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IN THE MATTER OF THE)
APPLICATION OF GOODMAN)
WATER COMPANY FOR A)
DETERMINATION OF THE FAIR)
VALUE OF ITS UTILITY PLANT AND)
PROPERTY AND FOR INCREASES IN)
ITS RATES AND CHARGES FOR)
UTILITY SERVICES BASED THEREON)

No. W-02500A- 06-0281

FILING OF APPLICANT'S
REBUTTAL TESTIMONY,
INCORPORATING ITS RESPONSE
TO STAFF'S DIRECT TESTIMONY

REBUTTAL TESTIMONY OF
THOMAS J. BOURASSA

I. INTRODUCTION AND QUALIFICATIONS.

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Thomas J. Bourassa. My business address is 139 W. Wood Drive,
Phoenix, Arizona 85029.

Q. HAVE YOU PREVIOUSLY SUBMITTED DIRECT TESTIMONY IN THE
INSTANT CASE?

A. Yes, my direct testimony was submitted in support of the initial application in this
docket by Goodman Water Company ("Goodman" or "Company").

1 **Q. WHAT IS THE PURPOSE OF THIS REBUTTAL TESTIMONY?**

2 A. I will provide rebuttal testimony in response to the direct filings by Arizona
3 Corporation Commission Utilities Division Staff ("Staff") with respect to rate base,
4 revenues and expenses, cost of capital and rate design.

5 **Q. WHAT IS THE REVENUE INCREASE THAT THE COMPANY IS**
6 **PROPOSING IN THIS REBUTTAL TESTIMONY?**

7 A. The Company is proposing a total revenue requirement of \$538,812, which
8 constitutes an increase in revenues of \$325,463, or 152.55% over test year
9 revenues.

10 **Q. HOW DOES THIS COMPARE WITH THE COMPANY'S DIRECT**
11 **FILING?**

12 A. In the direct filing, the Company requested a total revenue requirement of
13 \$537,955, an increase in revenues of \$324,607, or 152.15%.

14 **Q. WHY IS THE REQUESTED REVENUE INCREASE marginally**
15 **HIGHER IN THE COMPANY'S REBUTTAL FILING?**

16 A. In its rebuttal filing, Goodman has adopted a number of adjustments recommended
17 by Staff, as well as proposed a number of adjustments of its own. The net result of
18 these adjustments is a \$1,547 decrease in the proposed level of operating expenses
19 compared to the adjusted test year expense and a net increase in Original Cost Rate
20 Base ("OCRB") and Fair Value Rate Base ("FVRB") of \$16,368 from the direct
21 filing. Notably, the Company continues to propose that its OCRB be used as its
22 FVRB for purposes of setting rates in this proceeding.

23 **Q. TO WHAT DO YOU ATTRIBUTE THE INCREASE IN RATE BASE FROM**
24 **THE DIRECT FILING TO THIS REBUTTAL FILING?**

25 A. The Company has accepted Staff's adjustment to plant-in-service for \$17,325.
26 The Company has adjusted accumulated depreciation by \$263 as a result of the
27 increase to plant-in-service. Finally, the Company's proposed working capital has
28 been reduced by \$694 as a result of adjustments to operating expenses.

1 **Q. PLEASE SUMMARIZE THE PROPOSED REVENUE REQUIREMENTS**
2 **AND RATE INCREASES FOR THE COMPANY AND STAFF AT THIS**
3 **STAGE OF THE PROCEEDING?**

4 A. The proposed revenue requirements and proposed rate increases are as follows:

	<u>Revenue Requirement</u>	<u>Revenue Incr.</u>	<u>% Increase</u>
5 Company-Direct	\$537,955	\$324,607	152.15%
6 Staff	\$446,411	\$233,063	109.24%
7 Company Rebuttal	\$538,812	\$325,463	152.55%

8
9 **Q. WHY IS STAFF'S REVENUE REQUIREMENT AND RECOMMENDED**
10 **INCREASE LOWER RELATIVE TO THE COMPANY'S PROPOSALS?**

11 A. This is primarily due to Staff's adjustment to remove over \$47,000 of operating
12 expenses the Company which the Company disagrees. Staff has also proposed an
13 income tax calculation which includes interest synchronization which results in an
14 understatement of income taxes by over \$8,000. The balance of the difference is
15 due to differences in each of the party's respective rate bases and rates of return.

16 **Q. THE COMPANY IS STILL SEEKING A SUBSTANTIAL INCREASE IN**
17 **ITS RATES IN THIS PROCEEDING?**

18 A. Yes, and it remains primarily plant investment driven. Goodman has invested over
19 \$2.35 million of dollars in its water utility plant to serve ratepayers in the past
20 couple of years and it is entitled to a return on and of the fair value of that utility
21 plant.

22 ...

23 ...

24 ...

25 ...

26 ...

27

28

1 **II. RATE BASE.**

2 **Q. WOULD YOU PLEASE IDENTIFY THE PARTIES' RESPECTIVE RATE**
3 **BASE RECOMMENDATIONS?**

4 A. The rate bases proposed by all parties in the case are as follows:

	<u>OCRB</u>	<u>FVRB</u>
5 Company-Direct	\$ 1,275,683	\$ 1,275,683
6 Staff	\$ 1,279,589	\$ 1,270,589
7 Company Rebuttal	\$ 1,292,051	\$ 1,292,051

8 **A. Expensed Plant.**

9
10 **Q. HAVE YOU MADE A REBUTTAL ADJUSTMENT CONCERNING**
11 **CAPITALIZED EXPENSED PLANT?**

12 A. Yes. Following the Applicant's Rebuttal Exhibits, you will find the Applicant's
13 revised Rebuttal Schedules A-1, B-1, B-2, B-5, C-1, C-2, C-3, D-1, H-1, H-2, H-3
14 and H-4. Rebuttal Schedule B-2, adjustment number 1 reflects the increase to
15 plant-in-service of \$17,325 for capitalized expensed plant. Staff correctly pointed
16 out the Company failed to include this amount in rate base (plant-in-service) in its
17 direct filing. *See* Direct Testimony of Charles R. Myhlhousen ("Myhlhousen DT")
18 at 5. Both Staff and the Company agree on the amount of plant-in-service
19 included in rate base.

20 **B. Accumulated Depreciation.**

21 **Q. HAVE YOU MADE A REBUTTAL ADJUSTMENT CONCERNING**
22 **ACCUMULATED DEPRECIATION?**

23 A. Yes. B-2 rebuttal adjustment number 2 reflects the increase to accumulated
24 depreciation for the additional plant added in rebuttal adjustment number 1. The
25 Company's resulting accumulated depreciation balance at the end of the test year is
26 \$152 lower than the amount proposed by Staff. *See* Company Rebuttal Schedule B-
27 1 at \$108,511 versus Staff Direct Schedule CRM-3, page 3 at \$108,663. The \$152
28 difference is related to account no. 334 for meters and appears to be related to the

1 difference in the depreciation computation for the meter account for the 9 months
2 ended September 30, 2005. The Company computes \$1,014 of depreciation (using
3 half-year convention) for meters whereas Staff computes \$1,165. The Company
4 believes its computation is correct and recommends adopting the Company's
5 proposed level of accumulated depreciation.

6 **C. Working Capital.**

7 **Q. HAVE YOU MADE A REBUTTAL ADJUSTMENT CONCERNING**
8 **WORKING CAPITAL?**

9 A. Yes. Rebuttal Schedule B-2, adjustment number 3, reflects working capital at the
10 rebuttal level of operating expenses. The Company does not agree with Staff's
11 removal of working capital. *See* Myhlhousen DT at 5.

12 The formula method does produce positive working capital, but that is not
13 sufficient reason to dismiss its use. *Id* at 5-6. No method of computing working
14 capital, including a lead-lag study, is precisely correct. The purpose of any
15 working capital computation is to produce an amount of working capital allowance
16 that is reasonable and the cost of the calculation should not exceed the benefits.
17 This is true regardless of the size of the utility. Lead-lag studies are costly to
18 prepare and disagreement between the parties is common which in turn exacerbates
19 rate case expense further. In my experience the costs to prepare and defend lead-
20 lag studies can increase rate case expense by \$10,000 to \$15,000 or more. The
21 costs of lead-lag studies generally far exceed the benefits. Finally, the formula
22 method is simple and can readily be adjusted for the effects of pro forma
23 adjustments.

24 Working capital would not necessarily be negative if a lead-lag study were
25 prepared in the instant case despite Staff's generalization that 'proper lead-lag
26 studies usually produce negative cash working capital'. *See* Myhlhousen DT at 6.
27 Staff appears have a black letter policy of allowing the formula method to be used
28 only in the case of Class D and E utilities. *See* Myhlhousen DT a 5-6. Staff policy

1 is much too restrictive and limiting to be fair. The use of the formula method
2 should be based on the merits and applicability in each case. Relegating the
3 allowance for working capital based on the formula method to Class D and E
4 utilities effectively disallows working capital using the formula method for any
5 utility, regardless of size because Class D and E utilities use the short-form
6 application as prescribed by the Commission. There is no schedule for a rate base
7 or provision for working capital allowance in the short-form application. Even if
8 Staff were to claim that it includes working capital in its analysis and
9 recommendations, Class D and E utility rate cases are operating margin driven and
10 working capital ultimately has no impact in the determination of the revenue
11 requirement. Putting this aside, in the instant case, the Company, while classified
12 as a Class C utility for purposes of this proceeding, is quite small with only 459
13 customers at the end of the test year. The adjusted test year revenues were
14 approximately \$213,000, well below the \$250,000 limit for Class D utilities. It is
15 because proposed revenue requirement exceeds the \$250,000 limit that the
16 Company is classified as a Class C utility.

17 In general, working capital represents the invested capital used to support
18 inventories, petty cash, prepayments, minimum bank balances, and costs of
19 providing services. When these funds have come from investor sources, they are
20 legitimate investments to provide service and should be reflected in rate base. The
21 rate base in the instant case, as shown on the Company's rebuttal schedule B-1 is
22 significantly less than the amount of common equity as shown on the Company's
23 rebuttal schedule D-1. In fact, the common equity is higher by over \$95,000.
24 While the rate base and common equity amounts are generally not the same, they
25 should be within a reasonable amount such that when the authorized rate of return
26 is applied to rate base, the resulting return on investor capital is not unreasonably
27 depressed. To apply a return to rate base which does not provide for total common
28 equity investment to be serviced does not maintain the integrity of that capital and

1 does not enable the company to attract capital. Even including a working capital
2 allowance, the Company's rate base in the instant case is still significantly below
3 the amount of common equity.

4 **Q. HOW DO YOU ACCOUNT FOR THE DIFFERENCE BETWEEN RATE**
5 **BASE AND COMMON EQUITY AMOUNTS IN THIS CASE?**

6 A. The difference is primarily the result of the cash the Company has set aside in a
7 restricted cash account for customer and advance refunds. The amount at the end
8 of the test year totaled nearly \$106,000 and is not part of rate base. Arguably, the
9 Company's management is being prudent by setting aside funds for its anticipated
10 obligations. It has done this, in part, in lieu of paying dividends. The Company
11 has deposited these amounts in an interest bearing account and the Company has
12 accrued interest earned in the restricted cash account. The interest earned on this
13 cash hardly compensates investors. Interest earned on the restricted cash account
14 is relatively small. In fact, during the test year the amount of interest earned was
15 less than \$1,800 and based on the average cash balance amounted to approximately
16 1.9%. This hardly compensates investors for their capital.

17 Ideally, the Company should include the entire restricted cash balance in rate
18 base. Putting this aside, Staff's recommended exclusion of working capital in the
19 instant case only exacerbates the problem.

20 **III. INCOME STATEMENT.**

21 **Q. WOULD YOU PLEASE DISCUSS THE COMPANY'S PROPOSED**
22 **ADJUSTMENTS TO REVENUES AND EXPENSES AND IDENTIFY ANY**
23 **ADJUSTMENTS YOU HAVE ACCEPTED FROM STAFF?**

24 A. Yes. The Company rebuttal adjustments are detailed on Rebuttal Schedule C-2,
25 pages 1-6. The rebuttal income statement with adjustments is shown on Rebuttal
26 Schedule C-1, pages 1-2.

27 In rebuttal adjustment number 1, the Company proposes to remove \$174 for
28 meals from Outside Services expense. The Company's adjustment agrees with Staff

1 on this amount. *See* Myhlhousen DT at 7. As discussed below, the Company
2 disagrees with Staff's proposal to remove an additional \$17,693 from Outside
3 services expense.

4 Rebuttal adjustment 2 removes \$1,875 from annual rate case expense. This
5 adjustment agrees with Staff's recommendation. *See* Myhlhousen DT at 7. The
6 Company's proposed adjustment is in response to Staff's recommendation to
7 reduce the recommended total rate case expense from the Company's initial request
8 of \$100,000 to \$92,500. *See* Staff Direct Schedule CRM-13. Both the Company
9 and Staff agree to a 4 year amortization of rate case expense and the \$1,875
10 represents one fourth of the \$7,500 reduction proposed by Staff. Although the
11 Company believes that rate case expense is on track to meet or exceed its original
12 estimate of \$100,000, the Company has agreed to Staff's proposed reduction to
13 eliminate issues between the parties.

14 Rebuttal adjustment number 3 increases property tax expense by \$16 and
15 reflects the rebuttal proposed revenues. The Company and Staff are in agreement
16 on the method of computing property taxes. This method utilizes the ADOR
17 formula and inputs two years of adjusted revenues plus one year of proposed
18 revenues. I computed the property taxes based on the Company's proposed
19 revenues, and then used the property tax rate that was used in the direct filing. The
20 difference between Staff and the Company on the proposed level of property taxes
21 are due to differences in the party's respective proposed revenue

22 Rebuttal adjustment number 4 removes \$140 for the cost of lunches from
23 miscellaneous expense. This adjustment agrees with Staff's proposed adjustment.
24 *See* Myhlhousen DT at 7.

25 Finally, rebuttal adjustment 5 adjusts income taxes based on the Company's
26 proposed revenues, operating expense and depreciation. The Company does not
27 agree with Staff's interest synchronization with rate base methodology to compute
28 an interest expense deduction in its computation of income taxes. Interest

1 synchronization is not appropriate in this case as there is no long-term debt.
2 Interest synchronization results in approximately \$8,000 less income tax expense
3 than is required. Staff agrees the Company has no debt and also agrees that interest
4 synchronization is not appropriate in the instant case. *See* Staff Response to
5 Company Data Request 1.2 and 1.3, attached hereto as Rebuttal Exhibit No. 1.
6 Based on Staff's responses to Company data requests on this subject, I expect Staff
7 will correct and/or revise its income tax computation.

8 **Q. WOULD YOU PLEASE IDENTIFY AND DISCUSS ANY REVENUE AND**
9 **EXPENSE ADJUSTMENTS PROPOSED BY STAFF WHICH THE**
10 **COMPANY DISAGREES?**

11 A. The Company disagrees with Staff's proposal to reduce salaries and wages by
12 \$25,600. *See* Myhlhousen DT at 6. The Company's proposed level of wages and
13 salaries of \$32,000 is reasonable given the services provided by Mr. Sears. In
14 addition to the responsibility of providing for the overall long-term management of
15 the financial and strategic planning of the Company, Mr. Sears oversees the
16 preparation of and reviews of monthly and annual financial results, provides for
17 cash management as it relates to capital expenditures as well as operating expenses,
18 reviews, authorizes payment of Company expenditures, and supervises the
19 preparation of income tax returns. Mr. Sears is assisted in some of these duties by
20 Mr. Shiner, as I will discuss below. Staff's recommendation for removing \$25,600
21 of wages is based on what Staff considered necessary for the 'day-to-day'
22 operations of the Company. *See* Staff Response to Company Data Request 1.9,
23 attached hereto as Rebuttal Exhibit No. 1. However, while Mr. Sears may be
24 involved to some extent in the day-to-day operations, his responsibilities
25 encompass more than just 'day-to-day' operations and it is unreasonable for Staff
26 or the Commission to expect that only the costs of day-to-day operations should be
27 recovered from rate payers. Goodman is a financially sound and well managed
28 Company and it is no accident that it is so. Sound financial and strategic

1 management is essential to any successful business and rate payers ultimately
2 benefit from all the services provided by Mr. Sears.

3 The Company also disagrees with Staff's proposal to reduce outside services
4 expense by \$17,693. *See* Myhlhousen DT at 6. There are two parts to Staff's
5 adjustment. The first part, Staff removes \$11,916 of costs from CWH2 based on
6 the unsupported claim that CHW2 services are similar to and duplicated by another
7 outside service contractor YL Technologies. The fact is, these two contractors
8 provide different types and levels of service. YL Technologies provides for more
9 of the 'day-to-day' operations including customer billing and customer service,
10 while CWH2 provides management support which includes consulting services to:
11 1) assist management in regulatory matters, assist management of staffing
12 requirements; 2) assist management in developing and review of company policies
13 and procedures; 3) assist management in planning for customer growth; 4) provide
14 advice on matters related to maintaining a well run water system; and, 5) assist
15 management in monitoring the progress and activities of other professionals that
16 may from time to time be contracted by the Company to perform work – this
17 includes the work performed by YL Technologies. CWH2 has considerable
18 knowledge regarding the plant and equipment at Goodman and is a valuable
19 resource in the management of Goodman.

20 Staff analysis of the services provided by CWH2 is sorely inadequate. It its
21 response to a Company data request, Staff made its determinations on the basis that
22 Mr. Hill of CWH2 only spends 4-8 hours per month performing work for
23 Goodman. In addition, Staff concluded Mr. Hill performs some tests on a weekly
24 basis that YL Technologies performs on a monthly basis. *See* Staff Response to
25 Company Data Request 1.6, attached hereto as Rebuttal Exhibit No. 1. This hardly
26 represents a complete and sound analysis. First, Staff was provided a list of the
27 services provided by CWH2 and YL Technologies. *See* Company Responses to
28 Staff Data Requests 3.4 and 3.10 attached hereto as Rebuttal Exhibit "B". There is

1 little, if any, overlap of services. As I testified above, YL Technologies provides
2 for more of the 'day-to-day' operations while CWH2 provides management
3 support. While the advice CWH2 provides to management may involve
4 recommendations pertaining to the day-today operations, they are hardly the same
5 services as what YL technologies provides. Further, the costs of the services
6 provided by CWH2 are not out of line. CWH2 is an unrelated third-party and
7 charges fees at market rates. In fact, it would be far more costly to rate payers for
8 Goodman to have employed Mr. Hill directly than the approximately \$12,000
9 charged to Goodman during the test year. Management is being prudent by
10 obtaining Mr. Hill's services by contract.

11 In the second part of Staff's adjustment to outside services expense, Staff
12 removes \$5,777 of costs paid to Mr. Shiner. *See Myhlhousen DT at 7.* Again,
13 Staff's analysis is sorely inadequate. *See Staff Response to Company Data*
14 *Request 1.7, attached hereto as Rebuttal Exhibit No. 1.* Once again, Staff's
15 determination rests on what duties provided by Mr. Shiner Staff determined was
16 related to 'day-to-day' operations. Mr. Shiner does provide services which directly
17 relate to the day-today operations such as over-site of the work performed by
18 CWH2 and YL Technologies as well as the Company's engineers, Westland
19 Resources. However, Mr. Shiner also supervises the work by outside counsel,
20 Lewis and Roca, LLP, on regulatory matters, negotiating line extension agreements
21 with developers, and corporate planning including capital financing and extensions
22 of the Company's CC&N. Among other duties, Mr. Shiner also assists Mr. Sears
23 on reviewing financial and operational results, provides input on the long-term
24 financial and operational needs of the Company to adequately address system
25 growth, water supplies and water usage. Staff's adjustment is based on the amount
26 Staff determined to be 'appropriate', but like Staff's adjustments to salaries and
27 wages and other outside services, Staff has not adequately substantiated the level of
28 expense for Mr. Shiner it is recommending.

1 **Q. CAN YOU PROVIDE PERSPECTIVE ON THE REASONABLENESS OF**
2 **THE COMPANY'S PROPOSED EXPENSES FOR SALARIES AND WAGES**
3 **AND OUTSIDE SERVICES?**

4 A. Yes. Perspective can be gained by Staff's own analysis of small water companies
5 conducted in a pending case for Sabrosa Water Company ("Sabrosa"), Docket
6 Number W-20111A-06-0361. In the Staff report for Sabrosa dated November 30,
7 2006, Staff concluded that \$26 per customer per month was a reasonable level of
8 expense for small water companies for salaries and wages, outside services, rents,
9 insurance and office expense. See Excerpt From Staff Report on Sabrosa Water,
10 attached hereto as Rebuttal Exhibit No. 2. The cost per customer per month for
11 these expenses at the Company's proposed levels of expense is less than \$24. In the
12 Valley Utilities Water Company ("Valley") case, Decision 68309, November 14,
13 2005, the Commission approved levels of these expenses translated to a cost per
14 customer per month of over \$23. Valley had 2 1/2 times the number of customers at
15 year-end in that case than Goodman in this case.

16 At Staff's recommended levels of these expenses the cost per customer per
17 month for Goodman *translates* to approximately \$15.50. This is a level of cost I
18 would expect to find in a much larger utility where economies of scale have a
19 significant impact. In fact, in the Chaparral City Water Company ("Chaparral")
20 case (Decision 68176, dated September 30, 2005), the Commission approved levels
21 of these expenses was about \$15 per customer per month. Chaparral had over
22 12,000 customers at the end of the test year in that case. As I testified, one would
23 expect economies of scale for much larger utilities. Is it reasonable to conclude
24 that Goodman has achieved the economies of a company 26 times larger in terms
25 the customer levels? The answer is obviously 'No'.

26 **Q. SHOULDN'T THE REASONABLENESS OF THE LEVELS OF THESE**
27 **EXPENSES BE EXAMINED ON A CASE-BY-CASE BASIS?**

1 A. In general, I would agree. The expense levels for utilities can vary from case to
2 case. However, there are certain levels of expense are required to provide for a
3 well managed and financially sound utility. The Company believes the costs related
4 to salaries and wages are prudent and necessary for the provision of service. It is,
5 therefore, not unreasonable to examine other water utilities for comparison,
6 especially when, in the Company's opinion, Staff's recommendations do not reflect
7 all the costs necessary to effectively and efficiently run a utility. The level of
8 salaries and wages and outside services proposed by the Company are the expected
9 levels that will be incurred on a going forward basis.

10 **Q. DO YOU HAVE ANY OTHER DISAGREEMENTS WITH STAFF?**

11 A. Yes. The Company disagrees with Staff's adjustment to repairs and maintenance
12 expense. Staff proposes to remove \$4,130 of repairs and maintenance expense on
13 the basis of a change of vendors during the test year. *See Myhlhousen DT at 6.*
14 Regardless of whether the same contractor is providing the repairs and maintenance
15 services to the Company, the Company is expected to incur a full 12 months of
16 expense. Staff's adjustment results in less than a full 12 months of repairs and
17 maintenance expense during the test year. Staff apparently agrees. *See Staff*
18 *Response to Company Data Request 1.10, attached hereto as Rebuttal Exhibit No.*
19 *1. Based on Staff's response I would expect Staff to revise its proposed adjustment*
20 *to repairs and maintenance expense.*

21 **IV. COST OF CAPITAL.**

22 **A. Overview and Summary.**

23 **Q. PLEASE SUMMARIZE THE COMPANY'S REBUTTAL POSITION**
24 **REGARDING COST OF CAPITAL?**

25 A. The Company continues to recommend 10.5% as its cost of capital and rate of
26 return on original cost rate base, which Goodman accepts as the fair value of its
27 utility property for purposes of this rate case. The 10.5% rate of return is based on
28 a capital structure consisting of 100% common equity.

1 A return on equity of 10.5% is extremely conservative when the small size
2 and the operational and business risks related to Goodman's water operations are
3 considered.

4 **Q. HOW DOES THE RETURN OF 10.5% YOU ARE RECOMMENDING**
5 **COMPARE TO STAFF?**

6 A. The rates of return on equity ("ROE") recommended by Staff is 9.60%. This is
7 simply too low given the risks faced by Goodman. The rates of return
8 recommended by Staff is simply too low given the Company's extremely small
9 size, limited revenue and cash flow, small customer base, lack of diversification,
10 lack of liquidity, and other characteristics. Moreover, Staff's revenue requirement
11 will actually result in a return on equity of only 8.83%. This rate of return will not
12 produce sufficient operating income to pay a dividend on the Company's book
13 equity equal to what is being paid by the publicly traded utilities used by Staff.

14 **Q. DOES STAFF PROPOSE A FINANCIAL RISK ADJUSTMENT IN ITS**
15 **COST OF EQUITY RECOMMENDATION?**

16 A. No. See Irvine DT at 32. Neither does the Company.

17 **B. Response to Staff's Testimony on Unique Risks.**

18 **Q. DO YOU HAVE ANY RESPONSE TO THE TESTIMONY MR. IRVINE**
19 **PRESENTS AT PAGE 41 OF HIS DIRECT TESTIMONY ABOUT THE**
20 **RISKS FACED BY SMALL ARIZONA UTILITIES LIKE GOODMAN**
21 **COMPARED TO SAMPLE WATER UTILITY COMPANIES?**

22 A. Yes. Mr. Irvine's position is based on financial theory. At the core of the financial
23 theory is the so-called "Modern Portfolio Theory" ("MPT") which deals with the
24 management of stocks and other securities that are publicly traded on national stock
25 exchanges. Like any theory, the MPT makes certain assumptions, such as the
26 assumption that all investors hold fully diversified portfolios of stocks. As
27 explained by Mr. Irvine, market risk is the only relevant risk to investors holding
28

1 diversified portfolios. Firm-specific risk (“unique risk”) can be eliminated by
2 holding a diversified portfolio. *See* Irvine DT at 10-11.

3 Accepting for argument sake that the abstract proposition that all investors
4 hold diversified portfolios and that there is no debate about what constitutes a
5 diversified portfolio, I am sure Mr. Irvine would agree that the risks of the sample
6 water utilities would be priced by investors holding diversified portfolios. We
7 know this to be true because it would be nonsense to say that investors do not care
8 about stock prices and values of equity being lower because a utility has risks not
9 faced by other utilities. Such risks may be the risks priced by investors holding
10 diversified portfolios, if beta is relevant to investors. Each of the publicly traded
11 utility companies in Mr. Irvine’s water utility sample has a market beta, but not all
12 of the betas are the same. *See* Staff Schedule SPI-6. Arguably, the risks for each of
13 the sample water utilities have been priced differently by investors, otherwise, the
14 betas would all be the same.

15 Based on the foregoing, and also assuming for argument sake that MPT
16 applies to small non-publicly traded companies like Goodman, I would also expect
17 that Mr. Irvine would agree that the risks for small privately held utilities in
18 Arizona would be priced by investors holding diversified portfolios. If there is a
19 lack of diversification, limited revenues and cash flow, small customer base, higher
20 regulatory risk, and higher liquidity risk, investors do care and risk is higher. We
21 do not have market data for small water utilities and thus we do not have a beta
22 estimate based on the market for Goodman, but I expect it is higher than the
23 average beta of Mr. Irvine’s sample companies. Mr. Irvine simply assumes that
24 Goodman has the same level of risk as do the utilities in his sample and assumes the
25 average beta for his sample water utilities is the beta for Goodman. *See* Irvine DT
26 at 26. Ultimately he recommends the average of his cost of equity (“COE”) results
27 from his water utility sample as the COE for Goodman. He does this without any
28 evidence that Goodman has the same risks as the water utility sample companies.

1 **Q. DO OTHER COMMISSIONS SHARE THE VIEW THAT SMALL**
2 **UTILITIES HAVE HIGHER RISKS NOT CAPTURE BY THE MARKET**
3 **DATA?**

4 A. Yes. The California Public Utilities Commission ("CPUC"), for example,
5 recognizes that since market data is not available for smaller water utilities higher
6 rates on returns are necessary. Based on a study prepared by the CPUC Staff and
7 adopted by the CPUC (CPUC Decision 92-03-093, March 21, 1992), the CPUC
8 concluded that smaller utilities are more risky than larger ones and required higher
9 equity returns. Accordingly, the CPUC employs alternative methods for different
10 classes of utilities. Attached at Rebuttal Exhibit No. 3 is a copy of a memo from
11 the CPUC Staff to the Director of the Water Division. This memo explains the
12 CPUC's approach to determining the returns on the various classes of water utilities
13 as defined by the CPUC. The CPUC classifies water utilities based on the number
14 of customers - Class D (<500), Class C (500-1,999), Class B (2,000-9,999) and
15 Class A (>10,000). As the memo shows, the CPUC provides guidelines on returns
16 for Class C and D water utilities in the range of 11.65% to 13.40%. For Class B, it
17 averages the most recently authorized Class C and Class A returns. Goodman
18 would be classified as a Class D utility by the CPUC. According to the memo, an
19 appropriate range for Goodman would be in the 12.4% to 13.4% range.

20 **Q. WHAT HAS HAPPENED TO INTEREST RATES SINCE THIS MEMO**
21 **WAS WRITTEN IN 2004?**

22 A. The have generally increased. The fact that interest rates have increased indicates
23 the cost of equity has increased since 2004 when this memo was prepared.
24 However, I could not find a more recent memo and assume the CPUC guidelines
25 have not changed and/or not been updated since 2004.

26 **Q. DO STUDIES BY OTHERS SUPPORT THE VIEW THAT SMALLER**
27 **UTILITIES ARE MORE RISKY THAN LARGER ONES?**

1 A. Yes. In a study conducted by Dr. Thomas Zepp (hereinafter “Zepp”), he showed
2 that, on average, smaller publicly traded water utilities had a COE 99 basis points
3 higher than the average COE for larger publicly traded utilities.¹

4 **Q. DOES THE FACT THAT THE COMMISSION IN THE TWO CASES**
5 **CITED BY MR. IRVINE ON PAGE 41 OF HIS DIRECT TESTIMONY**
6 **REJECTING THE FIRM SIZE FACTOR IN ARIZONA RATE SETTING**
7 **CHANGE YOUR VIEW THAT SMALL UTILITIES ARE MORE RISKY**
8 **THAN LARGER ONES?**

9 A. No. In the Black Mountain Gas Company (“Black Mountain”) case (Decision
10 64727, April 17, 2002), the Commission did not conclude the “firm size
11 phenomenon” did not exist. The order merely summarized the argument made by
12 Staff which said “Staff argues that a study has shown the firm ‘size phenomenon’
13 does not exits for regulated utilities, and that therefore there is no need to adjust risk
14 for small firm size in utility regulation’. *Id* at 16. This statement was not a
15 conclusion of the Commission. What the Commission concluded in that order was
16 that Staff “...performed a rigorous cost of capital analysis, and [the Commission
17 finds] that its recommendations on that analysis are reasonable and withstand the
18 Company’s critique.” *Id*. There is no meaningful explanation and/or reasoning
19 provided by the order that would lead me to conclude there was an explicit rejection
20 of the “firm size phenomenon”. Black Mountain is a much larger utility than is
21 Goodman and was classified as a Class A utility for purposes of that case. *Id* at 2.
22 Also, Black Mountain did not prepare a COE study to support its proposed return
23 on equity and I do not know what evidence Black Mountain provided, if any, in
24 support of its position on the firm size premium. *Id* at 15. At best, one can infer
25 that the Commission was not swayed by Black Mountain’s arguments and
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28 ¹ Zepp, Thomas M. (2002, August). Utility Stocks and the size effect – revisited. *The Quarterly Review of Economics and Finance*, 578-582.

1 concluded that no size premium applied to Black Mountain. But, this conclusion
2 does not extend to all Arizona regulated utilities.

3 In the Arizona Water Company (“Arizona Water”) case (Decision 64282,
4 December 28, 2001), the Commission concluded that for Arizona Water a size
5 premium was not warranted. *Id* at 19. It did not conclude this for all Arizona
6 regulated utilities as Mr. Irvine implies. Arizona Water was also classified as a
7 Class A utility in that case and is much larger than is Goodman. It owns and
8 operates 18 water systems in Arizona and at the time of the case had over 60,000
9 customers. *Id* at 1. Arguably, the risks faced by Arizona Water are not comparable
10 to Goodman.

11 C. Response to Staff’s Testimony on Comparable Earnings and Risk
12 Premium.

13 Q. DO YOU AGREE THAT COMPARABLE EARNINGS ANALYSIS AND
14 THE RISK PREMIUM ANALYSIS ARE INVALID BECAUSE THEY ARE
15 NOT “MARKET BASED”?

16 A. No, I disagree with Mr. Irvine on this point. First, as I have testified, the risk
17 premium approach is founded on directly observable *market* interest rates. This
18 assures that the risk premium estimates of the COE begin with a sound basis and
19 are tied to current capital market costs. *See* Bourassa DT at 40.

20 Second, in the instant case, we are attempting to establish a fair and
21 reasonable return on equity for Goodman which will in turn be used to establish a
22 rate of return on the fair value of Goodman property devoted to public service.
23 That rate base is an accounting or book rate base. The rate base has not been
24 adjusted to reflect the current market value of the utility plant and assets devoted to
25 public service. In other words, Mr. Irvine is applying a *market* return derived from
26 a finance model to the Company’s *book* equity, which in turn is financing a *book*
27 rate base. Thus, Mr. Irvine is ignoring the fact that a firm’s earnings, whether they
28 are reported as the return on equity or as earnings per share, are also based on

1 accounting data, as opposed to market data. For example, earning per share
2 (“EPS”) is calculated by dividing net income into the number of shares outstanding.
3 The current market price of those shares is irrelevant to that calculation.

4 Third, risk premium model I employ is similar to the model routinely used
5 by the California Office of Ratepayer Advocate Staff to estimate estimates of the
6 COE for water utilities. The important characteristics of the California Ratepayer
7 Advocate Staff model are (1) the use of earned returns as the proxies for equity
8 costs and (2) the use of forecasted interest rates. In my opinion, authorized returns
9 on equity (“ROEs”) are expected to provide a conservative measure of the current
10 cost of equity for the water utilities sample. Since 2003 and 2004, when some of
11 those ROEs were set by regulators, interest rates have increased and thus the cost of
12 equity has increased. The authorized ROEs may also be conservative measures of
13 the current cost of equity because some of them are the result of settlements. Thus,
14 to the extent that the reported ROEs in my direct schedule D-4.14 are the result of
15 settlements, they probably understate the COE. I have a preference for the proxies
16 for equity costs to be authorized ROEs, not realized ROEs, for the reasons I listed
17 above, even though authorized ROEs may understate the COE.

18 Fourth, Staff contends that actual returns on equity should be ignored,
19 notwithstanding the comparable earnings standard. Instead, Staff asserts that
20 finance models should be the exclusive means of determining the COE.

21 **Q. WHAT WOULD BE THE RESULT USING A COMPARABLE EARNINGS**
22 **ANALYSIS WITH MARKET DATA?**

23 A. Using sample group of publicly traded water utilities used by both the Company
24 and Mr. Irvine, the historical market returns are much *higher* than the 10.5% I
25 recommend. For example, the following “total” returns, which take into account
26 both dividend payments and increases in stock price, are reported in Value Line:
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<u>Utility</u>	<u>5 Years</u>	<u>Annual Average</u>
Amer. States	81.8%	16.4%
Aqua America	92.9%	18.6%
Cal. Water	65.6%	13.1%
Conn. Water	-6.2%	-1.2%
Middlesex	38.5%	7.7%
SJW Corp.	<u>152.4%</u>	<u>30.5%</u>
Average	70.8%	14.2%

Data from Value Line (October 27, 2006). The 5-year historical compound annual return for the water utilities sample companies is 14.3%.

Q. WOULD INVESTORS CONSIDER THE TOTAL MARKET RETURNS OF A STOCK?

A. Yes. From the standpoint of an investor, a true market rate of return would take into account *both* anticipated dividends *and* capital gains resulting from future changes in the price of stock. I expect Mr. Irvine to agree when he testifies that “the cost of equity is the compensation investors expect for bearing the risk of ownership of a stock.” See Irvine DT at 7. The historical market returns are important to gaining perspective on investor expectations.

Q. DO INVESTORS CARE ABOUT THE RETURN ON EQUITY THAT A COMPANY IS EARNING AND IS PROJECTED TO EARN?

A. Only if they are looking to make sound investments. Returns on equity, earnings per share, and stock price/earnings ratios are widely followed and reported by investment services, business magazines, and other financial media outlets. A company’s earnings play a major role in any investment decision – a far greater role, I believe, than the results of a CAPM or DCF model. The higher the return on equity, the greater the company’s earnings and funds are available to pay dividends and to reinvest in capital projects.

1 **Q. DO YOU RELY ON THE COMPARABLE EARNINGS APPROACH**
2 **BECAUSE IT INDICATES A HIGHER RATE OF RETURN?**

3 A. No. As I have testified, my comparable earnings and risk premium analyses serve
4 as a check of reasonableness for the DCF results. *See* Bourassa DT at 15.
5 Regardless of the particular finance model being used, the results of the model
6 should be reasonable and generally consistent with the returns on equity actually
7 being earned.

8 Amazingly Staff has not included a consideration of either actual, authorized
9 returns on equity nor has it included a consideration of past price growth, book
10 value growth, or actual market returns of the companies in the water utility sample.
11 *See* Staff Response to Company Data Requests 2.3 and 2.4, attached hereto as
12 Rebuttal Exhibit No. 1. Staff admits that total market returns influence investor
13 expectations and admits that investors place differing degrees of importance to
14 market returns, EPS and DPS growth. *See* Irvine DT at 34 and Response to
15 Company Data Request 2.7 and 2.8, attached hereto as Rebuttal Exhibit No. 1.
16 Amazingly, Staff does not consider other historical information as a check of
17 reasonableness of the growth rates they select and the results of their financial
18 models. This hardly reflects a balance approach.

19 **Q. DOESN'T STAFF CONSIDER TOTAL MARKET RETURNS IN ITS**
20 **HISTORICAL MARKET RISK PREMIUM CAPM?**

21 A. Yes. But the historical market risk premium Staff uses is based on the S&P 500
22 consisting mainly of very large U.S. companies. Mr. Irvine's water utility sample
23 consists of mostly Micro-Cap companies. The largest company, Aqua America
24 would be considered a Mid-Cap. As I have testified, the financial data shows that
25 mid-cap, low-cap and micro-cap companies historical have higher returns than
26 large-cap companies. As we have seen, the historical returns on the water utility
27 sample are consistent with this historical financial data.

28 **Q. PLEASE CONTINUE.**

1 A. The basic idea of the standard constant growth DCF approach to estimating the
2 COE is to infer the COE from the current share price and from an estimate of
3 investors' expected future growth. Exactly what prospective measure of growth
4 should be used (trends in earnings per share, dividends per share, book value per
5 share) and how the information contained in these various measures used by
6 investors is important to in order to infer the investors' true expected return.
7 Although the growth rate in the DCF model is the expected rate of growth in
8 dividends, it is assumed that earnings, book value, and stock price all growth at the
9 same constant rate as dividends. Historically price, book value, earnings and
10 dividends have not grown at the same rate. *See Bourassa DT at 34.* Further, the
11 investors' return and the cost of equity capital for an application to original cost rate
12 base (book value) are identical only when the market price is equal to book value.
13 In fact, the DCF model understates the COE when price and book are not close to
14 unity (the market-to-book ratio of the water utilities sample companies averages
15 over 2.6).

16 **Q. ARE THE RESPECTIVE PARTIES APPLYING A MARKET BASED**
17 **RETURN TO A BOOK VALUE EQUITY AND RATE BASE?**

18 A. Yes. As I have already alluded to, if we were to be technically correct, equity and
19 rate base should be stated at market value. Because we are applying a market based
20 COE to book value is another reason why actual and authorized returns of the water
21 utilities sample companies are relevant as checks of reasonableness to a cost of
22 capital analysis in this case. Mr. Irvine argues that historical DPS and EPS
23 information is relevant to investors. *See Irvine DT at 35.* Why wouldn't the same
24 apply to actual and authorized earnings? After all, his historical EPS and
25 sustainable growth are based on book results and there is no evidence in this case to
26 suggest that investor expectations do not include consideration of the actual and
27 authorized earnings of the sample water utility companies.
28

1 **Q. PLEASE RESPOND TO MR. IRVINE'S CRITICISM OF YOUR RELIANCE**
2 **ON PROJECTED INTEREST RATES IN YOUR RISK PREMIUM**
3 **ANALYSIS ON PAGE 39 OF HIS DIRECT TESTIMONY?**

4 A. Using current rates to predict future rates, as Staff has done in its CAPM, does not
5 avoid the problem of predicting interest rates in 2007-2008, when Goodman's rates
6 will be in effect. Staff's use of today's interest rates effectively assumes that those
7 interest rates will remain unchanged in the future. The COE should be determined
8 when new rates will be in effect, not a single point in time prior to new rates being
9 established.

10 **Q. HAVE YOU PREPARED A DIFFERENT MARKET RISK PREMIUM**
11 **ANALYSIS THAT IS ENTIRELY MARKET BASED?**

12 A. Yes. Preliminarily I would like to state that I believe my risk premium analysis to
13 be valid. Putting this aside, I have prepared a bond risk premium analysis which is
14 entirely market based. *See* Rebuttal Exhibit No. 4.

15 The average bond risk premium over the most recent 5 year period is
16 12.21%. The current yield on a long-term U.S. Treasury Bond is 4.8%, suggesting
17 a current indicated COE of 17.0%. The Blue Chip forecasted yield for long-term
18 U.S. Treasury Bonds is 5.3%, suggesting a current indicated COE of 17.5%. The
19 10 and 15 year average risk premiums are far greater at 14.99% and 14.11%, and
20 using either current or forecasted interest rates, the indicated COEs well are above
21 18%.

22 **Q. PLEASE EXPLAIN YOUR EQUITY RISK PREMIUM ANALYSIS?**

23 A. As a proxy for a risk premium applicable to my water utility sample, a historical
24 risk premium for the sample is estimated with an annual time series analysis as
25 applied to my water utility sample companies. The risk premium is estimated by
26 computing the annual return on equity capital for the composite of the water utility
27 sample companies for each year using the actual stock prices and dividends of the
28 water utility sample companies, and then subtracting the long-term government

1 bond for that year. The composite of the water utility sample companies is a value
2 weighted index which means that each company in the index receives a weight
3 proportional to the market value of its equity. Value-weighted indexes have the
4 useful property of tracking the performance of a buy and hold investments in the
5 underlying stocks. The S&P 500, for example, is a value weighted index.

6 **Q. WHAT IS SUGGESTED BY YOUR BOND RISK PREMIUM ANALYSIS?**

7 A. It suggests that the true cost of capital may be much higher than any of the parties
8 have recommended in this case. It also confirms my conclusion that a 10.5% ROE
9 is extremely conservative.

10 **D. Response to Staff's Testimony on Use of Analyst Forecasts for**
11 **Estimating Growth Rates.**

12 **Q. PLEASE RESPOND TO MR. IRVINE'S COMMENTS ABOUT THE**
13 **GORDON, MYRON AND GOULD STUDY YOU CITED IN YOUR DIRECT**
14 **IN SUPPORT OF THE USE OF ANALYST ESTIMATES?**

15 A. I did not claim that the study by Gordon, Myron, and Gould² concluded that
16 investors ignore past growth rates. The authors note that all four estimates of
17 growth³ evaluated in the study rely on past data, but in the case of the analyst
18 earnings forecasts, a larger body of past data is used, filtered through a group of
19 security analysts who adjust for abnormalities that are not considered relevant for
20 future growth. *Id.* The authors conclude that because of this, "the superior
21 performance of the cost of equity estimates based on earnings forecasts should
22 come as no surprise." *Id.* The authors also note that forecasts are widely accepted
23 by investors and the study does, in fact, support the sole use of analyst forecasts. *Id.*

24
25 ² David A. Gordon, Myron J. Gordon and Lawrence I. Gould, "Choice Among Methods of
26 Estimating Share Yield," *Journal of Portfolio Management* (Spring 1989) 50-55.

27 ³ The four estimates of long-run growth evaluated in the Gordon, Myron, and Gould study
28 were: 1) historical dividend growth; 2) historical earnings growth; 3) analyst forecasts of
earnings growth; and, 4) historical retention growth.

1 As I testified in my direct testimony, in estimating future growth, financial
2 institutions and analysts have taken into account all relevant historical information
3 on a company as well as other more recent information. Any further recognition of
4 the past will double count what has already occurred. *See* Bourassa DT at 37. The
5 Gordon, Myron, and Gould study supports this assertion.

6 **Q. HOW DID YOU DERIVE AN ESTIMATE OF THE GROWTH RATE FOR**
7 **YOUR DCF MODEL?**

8 A. I used analysts' forecasts of EPS growth from several sources, not just Value Line.
9 I used forecasts published by Zack's Investment Research, Standard & Poor's
10 Earning Guide, and Value Line Investment Survey. *See* Bourassa DT at 36. In my
11 opinion, using analysts' forecasts from several reputable sources offsets potentially
12 overly optimistic or overly pessimistic projections from one source. Further, unlike
13 investment banking firms and stock brokerage firms, independent research firms
14 like Value Line and Standard and Poor's have no incentive to distort earnings
15 growth estimates in order to bolster interest in common stocks.

16 **Q. WHY IS EARNINGS GROWTH A MEANINGFUL GUIDE TO**
17 **INVESTORS' LONG-TERM GROWTH EXPECTATIONS?**

18 A. It is growth in earnings, after all, that will support future dividends and share prices.
19 There is an abundance of evidence attesting to the importance of earnings in
20 assessing investor expectations. The sheer volume of earnings forecasts available
21 from the investment community relative to the scarcity of dividend forecasts attests
22 to their importance. Value Line, Zacks, S&P, Thompson First Call, to name a few,
23 all provide comprehensive information on investor's earnings forecasts. Value
24 Line's principle investment rating assigned to individual stocks, Timeliness Rank,
25 is based primarily on earnings. These investment information providers focus on
26 earnings growth rather than dividend growth which indicates the investment
27 community places greater importance to earnings as a measure on future long-term
28 growth.

1 Q. DO YOU HAVE A COMMENT ON PAGE 36 and 37 OF MR. IRVINE'S
2 TESTIMONY CONCERNING OTHER EXPERTS WHO SUGGEST SOLE
3 RELIANCE ON ANALYST ESTIMATES ARE INADVISABLE?

4 A. Yes. Mr. Irvine's reliance on the study by David Dreman is puzzling. Irvine DT at
5 36. Even though Mr. Dreman has criticized analysts' growth rates as being too
6 optimistic, Mr. Dreman also says investors rely on those forecasts.

7 We have also seen that in spite of high error rates being
8 recognized for decades, neither analysts nor investors who
9 religiously depend on them have altered their methods in any
way.⁴

10 Mr. Irvine's reliance on Burton Malkiel is also puzzling. See Irvine DT at 36. Mr.
11 Malkiel without doubt critical of analysts' forecast of earnings. However, based on
12 his comments even the past provides no help in predicting the future.

13 ...Calculations of past earning growth are no help in
14 predicting the future.....

15 Bluntly stated, the careful estimates of securities analysts
16 (based on industry studies, plant visits, etc.) do little better
17 than those that would be obtained by simple extrapolation of
past trends, which we have already seen are no help at all.
[Emphasis supplied]⁵

18 In other words, if we follow Mr. Malkiel's logic, investors would be no worse off
19 using an investment strategy of throwing darts at a board. If neither analyst
20 forecasts nor historical information are of use to investors, there is no reason to
21 believe that Mr. Irvine's use of historical information in combination with analysts'
22 estimates is any better at measuring investor expectations.

23 If investors rely on analysts' growth rate forecasts, those are the forecasts of
24 relevance to the determination of equity costs. Despite the claims by Dreman and
25 Malkiel about growth forecasts being overly optimistic, growth forecasts still

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27 ⁴ David Dreman, *Contrarian Investment Strategies: The Next Generation*. 1998. Simon &
Schuster. New York. page 115-116.

28 ⁵ Burton G. Malkiel. *A Random Walk Down Wall Street*. 2003. W.W. Norton & Co. New
York. p. 173-174.

1 perform best for utility stocks when estimating the COE. *See* Gordon, Myron, and
2 Gould. Those growth rates influence the prices investors will pay for stocks and
3 thus impact the dividend yields. The dividend yields change until the sum of the
4 dividend yield plus those growth rates equal the investors' perceived COE. Had the
5 growth forecasts been lower – as Mr. Irvine suggests they should be – the stock
6 prices would be lower and dividend yields would be higher but there would not
7 necessarily be any difference in the ultimate estimate of the COE.

8 **Q. IS THE USE OF HISTORICAL GROWTH RATES ANY LESS**
9 **SUBJECTIVE THAN USING ANALYST EXPECTATIONS OF GROWTH?**

10 A. No, but Mr. Irvine seems to think so. *See* Irvine DT at 38. However, use of
11 historical growth rates in a prospective financial model like the DCF makes the
12 historical growth rates no less subjective in developing measures of investor's
13 expectations.

14 **Q. ON PAGE 38, MR. IRVINE CRITICIZES YOU FOR NOT USING**
15 **FORECASTS OF DIVIDEND GROWTH IN YOUR GROWTH**
16 **ESTIMATES. DO YOU HAVE A RESPONSE?**

17 A. Yes. First, as I testified in my direct testimony, the constant growth DCF result
18 using projected DPS growth was at or below the cost of debt. *See* Bourassa DT at
19 38. Even using the somewhat higher DPS forecasts from the October 27, 2006
20 Value Line, two of the three sample company indicated COE are far below the
21 current cost of debt. These results are not reasonable or rational and would distort
22 the DCF model's result.

23 Second, I do not use projected DPS estimates, in part, because of the three
24 sources for analysts estimates that I employ, Zack's, Value Line, Standard and
25 Poor, only one provides projected DPS growth estimates.

26 Third, earnings growth provides a more meaningful guide to investors' long-
27 term growth expectations. After all, it is growth in earnings that will support future
28 dividends and share prices. There is an abundance of evidence attesting to the

1 importance of earnings in assessing investor expectations. The sheer volume of
2 earnings forecasts available from the investment community relative to the scarcity
3 of dividend forecasts attests to their importance. Value Line, Zacks, S&P,
4 Thompson First Call, to name a few, all provide comprehensive information on
5 investor's earnings forecasts. Value Line's principle investment rating assigned to
6 individual stocks, Timeliness Rank, is based primarily on earnings. These
7 investment information providers focus on earnings growth rather than dividend
8 growth which indicates the investment community places greater importance to
9 earnings as a measure on future long-term growth.

10 **E. Staff's DCF Estimates Are Unreasonably Low Due to Staff's Biased**
11 **Selection of Inputs.**

12 **Q. PLEASE EXPLAIN WHY YOU BELIEVE STAFF'S CONSTANT GROWTH**
13 **DCF MODEL PRODUCES A COST OF EQUITY THAT IS**
14 **UNREALISTICALLY LOW.**

15 A. In Staff's constant growth (single growth stage) DCF model, Staff relies heavily on
16 historical DPS and EPS growth. As I explained in my direct testimony, one of the
17 reasons I did not use historical DPS and EPS growth is because the indicated COE
18 produced by the DCF model using these growth rates is *less than the current cost of*
19 *debt.* See Bourassa DT at 38. Staff uses 10-year historical DPS and EPS growth
20 rates. However, the results are not much better than using the 5-year historical data.

21 **Q. WHAT ARE THE GROWTH RATES USED BY STAFF?**

22 A. The following table shows the growth rates Mr. Irvine uses in implementing the
23 constant growth DCF model (*see* Staff Schedule SPI-7):

<u>Type of Growth</u>	<u>Historic</u>	<u>Projected</u>
Dividends per Share ("DPS") Growth	2.7%	5.0%
Earning per Share (EPS") Growth	4.2%	7.9%
Intrinsic (Sustainable) Growth	<u>5.7%</u>	<u>8.4%</u>

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<u>Type of Growth</u>	<u>Historic</u>	<u>Projected</u>
Average	4.2%	7.1%

Staff's gives the historical growth rates 50% weight in its model. Using the overall historical average growth rate, the indicated COE is at or below the projected cost of Baa bonds (6.9%). As shown below, the historical growth DCF model using Staff's overall average produces an indicated COE of 6.9%:

(1) Staff DCF – Historical Growth

$$\frac{D_1}{P_0} + G = K$$

$$2.7\% + 4.2\% = 6.9\%$$

Q. WHAT ARE THE INDICATED COSTS OF EQUITY JUST USING STAFF'S HISTORICAL DPS GROWTH?

A. The result is 5.1% as shown below.

(2) Staff DCF - Historical DPS growth

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

$$2.7\% + 2.7\% = 5.4\%$$

Q. WHAT ARE THE INDICATED COSTS OF EQUITY JUST USING STAFF'S HISTORICAL EPS GROWTH?

A. The result is 6.9%, as shown below:

(3) Staff DCF - Historical EPS growth

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

$$2.7\% + 4.2\% = 6.9\%$$

Perhaps even more revealing is that Staff excludes an EPS growth rate for one of its water utility sample companies because it is negative. See Schedule SPI-4. Mr. Irvine would like us to believe that his analysis is less subjective. See

1 Irvine DT at 38. But if a negative growth rate can be excluded because it is not
2 realistic, then why shouldn't the other growth rates be eliminated on a similar basis.
3 If investors view historical information just as important as forecasts of growth, as
4 Mr. Irvine claims, then why should a negative growth rate be excluded? There is
5 no requirement on the DCF model that negative growth rate cannot be used.
6 Common sense tells us a negative growth rate should not be used because it is
7 unrealistic. But a negative growth rate is no more unrealistic than the growth rates
8 that produce indicated COEs below the cost of debt.

9 **Q. EXCUSE ME MR. BOURASSA, BUT I DON'T RECALL SEEING**
10 **INDIVIDUAL COMPUTATIONS LIKE THESE IN STAFF'S SCHEDULES**
11 **OR TESTIMONY. WHY IS THAT?**

12 A. Because Staff does not show the individual results of their selected growth rates.
13 Staff has "hidden the ball" so to speak. I have prepared rebuttal exhibits, attached
14 hereto as Rebuttal Exhibits No. 5 and 6, which show that Staff's individual results
15 for the sample utilities show indicated costs of equity as low as 3.1%! Further, a
16 significant number are below 4.9%, i.e., the current yield on 30-day Treasuries.
17 Two-thirds of the indicated costs of equity are below the current cost of debt. This
18 is truly remarkable.

19 **Q. PLEASE COMMENT ON STAFF'S COMPUTATION OF THE GROWTH**
20 **RATES USED IN THEIR MODELS.**

21 A. Staff growth rates are based on the compound average annual growth. Staff admits
22 this. See Staff Response to Company Data Request 2.12, attached hereto as
23 Rebuttal Exhibit No. 1. In statistical parlance, the compound average is also called
24 the geometric mean, or sometimes the geometric average. Staff uses geometric
25 means for both the historical and projected growth rates. Mr. Irvine's choice to use
26 geometric means bias downward the COE estimates. A geometric average annual
27 growth is the correct method to express what has happened in the past but is not an
28 appropriate choice for prospective (forward-looking) model like the DCF.

1 Statistically speaking, the arithmetic average is the unbiased measure of the
2 expected value of repeated observations of a random variable, not the geometric
3 mean. The arithmetic mean answers the question of what growth rate is the best
4 estimate of the future amount of money that will be produced by continually
5 reinvesting in the stock market.⁶ If an investor expects growth and variability in
6 growth that occurred in the past to continue in the future, the required ROE must be
7 based on the arithmetic annual average. If an ROE set to earn on the geometric
8 average annual growth, the expected growth cannot be achieved if there is any
9 variability in annual growth.

10 **Q. DOES STAFF USE ARITHMETIC BASED AVERAGES OR MEANS**
11 **ELSEWHERE IN ITS MODELS?**

12 A. Yes. The historical market risk premium used in its historical market risk premium
13 CAPM is an arithmetic mean risk premium of the S&P 500 total returns over
14 intermediate government bonds. *See* Irvine DT at 28 and Response to Company
15 Data Request 3.11, attached hereto as Rebuttal Exhibit No. 1.

16 **Q. DOESN'T THE USE OF ARITHMETIC MEANS AND GEOMETRIC**
17 **MEANS PROVIDE A BALANCED APPROACH?**

18 A. No, although Staff apparently thinks so. *See* Staff Response to Company Data
19 Request 3.12, attached hereto as Rebuttal Exhibit No. 1. I have stated the reasons
20 why the geometric mean is not appropriate earlier and will not repeat them. The
21 use of the geometric mean does not provide balance. What it does do is to skew
22 Staff's DCF results downward.

23 **Q. EARLIER YOU SHOWED THAT STAFF'S PROJECTED GROWTH**
24 **RATES AVERAGED 7.1%. HOW DOES STAFF COMPUTE THE**
25 **PROJECTED GROWTH RATES FOR DPS GROWTH AND EPS**
26 **GROWTH?**

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28 ⁶ Roger A. Morin. *New Regulatory Finance*. 2006. Public Utility Reports, Inc. p. 133.

1 A. Using the Value Line data they compute a growth rate which is really a geometric
2 average. I do not quite understand why Staff does this because Value Line provides
3 a 3-5 year growth rate on in the Value Line report for each company. Staff's
4 computed values are lower than the stated growth rates on Value Line reports for
5 each company. Using the Value Line reported 3-5 year growth rates, the average
6 growth rates for DPS and EPS would be 4.8% and 9.0%, respectively and Staff's
7 the average projected growth rate would be 7.4%. Compare this to 7.1% in the
8 table above.

9 **Q. WHAT WOULD BE THE IMPACT ON STAFF'S DCF RESULTS USING**
10 **ARITHMETIC MEANS RATHER THAN GEOMETRIC MEANS FOR THE**
11 **GROWTH RATES?**

12 A. Staff's DCF result would be at least 20 basis points higher at 9.2%. If we exclude
13 the lowest and least realistic of the growth rates, the historical DPS growth rate of
14 2.7%, Staff's DCF result would be at least 60 basis points higher at 9.6%. Compare
15 this to Staff's 9.0% as shown on Staff Schedule SPI-2.

16 **F. Staff CAPM Estimates Underestimate the Current Cost of Equity.**

17 **Q. LET'S MOVE ON TO STAFF CAPM ESTIMATES. WHAT IS THE**
18 **ESTIMATED BETA FOR GOODMAN STAFF HAS USED IN ITS CAPM?**

19 A. Staff used an average of the betas estimated by Value Line for each utility in its
20 sample group to implement the CAPM. Staff computed an average beta of 0.82 for
21 the six water utilities in its sample group. *See Irvine DT 27.*

22 As I have testified, Staff has not presented any evidence or data suggesting
23 that Goodman, if it were publicly traded, would have a beta equal to that of their
24 utility sample group. They have made no attempt to analyze the particular risks
25 associated with an investment in Goodman and to compare those risks with the
26 publicly traded water utilities in their sample groups. They have simply assumed
27 that all water utilities, regardless of a particular utility's size and other firm-specific
28 characteristics, have the same beta as the publicly traded water utilities.

1 **Q. HOW DOES STAFF COMPUTE THE MARKET RISK PREMIUMS USED**
2 **IN ITS CAPM?**

3 A. Staff does not compute an historical MRP. Staff's historical MRP is based on the
4 S&P 500 market returns from 1926 to 2004 reported by Ibbotson and is 7.5%. *See*
5 Irvine DT at 28. Staff's current MRP is derived by solving a CAPM, Staff's
6 equation (8) as shown on page 25 of Mr. Irvine's testimony, for the MRP using
7 Staff's derived market based DCF ROE of 10.48%, a 30-year Treasury note of
8 4.68%, and a beta of 1.0. Staff's current MRP in the instant case is 5.8%. Aside
9 from this method being extremely unstable, Staff using median values of dividend
10 yield and growth for its market based DCF ROE which skew the CAPM results
11 significantly downward.

12 **Q. EXCUSE ME, MR. BOURASSA, DID YOU TESTIFY THAT STAFF USES**
13 **MEDIAN VALUES INSTEAD OF AVERAGE VALUES IN DERIVING THE**
14 **CURRENT MRP?**

15 A. Yes. *See* Staff Response to Company Data Request 3.1 and 3.6, attached hereto as
16 Rebuttal Exhibit No. 1. Staff uses median values for the dividend yield and the
17 growth rate in the DCF method used to compute a current market ROE. The
18 dividend yield is the median dividend yield for the next 12 months of the Value
19 Line Index dividend paying stocks. The growth rate is based on the median price
20 appreciation potential for the next 3-5 years of the 1700 stocks in the Value Line
21 Index. The use of the median values is some what confusing as Staff uses an
22 arithmetic average based growth rate in its historical market risk premium CAPM.
23 What is further disturbing is that the median values are considerably less than the
24 average values. For example, the average dividend yield for the Value Line Index
25 for the next 12 months of the Value Line Index dividend paying stocks is 2.15%.
26 Compare this to the 1.7% used by Staff. The average price appreciation is over
27 10.75%. Compare this to the 8.78% used by Staff.

28

1 Q. WHAT DOES STAFF HAVE TO SAY ABOUT THE USE OF MEDIAN
2 VALUES?

3 A. Staff finds the median values fair and reasonable. *Id.* Yet, Staff has not even
4 attempted to ascertain what the average values are and whether those values are
5 more or less reasonable than the median values. *See* Staff Response to Company
6 Data Request 3.2, 3.3 and 3.4, attached hereto as Rebuttal Exhibit No. 1.

7 Q. ARE YOUR COMPARISONS CONSISTENT WITH THE DATES UPON
8 WHICH STAFF PREPARED ITS CURRENT MRP?

9 A. Yes. Staff acquired its median values for dividend yield and price appreciation
10 and prepared its current MRP using the Value Line reports published on October
11 27, 2006. The data upon which I computed the average dividend and price
12 appreciation values for the Value Line Index are from the October 31, 2006 Value
13 Line Analyzer Software database. So, the comparisons are valid.

14 Q. WHAT WOULD BE THE IMPACT ON STAFF'S CAPM RESULTS USING
15 THE AVERAGES RATHER THAN THE MEDIANS AS INPUTS INTO THE
16 CURRENT MARKET RISK PREMIUM CAPM?

17 A. The current market risk premium CAPM would produce an indicated COE of
18 11.4%. Compare this to 9.4% as shown on Staff's Schedule SPI-2. Staff's average
19 CAPM result would be 11.1%. Compare this to Staff's 10.1% as shown on Staff
20 Schedule SPI-2.

21 G. Restatement of Staff Cost of Equity Results.

22 Q. BASED ON THE USE OF ARITHMETIC MEANS RATHER THAN
23 GEOMETRIC MEANS FOR STAFF'S DCF GROWTH AND EMPLOYING
24 MEANS RATHER THAN MEDIANS TO DERIVE A MARKET RISK
25 PREMIUM FOR THE CAPM, WHAT WOULD STAFF'S OVERALL
26 RESULTS BE?

27 A. Staff's over all COE result would be 10.2%, over 60 basis points higher than its
28 recommended 9.6%. The 10.2% result includes the use of the low DPS and EPS

1 growth rates. Thus, the 60 basis points is the minimum bias I believe is present in
2 Staff's models in the instant case. A significant problem with Staff's application of
3 the DCF and CAPM is in the choice of the inputs it employs and the reasonableness
4 of their assumptions. When they are examined in detail, it becomes apparent that
5 their respective choices skew the results of models downward.

6 **V. RATE DESIGN.**

7 **Q. PLEASE SUMMARIZE THE POSITIONS OF THE PARTIES WITH**
8 **RESPECT TO THE RATE DESIGN.**

9 A. As a preliminary matter, I would like to point out that during discovery and after a
10 discussion with Mr. Myhlhousen regarding his rate design schedule (Staff Schedule
11 CRM -18) I understand that the monthly minimums above the 5/8 inch meter size
12 as shown on Staff's rate design schedule are incorrect. According to Mr.
13 Myhlhousen, the monthly minimums should have been more closely aligned with
14 the minimums scaled on the 5/8 inch meter flow rates and the minimums shown on
15 this schedule. Also, Mr. Myhlhousen informs me that he intended for the 3/4 inch
16 metered customers to have the same monthly minimum as the 5/8 inch metered
17 customers. Base on my understanding, the monthly minimums for Staff should be
18 as follows:

<u>Meter Size</u>	<u>Monthly Minimum</u>	<u>Gallons included in Monthly Minimum</u>
5/8	\$39.00	0
3/4	\$39.00	0
1	\$95.00	0
1 1/2	\$195.00	0
2	\$305.00	0
3	\$624.00	0
4	\$975.00	0
6	\$1,170.00	0

1 I will address Staff's rate design for purposes of rebuttal based on this
2 understanding. If I have misunderstood Staff's intended rate design, I apologize in
3 advance for any criticisms of Staff design based on this misunderstanding.

4 **Q. PLEASE CONTINUE.**

5 A. The primary difference between Staff and the Company's rate design is that Staff is
6 recommending a three tier design for the 5/8 inch metered customers and two-tier
7 designs for larger meters. Each size meter larger than 5/8 inch meter have distinct
8 two-tier design whereas the Company has proposed three tier designs for all meter
9 sizes and has only two separate tier structures - one for the 3/4 inch and smaller
10 meters and one for the 1 inch and larger meters.

11 Both Staff and the Company's monthly minimums are scaled on the 5/8 inch
12 meter with the exception that Staff's 3/4 inch meter monthly minimum is not scaled.
13 Rather, it is the same as the 5/8 inch meter.

14 **Q. DO YOU AGREE THAT THE 3/4 INCH METERS SHOULD HAVE THE**
15 **SAME MONTHLY MINIMUM AS THE 5/8 INCH METERS?**

16 A. No. The 3/4 inch meters should be scaled on the 5/8 inch meter as are Staff's other
17 size meters. The 3/4 inch meters have a higher potential demand on the water
18 system due to higher flow capacity and accordingly should have a higher minimum
19 charge. The Company's present monthly minimums reflect the demand potential
20 differential and there is no reason to change the basic design.

21 **Q. DOES IT MAKE SENSE TO HAVE THE SAME MONTHLY MINIMUMS**
22 **FOR THE 5/8 INCH METERS AND 3/4 INCH METERS IN LIGHT OF THE**
23 **FACT THAT STAFF'S PROPOSES A SEPARATE TWO-TIER DESIGN**
24 **RATHER THAN A THREE-TIER DESIGN FOR THE 3/4 INCH METERS?**

25 A. No. If the Commission decides to set the 5/8 inch meter and 3/4 inch meter monthly
26 minimums the same, then the 3/4 inch meters should be on the same tier structure as
27 the 5/8 inch meters. This is not the case under Staff's design (as I understand it).

28 *See Staff Schedule CRM-18.*

1 **Q. DOES IT MAKE SENSE TO HAVE SEPARATE TIER STRUCTURES OR**
2 **BREAK OVER POINTS FOR EACH SIZE METER?**

3 A. It depends. In the instant case, there Company only has 5/8 inch metered
4 customers, 1 inch metered customers, and 2 inch metered customers. Most of the
5 customer base consists of 5/8 inch metered customers. The Company's proposed
6 rate design is less complex and easier to understand - important factors in a rate
7 design for a small water utility.

8 Additionally, until the patterns of use for the various larger meters are
9 available it is not wise to establish break over points over all meter sizes. There
10 were only 34 - 1 inch metered customers and 3 - 2 inch metered customers at the
11 end of the test year. At the beginning of the test year, there was only 1 - 1 inch
12 metered customer and most of the growth took place during the last half of the year.
13 This compounds any meaningful analysis of usage patterns for this customer class.

14 **Q. DOES A BREAK OVER POINT OF 75,000 GALLONS MAKE SENSE FOR**
15 **THE 1 INCH METERS?**

16 A. No. The final break over point for the 5/8 inch meter is 9,000 gallons under Staff's
17 proposed design. Based on relative flow rates to the 5/8 inch meter, the logical
18 break over point on a two-tier structure for the for the 1 inch meter should be
19 22,500 gallons, not 75,000 gallons.

20 The average use for the 1 inch metered customers was approximately 3,800
21 gallons - which was less than that of the 5/8 inch metered customers. Staff's rate
22 design allows for 75,000 gallons in the first tier and if the test year provides any
23 indication of the usage pattern for the 1 inch metered customers these customers
24 will likely not or rarely receive a conservation price signal - which is after all the
25 purpose of an inverted tier design.

26 **Q. DOES THE COMPANY RECOMMEND ANY CHANGES AT THIS TIME**
27 **TO ITS RATE DESIGN?**

28 A. No.

1 **Q. WHAT ARE THE COMPANY'S REBUTTAL PROPOSED RATES?**

2 A. The rebuttal proposed rates for customers with a water meter size of:

3	<u>Meter</u>	<u>Monthly</u>	<u>Gallons included</u>
4	<u>Size</u>	<u>Minimum</u>	<u>in Monthly Minimum</u>
5	5/8	\$44.87	0
6	3/4	\$67.31	0
7	1	\$112.19	0
8	1 1/2	\$224.37	0
9	2	\$358.99	0
10	3	\$673.11	0
11	4	\$1,121.85	0
12	6	\$2,243.70	0

13 The commodity charges and tiers by meter size are:

14	<u>Meter</u>	<u>Tier (gallons)</u>	<u>Charge</u>
15	<u>Size</u>		<u>per 1,000 gallons</u>
16	5/8 and 3/4 Inch	1 to 4,000	\$ 5.02
17		4,001 to 10,000	\$ 6.72
18		Over 10,000	\$ 7.72
19	1 Inch and larger	1 to 10,000	\$ 5.02
20		10,001 to 25,000	\$ 6.72
21		Over 25,000	\$ 7.72

22 The proposed construction meter and standpipe rate is \$7.72 per 1,000
 23 gallons with no minimum monthly charge.

24 **Q. DOES STAFF AGREE TO THE COMPANY'S PROPOSED CHANGES TO**
 25 **ITS OTHER RATES AND CHARGES?**

26 A. Yes, except for the late charge. The Company recommends a \$10.00 late charge
 27 while Staff recommends a late charge of 1.5% per month. See Myhlhousen DT at
 28 11. The Company proposes a compromise of 1.5% per month or \$5.00 which ever

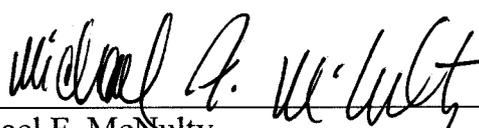
1 is greater. A late charge should encourage prompt and timely payment of customer
2 bills. A late fee of 1.5% on a \$50.00 unpaid bill amounts to 75 cents. This hardly
3 sends a proper signal to customers to pay their bills on time.

4 **Q. DOES THAT CONCLUDE YOUR REBUTTAL TESTIMONY?**

5 A. Yes.

6 RESPECTFULLY SUBMITTED this 20th day of December, 2006.

7 LEWIS AND ROCA

8 
9 _____
10 Michael F. McNulty
11 Lewis and Roca, LLP
12 One South Church Avenue, Suite 700
13 Tucson, Arizona 85701-1611
14 Attorneys for Goodman Water Company

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1 ORIGINAL AND thirteen (13) copies
2 of the foregoing delivered VIA DHL
3 this 6th day of December, 2006

4 Arizona Corporation Commission
5 Utilities Division – Docket Control
6 1200 West Washington Street
7 Phoenix, Arizona 85007

8 COPY of the foregoing delivered VIA
9 U.S. MAIL this 6th day of December, 2006

10 Goodman Water Company
11 6340 North Campbell Avenue, Suite 278
12 Tucson, AZ 85718

13 By: 
14 Hope I. Bracken
15 Secretary to Michael F. McNulty
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The Arizona Corporation Commission Utilities Division Staff's
Responses To the First Set Of Data Requests
From Goodman Water Company
Docket No. W-02500A-06-0281
December 12, 2006

REQUEST 1.1 **Workpapers – Please provide a copy of all work papers including electronic copies of schedules, copies of articles, studies, and/or references used in the rate case that support the Staff's recommendations for rate base adjustments, operating statement adjustment, and cost of capital.**

Response: Electronic copies sent to Tom Bourassa on December 4, 2006.

Respondent: Charles R. Myhlhousen, Public Utility Analyst III.

Response: Electronic copies sent to Tom Bourassa on December 6, 2006. Hard copy of references are being provided herein.

Respondent: Steve Irvine, Public Utility Analyst III.

REQUEST 1.2 **Income tax Computation and Interest Synchronization – Please explain the basis for Staff's interest expense synchronization computation in the determination of income tax expense. Please provide supporting data and computation for the 2.10% weighted cost of debt used. Please provide the actual amounts of debt and equity used by Staff, and not simply percentages.**

Response: Staff error, the Company has no interest expense or long term debt. This will be corrected in Staff's surrebuttal testimony.

Respondent: Charles R. Myhlhousen, Public Utility Analyst III.

REQUEST 1.3 **Please acknowledge that the Company has no long-term debt in its capital structure.**

Response: Staff is not aware of any long-term debt held by the company.

Respondent: Steve Irvine, Public Utility Analyst III.

REQUEST 1.4 **Please acknowledge that he Staff has not proposed long-term debt in the Company's capital structure.**

Response: Staff does not recommend any debt in the company's capital structure for this rate case.

Respondent: Steve Irvine, Public Utility Analyst III.

The Arizona Corporation Commission Utilities Division Staff's
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Docket No. W-02500A-06-0281
December 12, 2006

REQUEST 1.5 **Please acknowledge that the Commission has accepted the formula method for computing working capital for Class C utilities in the past.**

Response: I personally do not know of any companies however, the formula method may have been allowed on rare occasions. The formula method for computing working capital is not recommended for class C and above utilities when it is not supported by a lead/lag study.

Respondent: Charles R. Myhlhousen, Public Utility Analyst III.

REQUEST 1.6 **Outside Services- Please identify what services provided by CWH2 and YL Technology are duplicative. Please be specific. (Refer to page 7, line 9-10 of Mr. Myhlhousen's direct testimony.) As part of your response, please specify what portion of the services provided by each of these contractors that Staff deems to be duplicated. How did Staff determine that portion what was duplicated? Please provide basis, computation, and/or detailed analysis.**

Response: In response to Staff's third set of data requests, the information furnished stated that Mr. Christopher Hill provides on the average only 1 to 2 hours per week in managing YL Technology. That would only be 4 to 8 hours per month for a yearly fee of approximately twelve thousand dollars. In Staff's on-site visit on August 16, 2006, Mr. Hill stated that on a weekly basis he performs the same tests that YL Technology performs on a monthly basis which is all that is required.

Respondent: Charles R. Myhlhousen, Public Utility Analyst III.

REQUEST 1.7 **Outside Services – Please provide the rationale and basis for the amount of expense Staff deemed “appropriate for the services of Mr. J.A. Shiner. (ref to page 7, line 14-15 of Mr. Myhlhousen's direct testimony) Please include any computation made in determining the amount of services Staff to be appropriate.**

Response: In response to Staff's third set of data requests, the Company stated that no time cards are kept or tracking of time. No written reports are prepared. No written contract with the Company was furnished. Staff just received a listing of duties performed. From this list Staff made a determination of which duties might be day to day and which did not pertain to day to day operations. Mr. Shiner is a co-owner of the Company and this is not an arms length transaction.

Respondent: Charles R. Myhlhousen, Public Utility Analyst III.

The Arizona Corporation Commission Utilities Division Staff's
Responses To the First Set Of Data Requests
From Goodman Water Company
Docket No. W-02500A-06-0281
December 12, 2006

REQUEST 1.8 **Please define "day to day operations" as referred to by Mr. Myhlhousen on page 6, line 20 of his direct testimony.**

Response: Day to day operations would include the items necessary to provide service to the present ratepayers.

Respondent: Charles R. Myhlhousen, Public Utility Analyst III.

REQUEST 1.9 **Salaries and Wages – Please describe how Staff determined the portion of the employee's duties that were dedicated to "day to day" operations? Please provide basis, computation, and/or detailed analysis. (Refer to page 6, line 19-20 of Mr. Myhlhousen's direct testimony.)**

Response: In response to Staff's third set of data requests, the Company stated that no time cards are kept or tracking of time. No written reports are prepared. No written employment contract. Staff just received a listing of duties performed. From this list Staff made a determination of which duties might be considered day to day and which did not pertain to day to day operations. Mr. Alexander is a co-owner of the Company and this is not an arms length transaction.

Respondent: Charles R. Myhlhousen, Public Utility Analyst III

REQUEST 1.10 **Repairs and Maintenance – Please respond to the following**

a. Were the services provided by P&H Contracting the same types of services later provided by other contractors? If not, please explain.

Response: Staff agrees that this amount should not have been removed. It will be addressed in Staff's surrebuttal testimony.

Respondent: Charles R. Myhlhousen, Public Utility Analyst III

b. Were the services provided by P&H Contracting duplicated by other contractors? If so, please explain.

Response: See (a) above answer.

Respondent: Charles R. Myhlhousen, Public Utility Analyst III

The Arizona Corporation Commission Utilities Division Staff's
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- c. **Regardless of whether the same contractor(s) is (are) providing the repairs and maintenance services to the Company, is the Company expected to incur a full 12 months of expenses. If not, please explain.**

Response: See (a) above answer.

Respondent: Charles R. Myhlhousen, Public Utility Analyst III

- d. Response: The Company did not supply a subsection (d) question.
- e. **Does Staff's recommended repairs and maintenance expense include a full 12 months of test year expense? If so, please explain.**

Response: See (a) above answer.

Respondent: Charles R. Myhlhousen, Public Utility Analyst III

- f. **Please identify the specific type of service for repairs and maintenance expense that will not be recurring on a going forward basis, whether those services were preformed by P&H Contracting or by other contractors.**

Response: See (a) answer above.

Respondent: Charles R. Myhlhousen, Public Utility Analyst III

REQUEST 1.11 Please provide a proof of revenue using Staff proposed rates and the Company's bill counts.

Response: Staff has furnished Tom Bourassa the electronic copy of proof of revenue on December 4, 2006.

Respondent: Charles R. Myhlhousen, Public Utility Analyst III

REQUEST 1.1

Workpapers – Please provide a copy of all work papers including electronic copies of schedules, copies of articles, studies, and/or references used in the rate case that support the Staff’s recommendations for rate base adjustments, operating statement adjustment, and cost of capital.

Response: Electronic copies sent to Tom Bourassa on December 6, 2006. Hard copy of references are being provided herein.

Respondent: Steve Irvine, Public Utility Analyst III.

The Arizona Corporation Commission Utilities Division Staff's
Responses To the Second Set Of Data Requests
From Goodman Water Company
Docket No. W-02500A-06-0281
December 18, 2006

REQUEST 2.1 **Please indicate whether the Staff believes that the cost of equity equals the compensation that investors expect for bearing the risk of ownership of a stock? If so, please explain the basis for your response.**

Response: The answer is provided on page 7 of my direct testimony.

Respondent: Steve Irvine, Public Utility Analyst III

REQUEST 2.2 **Does Staff maintain that the six sample water utilities selected for comparison by Mr. Irvine are comparable to the Company --**

- **in terms of investment risk?**
- **in terms of market risk?**
- **in terms of the level of risk posed by an investment in the common equity?**
- **in terms of the risk associated with an investment in the common stock of each? Has that risk increased or decreased? Explain the basis for your response, including each factor or characteristic Staff considered in its selection process.**

Response: Staff maintains that the sample companies used as a proxy for Goodman are comparable in terms of market risk. Staff's analysis only measures the market risk because it is the only risk relevant to cost of equity.

Respondent: Steve Irvine, Public Utility Analyst III.

REQUEST 2.3 **Please provide the average annual total market returns for each utility in Staff's sample group for the historical 1, 3 and 5 year periods.**

Response: Staff has not performed this analysis.

Respondent: Steve Irvine, Public Utility Analyst III.

The Arizona Corporation Commission Utilities Division Staff's
Responses To the Second Set Of Data Requests
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REQUEST 2.4 **Please provide the historical 5 and 10 year average stock price growth and book growth for the six publicly traded water utilities in Staff's sample group. Are these growth rates the same as the historical DPS and EPS growth rates? If they are not the same, how are they different?**

Response: Staff has not performed this analysis.

Respondent: Steve Irvine, Public Utility Analyst III.

REQUEST 2.5 **Is the Staff's proposed cost of equity acknowledge investor expectations?**

Response: Staff's proposed cost of equity is an estimation of investor's expectations.

Respondent: Steve Irvine, Public Utility Analyst III.

REQUEST 2.6 **Is the return that investors expect for a given stock equal to the level of return that other firms with equivalent levels of risk also yield? Explain the basis for your answer.**

Response: Expectations do not equate to yields.

Respondent: Steve Irvine, Public Utility Analyst III.

REQUEST 2.7 **Please indicate whether Staff believes that historical annual total market returns influence investor expectations? If so, please indicate to what extent they do, and if not, please explain why Staff believes it not to be the case.**

Response: Staff does believe that historical annual total market returns influence investor expectations. This is recognized as an input in Staff's use of the historical market risk premium. It is reasonable to expect that the extent to which individual investors give consideration to historical returns differs.

Respondent: Steve Irvine, Public Utility Analyst III.

The Arizona Corporation Commission Utilities Division Staff's
Responses To the Second Set Of Data Requests
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REQUEST 2.8 Are total historical market returns more or less important than historical EPS and DPS growth in developing estimates of investor expectations?

Response: It is reasonable to expect that individual investors place differing degrees of importance on each growth factor.

Respondent: Steve Irvine, Public Utility Analyst III.

REQUEST 2.9 Please provide any studies, reports or other supporting reference materials that concludes the analysts' estimates for the water utility industry from Value Line, and/or the S&P Earnings Guide, and/or Zacks are overly optimistic.

Response: Staff's testimony makes reference to articles that describe the tendency for analysts as a whole to be overly optimistic, but does not make reference to reference material that speaks specifically to analysts from Value Line, S&P Earnings Guide, or Zacks.

Respondent: Steve Irvine, Public Utility Analyst III

REQUEST 2.10 Please state the assumptions of the DCF constant growth model.

Response: Investors evaluate common stocks in the classical economic framework. Investors discount the expected cash flows at the same rate (k) in every future period. K corresponds only to the specific stream of future cash flows. Dividends, rather than earnings, constitute the source of value. The discount rate (k) must exceed the growth rate (g). As g approaches k , the stock price becomes infinite ($P_0 = D_1/k-g$). The constant growth rate will continue for an indefinite future. Investors require the same k each year. There is no external financing – growth is provided only by the retention of earnings. The dividend payout ratio remains constant. The price/earnings ratio remains constant. The stock price grows proportionately to the growth rate.

Respondent: Steve Irvine, Public Utility Analyst III

The Arizona Corporation Commission Utilities Division Staff's
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REQUEST 2.11 Does Staff believe that the estimated betas published by Value Line:
• provide a useful measure of investment risk?
• provide a useful measure of market risk?
Please, explain the basis for your answers, including the relationship between beta and investment risk, between beta and market risk, and between market and investment risk?

Response: Beta is a measure of market risk and not investment risk.

Respondent: Steve Irvine, Public Utility Analyst III

REQUEST 2.12 Discounted Cash Flow - With regards to the Dividends Per Share (DPS) and the Earnings Per Share (EPS) for six sample water utilities selected by Mr. Irvine, please indicate:
• the historical 5 and 10 year arithmetic means of DPS and EPS growth
• the historical 5 and 10 year geometric means for DPS and EPS growth

Response: Staff calculated 10 year geometric means as shown below and in the workpapers provided in response to the company's first data request. Staff did not calculate 5 year geometric means or arithmetic means for DPS and EPS.

American States Water	DPS	1.1	EPS	2.5
California Water		1.1		2.3
Aqua America		6.2		9.4
Connecticut Water		1.3		-0.9
Middlesex Water		2.2		0.4
SJW Corp		4.2		6.6

Respondent: Steve Irvine, Public Utility Analyst III

The Arizona Corporation Commission Utilities Division Staff's
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REQUEST 2.13

Discounted Cash Flow – In connection with the geometric mean and the arithmetic mean of historical DPS and EPS growth rates:

- **which methodology does Staff rely upon, and why?**
- **which methodology does Staff rely upon in estimating the cost of capital, and why?**

Response:

Staff relies on geometric means when calculating DPS and EPS growth rates. Staff uses both geometric and arithmetic means in estimation of cost of capital. Use of both arithmetic and geometric growth rates provides a balanced approach to cost of equity estimation.

Respondent: Steve Irvine, Public Utility Analyst III

The Arizona Corporation Commission Utilities Division Staff's
Responses To the Third Set Of Data Requests
From Goodman Water Company
Docket No. W-02500A-06-0281
December 18, 2006

REQUEST 3.1

CAPM – Current Market Risk Premium – Does Staff use Value Line Investment Survey 3-5 year estimated median price appreciation potential as the basis for computing the growth rate used in Staff's DCF current market cost of equity computation? If yes, what is the computed growth rate? Also, please explain why the median price appreciation is used and not the average price appreciation. Also, please explain 1) why the projected 3-5 year total return for the stocks in the Value Line Investment Survey is not used 2) why the projected 3-5 year annual DPS growth rate is not used: and, 3) why the projected 3-5 year annual EPS growth rate is not used. If no, please explain.

Response:

Estimated median price appreciation potential from Value Line is a component of the calculation used to compute the growth rate used in Staff's calculation of the current market cost of equity. See page 28 of direct testimony of staff witness Steve Irvine for the computed growth rate. Median measures have the benefit of being affected less by statistical outliers. 1) That would be inefficient as growth information is already available in Value Line's appreciation potential. 2) and 3) Sole reliance on DPS or EPS growth would be incomplete as they are single indicators of growth.

Respondent: Steve Irvine, Public Utility Analyst III

REQUEST 3.2

CAPM – Current Market Risk Premium – Please provide the average projected 3-5 year price appreciation for the 1700 stocks followed in the Value Line Investment Survey. Is this higher or lower than the median price appreciation potential used by Staff?

Response:

Staff does not have that information and it would be burdensome to calculate.

Respondent: Steve Irvine, Public Utility Analyst III.

The Arizona Corporation Commission Utilities Division Staff's
Responses To the Third Set Of Data Requests
From Goodman Water Company
Docket No. W-02500A-06-0281
December 18, 2006

REQUEST 3.3 **CAPM – Current Market Risk Premium** – Please provide the average projected 3-5 year total return for the 1700 stocks followed in the Value Line Investment Survey. Is this higher or lower than the median price appreciation potential used by Staff?

Response: Staff does not have that information and it would be burdensome to calculate.

Respondent: Steve Irvine, Public Utility Analyst III.

REQUEST 3.4 **CAPM – Current Market Risk Premium** – Please provide average projected 3-5 year DPS growth rate for the 1700 stocks followed in the Value Line Investment Survey. Is this higher or lower than the Staff's computed growth rate based on the median price appreciation potential?

Response: Staff does not have that information and it would be burdensome to calculate.

Respondent: Steve Irvine, Public Utility Analyst III.

REQUEST 3.5 **CAPM – Current Market Risk Premium** – Please provide average projected 3-5 year EPS growth rate for the 1700 stocks followed in the Value Line Investment Survey. Is this higher or lower than the Staff's computed growth rate based on the median price appreciation potential?

Response: Staff does not have that information and it would be burdensome to calculate.

Respondent: Steve Irvine, Public Utility Analyst III.

The Arizona Corporation Commission Utilities Division Staff's
Responses To the Third Set Of Data Requests
From Goodman Water Company
Docket No. W-02500A-06-0281
December 18, 2006

REQUEST 3.6 **CAPM – Current Market Risk Premium** – Does Staff use Value Line Investment Survey median of estimated dividend yields (next 12 months) of all dividend paying stocks as the basis for dividend yield used in Staff's DCF current market cost of equity computation? If yes, please explain why the median dividend yield is used and not the average dividend yield.

Response: Estimated dividend yields from Value Line is used for the dividend yield component used in Staff's calculation of the current market cost of equity. See page 28 of direct testimony of staff witness Steve Irvine. Staff finds median of estimated dividend yields a fair and reasonable measure of expected dividend yield. Median measures have the benefit of being affected less by statistical outliers.

Respondent: Steve Irvine, Public Utility Analyst III.

REQUEST 3.7 **CAPM – Current Market Risk Premium** – Does Staff include 3-5 year income growth (dividend growth) potential in computing the growth rate used in Staff's DCF current market cost of equity computation? Please explain.

Response: Staff has interpreted this question to ask if there is a dividend growth component in Value Line's appreciation potential. This depends on the underlying assumptions of Value Line's calculation and Staff is not certain of Value Line's inputs.

Respondent: Steve Irvine, Public Utility Analyst III.

REQUEST 3.8 **CAPM – Current Market Risk Premium** – Is Staff's computed growth rate based on Value Line Investment Survey 3-5 year estimated median price appreciation potential and used in Staff's DCF current market cost of equity computation a geometric average growth rate?

Response: Yes. See direct testimony of Staff witness Steve Irvine at page 28.

Respondent: Steve Irvine, Public Utility Analyst III.

The Arizona Corporation Commission Utilities Division Staff's
Responses To the Third Set Of Data Requests
From Goodman Water Company
Docket No. W-02500A-06-0281
December 18, 2006

REQUEST 3.9 **CAPM – Current Market Risk Premium** – Does Staff's current market risk premium include a 3-5 year income (dividend) growth potential? If the current market risk premium does not include a 3-5 year income growth potential, isn't Staff's current market risk premium understated. If not, why not.

Response: No. Dividend growth isn't a component of the CAPM. Staff's CAPM ROE result is whole and nothing is omitted.

Respondent: Steve Irvine, Public Utility Analyst III

REQUEST 3.10 **CAPM – Current Market Risk Premium** – Is the historical market risk premium of 7.5% employed in Staff's historical market risk premium CAPM computed by averaging the historical arithmetic difference between S&P 500 total returns and intermediate-term government bond income returns from 1926 through 2005 as reported in Ibbotson Associates 2006 Yearbook? If not, please explain.

Response: Yes. This is described on pages 27 and 28 of direct testimony of staff witness Steve Irvine. Staff's testimony incorrectly cites the 2005 yearbook and should refer to the 2006 yearbook.

Respondent: Steve Irvine, Public Utility Analyst III

REQUEST 3.11 **CAPM – Current Market Risk Premium** – Is the Ibbotson Associates historical equity risk premium used by Staff an arithmetic mean or a geometric mean?

Response: The Ibbotson's risk premium is based on an Arithmetic mean. This is described on pages 27 and 28 of direct testimony of staff witness Steve Irvine.

Respondent: Steve Irvine, Public Utility Analyst III

The Arizona Corporation Commission Utilities Division Staff's
Responses To the Third Set Of Data Requests
From Goodman Water Company
Docket No. W-02500A-06-0281
December 18, 2006

REQUEST 3.12 **Please explain why Staff uses the geometric mean for its historical DPS and EPS growth rates and the arithmetic mean for the historical equity risk premium.**

Response: Staff uses both geometric and arithmetic means in estimation of cost of capital to provide a balanced approach to cost of equity estimation.

Respondent: Steve Irvine, Public Utility Analyst III

REQUEST 3.13 **Do the Ibbotson Associates historical total market returns used to compute the historical intermediate-horizon equity risk premium include both capital (price) appreciation and income returns? If not, please explain.**

Response: The intermediate horizon expected equity risk premium used by Staff is derived by subtracting large company stock total returns minus intermediate term government bond income returns.

Respondent: Steve Irvine, Public Utility Analyst III

REQUEST 3.14 **Describe how increases in yields on U.S. Treasury instruments and other publicly-available interest rates have affected Staff's cost of equity recommendations for Arizona water and wastewater utilities during the past three years.**

Response: Staff's has not performed this analysis.

Respondent: Steve Irvine, Public Utility Analyst III

The Arizona Corporation Commission Utilities Division Staff's
Responses To the Third Set Of Data Requests
From Goodman Water Company
Docket No. W-02500A-06-0281
December 18, 2006

REQUEST 3.15

Indicate whether an investor would expect the cost of equity of the publicly traded water utilities in Staff's sample group to exceed the interest rates (yields) of the following:

- a. 10-year Treasury note**
- b. 20-year Treasury note**
- c. Investment grade (Baa) corporate bonds**

Response:

- a) As shown in Mr. Irvine's testimony and workpapers the cost of equity of the publicly traded water utilities is greater than the 10-year Treasury note.
- b) Staff has not conducted this analysis.
- c) Staff has not conducted this analysis.

Respondent: Steve Irvine, Public Utility Analyst III

2

MEMORANDUM

RECEIVED

TO: Docket Control Center

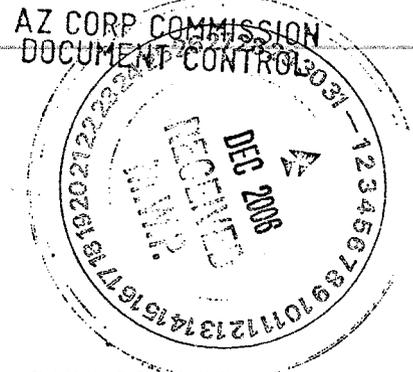
THRU: Ernest G. Johnson
Director
Utilities Division

FROM: Darron W. Carlson
Public Utilities Analyst Manager
Utilities Division

DATE: November 30, 2006

RE: SUPPLEMENT TO STAFF REPORT FOR SABROSA WATER
COMPANY'S APPLICATION FOR ESTABLISHMENT OF
PERMANENT RATES (DOCKET NO. W-02111A-06-0361)

2006 NOV 30 P 2:21



Prior to resigning from his position as an Arizona Corporation Commission Staff Public Utilities Analyst III, Jim Beechey completed the attached Staff Report. Mr. Carlson has reviewed Mr. Beechey's Staff Report dated November 30, 2006, and adopts it for filing on behalf of Staff.

EGJ:DWC:red

Originator: Darron W. Carlson

Service List for: Sabrosa Water Company
Docket No. W-02111A-06-0361

Mr. Michael W. Patten
ROSHKA, DEWULF & PATTEN, PLC
One Arizona Center
400 East Van Buren Street, Suite 800
Phoenix, Arizona 85004

Mr. Dennis Schumacher
123 West Sabrosa Drive
Phoenix, Arizona 85087

Mr. Christopher C. Kempley
Chief, Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

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

Ms. Lyn Farmer
Chief, Hearing Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

**STAFF REPORT
UTILITY DIVISION
ARIZONA CORPORATION COMMISSION**

SABROSA WATER COMPANY

DOCKET NO. W-02111A-06-0361

**APPLICATION FOR A
PERMANENT RATE INCREASE**

NOVEMBER 30, 2006

STAFF ACKNOWLEDGMENT

The Staff Report for Sabrosa Water Company, Docket No. W-02111A-06-0361 was the responsibility of the Staff members listed below. Jim Beechey was responsible for the review and analysis of the Company's application, recommended revenue requirement, rate base, and rate design. Dorothy Hains was responsible for the engineering and technical analysis. Bradley Morton was responsible for reviewing the Commission's records on the Company, determining compliance with Commission policies/rules and reviewing customer complaints filed with the Commission.



Jim Beechey
Public Utilities Analyst III



Dorothy Hains
Utilities Engineer

Bradley Morton
Public Utilities Consumer Analyst II



STAFF ADJUSTMENTS

A -	METERED WATER REVENUE - Per Company	\$43,501	
	Per Staff	58,458	\$14,957

Increased metered water revenue by \$15,401 to reflect a full twelve month test year at the present interim emergency rates; and to reflect the current 51 customer level from the test year average of 58.

5/8 (54 cust per bill count = 61,072) - (8 cust x's 89.13 ave cost=8,556) =52,516
3/4 (1 cust = 2,394)
1" (3 cust = 2,696) + (1 cust x's 70.50 ave cost x's 12=852)=3,548
52,516+2,394+3,548=58,458

B -	OUTSIDE SERVICES - Per Company	\$110,843	
	Per Staff	15,912	(\$94,931)

Decreased outside services expense by \$94,931 as follows:
- reclassified \$2,180 in legal expense to Regulatory Commission expense.
- decreased Company's unsubstantiated remaining asserted expenses from \$108,663 to \$15,912, an amount considered by Staff to be fair and reasonable based on the averaged costs of 35 small water companies, @ \$26.00 per customer per month. for 51 current customers. (26x51x12=15,912).
Averaged costs include salaries, outside services, rent, office & supplies, telephone, insurance, and transportation expense.

C -	WATER TESTING - Per Company	\$1,814	
	Per Staff	3,909	\$2,095

Increased water testing costs by \$2,095 to reflect Staff's recommended annual monitoring expense reflecting the Company's mandatory participation in the Monitoring Assistance Program.

D -	REGULATORY COMMISSION EXPENSE - RATE CASE	\$0	
	- Per Company		
	Per Staff	7,790	\$7,790

Recorded Regulatory Commission Expense of \$7,790 reflecting amortization over four years of \$30,296 in rate case related legal expenses that were incorrectly capitalized by the Company to plant in service and outside services expense.

3

Memorandum

Date: May 21, 2004

To: Izetta C. R. Jackson, Director – Water Division

From: **Public Utilities Commission—
San Francisco –**
Seaneen M. Wilson, FEIV

Subject: *Concerns regarding how Rates of Return and Returns on Equity are determined for Class A, B, C, and D Water Utilities*

Overview

I would like to address two issues in this memorandum – 1) Concerns regarding the determination of a Rate of Return (ROR) for Del Oro Water Company, and 2) Explanation of the specific methods used to determine the ROR for the various classes of water utilities.

Concerns Regarding Del Oro ROR

Prior to the May 6th Commission meeting, an advisor raised concerns regarding the determination of the Rate of Return (ROR) of 8.53% for Del Oro Water Company (Del Oro) (Agenda Item 16 at May 6th Commission Meeting). There was a concern that the ROR for this Class B water utility was 100 basis points lower than ROR's recently authorized for Class A water utilities.

First of all, the recommended ROR for Del Oro is not 100 basis points less than the ROR's most recently authorized for Class A water utilities. In particular, at the May 6th meeting, California-American Water was authorized a ROR of 6.74% (D.04-05-023) and the next most recent authorized ROR is 8.79% for Southern California Water (D.04-03-039). Not only are these returns not 100 basis points greater than that recommended for Del Oro, in the case of California-American, its ROR is 179 basis points lower than that recommended for Del Oro.

Second, as described below, there is a particular method for determining the ROR for each Class of water utility. If the suggested adjustment of a 100 basis point increase is made to the ROR, the Return on Equity (ROE) for this Class B water utility would be greater than that authorized for a Class D water utility, which is not appropriate. (see detailed discussion below)

Methods for determining ROR for Different Classes of Water Utilities

One of the duties of this Commission is to authorize the ROR and ROE for Class A, B, C, and D water utilities. Given the different characteristics of and risks faced by each class of water utility, the ROR and ROE are calculated differently for each.

Class A – 10,000 or more customers

The ROR for Class A water utilities is determined by summing the weighted cost of each component of the capital structure (cost factor times percentage of capital structure). This capital structure is normally made up of long-term debt and common equity. The long-term debt cost is based on the rates each company pays its lenders and the ROE is determined by the Commission after assessing the results of market based models run on a comparable group of water utilities. (Example attached at p. 4 – Table 1-1)

Class B – 2,000 – 9,999 customers

The ROR for Class B water utilities is determined in a similar fashion, except for the calculation of the ROE. Since market data is not available for water utilities comparable to Class B (companies of this size are not publicly traded), staff averages the most recently authorized Class A and Class C ROE's in order to determine the appropriate ROE for a Class B company (see attached tables at p.5 – Class B Tables). The company specific capital structure and cost of long-term debt¹ are then combined with this Class A & C average ROE to determine the overall ROR for the Class B water utility.

Del Oro ROR

As the first Class B Table shows (page 5), the ROR calculated for Del Oro is 8.53%. This is based on a combination of the company specific capital structure and cost of long-term debt and the average of the recently authorized Class A and C returns. A suggestion has been made that this company receive a ROR of 9.50%. If this ROR is plugged into that calculation, the resulting ROE would be 13.57%, which is greater than the highest ROE currently being recommended for Class D water utilities of 13.4% (page 6).

Class C & D – C = 500- 1,999 customers / D = 1 – 499 customers

The ROR for Class C and D water utilities is determined based on procedures adopted in

¹ D.92-03-093, p. 30, "As to rate of return, we will continue to deal with Class B utilities on a case by case basis."

D.92-03-093.² Since most Class C and D water utilities do not have any long-term debt, (or, if they do it is covered by a principal and interest surcharge and not included in rates) their total capital structure consists of common equity. The ROE that is determined for Class C and D water utilities is also the ROR. Per D.92-03-093, each year the Water Division reviews the movement of interest rates in the past year as well as ROEs authorized for Class A water utilities to determine the appropriate ROEs for the Class C and D water utilities. (See attached March 1, 2004 memo) If there is material movement up or down in interest rates or the authorized Class A ROE's, then the range of ROEs recommended for Class C and D water utilities is adjusted in the same direction. A range of ROE's is provided so that the analyst can consider the specific risks faced by each individual company in a particular class.³

If you have any questions or would like to learn more about cost of capital for water utilities, please contact me at 415-703-1818 or smw@cpuc.ca.gov.

² D.92-03-093, p. 29, "Because we recognize that Class C and Class D water utilities are fundamentally different from Class A water utilities in terms of the operational and financial risks they face, it is not appropriate to tie the range of returns to those of Class A utilities. Instead, we will have CACD prepare an annual recommendation to the Commission on the appropriate range of returns for Class C and D utilities. Consideration will be given to changes in financial conditions and substantial changes in operational conditions meriting adjustment to the range of reasonable returns."

³ D.92-03-093, p. 29, "Use of a range allows for acknowledgement of differences in water quality, service, and management."

Table 1-1

	Capital Structure	Cost Factor	Weighted Cost
Test Year 2003			
Long-Term Debt	55.92%	7.39%	4.13%
Common Equity	44.08%	9.54%	4.20%
Total	100.00%		8.34%
Test Year 2004			
Long-Term Debt	57.56%	7.28%	4.19%
Common Equity	42.44%	9.54%	4.05%
Total	100.00%		8.24%
Test Year 2005			
Long-Term Debt	58.35%	7.16%	4.18%
Common Equity	41.65%	9.54%	3.97%
Total	100.00%		8.15%
Test Year 2006			
Long-Term Debt	58.40%	7.46%	4.36%
Common Equity	41.60%	9.54%	3.97%
Total	100.00%		8.32%

Class B Tables

**Del Oro Group of Companies
Cost of Capital**

Description	Capital Ratios	Cost Factors	Weighted Cost Factors
Long Term Debt	67.20%	7.57%	5.09%
Common Equity	32.80%	10.98%	3.60%
Rate of Return	<u>100%</u>		<u>8.69%</u>

**Del Oro Group of Companies
Class B Water ROE**

Description	ROE
Most Recently Authorized Class A ROE	9.80%
Average of Range of Class C ROE's recommended by Water Division	12.15%
Average	<u>10.98%</u>

Memorandum

Date: March 1, 2004

To: The Commission

From: **Kenneth K Louie, Chief, Audit & Compliance Branch**
Izetta Jackson, Director, Water Division

Subject: *Rate of Return for Small Water Utilities (Class C and Class D)*

This memorandum updates the Water Division's recommended rates of return for Class C (<2,000 customers) and Class D (<500 customers) water companies, as required by D.92-03-093 in Phase I of I.90-11-033 (Water Risk OII).

Based on our analysis of financial market changes within the last year and the high operational risks faced by Class C and Class D water companies, we are recommending no change in the return ranges for Class C and Class D water utilities informal general rate cases. For 2004, we are recommending Return on Equity (ROE) ranges of:

Class C – 11.65% to 12.65% (no change from last year)

Class D – 12.40% to 13.40% (no change from last year)

In setting rates of return for other utilities, the Commission has recognized changes in interest rates as well as the economy generally. At the same time, the Commission has cautioned against lock-step conformity to these factors. The Water Division's Audit & Compliance staff has developed its recommendations accordingly.

- Financial Market Outlook: Overall, interest rates have decreased since last year. As of February 2004:
 - The average yield on 90-day Treasury Bills is .92%, as compared to 1.03% for 2003, representing an 11 basis point decrease;
 - The average yield on a 1-Year Treasury is 1.25%, as compared to 1.24% for 2003, representing a 1 basis point increase;
 - The average yield on a 5-Year Treasury is 3.10%, as compared to 2.97% in 2003, representing a 13 basis point increase; and
 - The average Long-term Treasury is 5.03%, as compared to 4.96% in 2003,

representing a 7 basis point increase.

- It should also be noted that the interest rate forecasts for 2004 are somewhat higher than those experienced in 2003:
 - 90-day Treasury bill is forecast to be 1.10%,
 - 1-Year Treasury is forecast to be 1.57%,
 - 5-Year Treasury is forecast to be 3.39%, and
 - Long-Term Treasury is forecast to be 5.30%.

In developing its ROE recommendations, Water Division's Audit & Compliance staff also observes any changes from the previous years authorized returns for Class A water companies.

- Authorized ROE's for Class A water utilities have remained fairly constant since last year, averaging 9.93% in 2003.

Water Division staff also evaluates the high risk factors inherent in the Class C and Class D water companies, taking into account that:

- ROE should be high enough to encourage rate base investment, and
- ROE should be well above the cost of debt. This compensates owners of small water companies for financing water plant with personal borrowings, which is risky. Small water companies are still prone to business failures and uncompensated takeovers.

In D.92-03-093, the Commission has allowed rate of return to be set at a level above or below the recommended ranges if warranted by the facts of a particular case and established the 1992 standard returns shown for Class C and Class D water utilities. Thus, our recommended returns are stated as "ranges" so that Water Division staff may recognize differences in such items as water and service quality and management effectiveness, on a case-by-case basis. Since that time, several risk-reducing Commission policies have been added, including Automatic CPI offset procedure, Extraordinary expense memo accounts, Catastrophic Event Memorandum Account, Service Guarantee Plan, and Purchased Power/Water balancing accounts.

The table below provides a historical perspective on the recommended return on equity for the small water companies. Any questions regarding this recommendation may be directed to Sean Wilson of the Water Division (1-415-703-1818, smw@cpuc.ca.gov).

Year	Recommended ROE Range		Federal Reserve Statistics			
	Class C Water	Class D Water	90-day Treasuries	1-Year Treasuries	5-Year Treasuries	Long-Term Treasuries
1994	11.30% - 11.80%	13.60% - 14.10%	4.37%	5.32%	6.69%	7.37%
1995	13.00% - 13.50%	14.00% - 14.50%	5.66%	5.94%	6.38%	6.88%
1996	12.00% - 13.00%	12.75% - 13.75%	5.15%	5.52%	6.18%	6.71%
1997	12.50% - 13.50%	13.50% - 14.50%	5.20%	5.63%	6.22%	6.61%
1998	12.00% - 13.00%	12.75% - 13.75%	4.91%	5.05%	5.15%	5.58%
1999	12.00% - 13.00%	12.75% - 13.75%	4.78%	5.08%	5.55%	5.87%
2000	12.25% - 13.25%	13.00% - 14.00%	6.00%	6.11%	6.16%	5.94%
2001	12.00% - 13.00%	12.75% - 13.75%	3.48%	3.49%	4.56%	5.49%
2002	11.75% - 12.75%	12.50% - 13.50%	1.64%	2.00%	3.82%	5.43%
2003	11.65% - 12.65%	12.40% - 13.40%	1.03%	1.24%	2.97%	4.96%
2004	11.65% - 12.65%	12.40% - 13.40%	0.92%	1.25%	3.10%	5.03%

NOTE: 2003 Average Interest Rates as of February 2004

Memorandum

Date: March 1, 2004

To: The Commission

From: **Kenneth K Louie, Chief, Audit & Compliance Branch**
Izetta Jackson, Director, Water Division

Subject: *Rate of Return for Small Water Utilities (Class C and Class D)*

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In setting rates of return for other utilities, the Commission has recognized changes in interest rates as well as the economy generally. At the same time, the Commission has cautioned against lock-step conformity to these factors. The Water Division's Audit & Compliance staff has developed its recommendations accordingly.

- **Financial Market Outlook:** Overall, interest rates have decreased since last year. As of February 2004:
 - The average yield on 90-day Treasury Bills is .92%, as compared to 1.03% for 2003, representing an 11 basis point decrease;
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 - The average yield on a 5-Year Treasury is 3.10%, as compared to 2.97% in 2003, representing a 13 basis point increase; and
 - The average Long-term Treasury is 5.03%, as compared to 4.96% in 2003, representing a 7 basis point increase.

- It should also be noted that the interest rate forecasts for 2004 are somewhat higher than those experienced in 2003:
 - 90-day Treasury bill is forecast to be 1.10%,
 - 1-Year Treasury is forecast to be 1.57%,
 - 5-Year Treasury is forecast to be 3.39%, and
 - Long-Term Treasury is forecast to be 5.30%.

In developing its ROE recommendations, Water Division's Audit & Compliance staff also observes any changes from the previous year's authorized returns for Class A water companies.

- Authorized ROE's for Class A water utilities have remained fairly constant since last year, averaging 9.93% in 2003.

Water Division staff also evaluates the high risk factors inherent in the Class C and Class D water companies, taking into account that:

- ROE should be high enough to encourage rate base investment, and
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The table below provides a historical perspective on the recommended return on equity for the small water companies. Any questions regarding this recommendation may be directed to Sean Wilson of the Water Division (1-415-703-1818, smw@cpuc.ca.gov).

Year	Recommended ROE Range		Federal Reserve Statistics			
	Class C Water	Class D Water	90-day Treasuries	1-Year Treasuries	5-Year Treasuries	Long-Term Treasuries
1994	11.30% - 11.80%	13.60% - 14.10%	4.37%	5.32%	6.69%	7.37%
1995	13.00% - 13.50%	14.00% - 14.50%	5.66%	5.94%	6.38%	6.88%
1996	12.00% - 13.00%	12.75% - 13.75%	5.15%	5.52%	6.18%	6.71%
1997	12.50% - 13.50%	13.50% - 14.50%	5.20%	5.63%	6.22%	6.61%
1998	12.00% - 13.00%	12.75% - 13.75%	4.91%	5.05%	5.15%	5.58%
1999	12.00% - 13.00%	12.75% - 13.75%	4.78%	5.08%	5.55%	5.87%
2000	12.25% - 13.25%	13.00% - 14.00%	6.00%	6.11%	6.16%	5.94%
2001	12.00% - 13.00%	12.75% - 13.75%	3.48%	3.49%	4.56%	5.49%
2002	11.75% - 12.75%	12.50% - 13.50%	1.64%	2.00%	3.82%	5.43%
2003	11.65% - 12.65%	12.40% - 13.40%	1.03%	1.24%	2.97%	4.96%
2004	11.65% - 12.65%	12.40% - 13.40%	0.92%	1.25%	3.10%	5.03%

NOTE: 2003 Average Interest Rates as of February 2004

4

5

Far West Sewer Company
Discounted Cash Flow Analysis (Water)
Constant Growth DCF Model - Historical
Using Staff Historical EPS Growth

Exhibit _____
 Rebuttal
 Witness: Bourassa

Line No.	(1)	(2)	(3)	(4)	(5)
	Spot Price (Po)	Next Year's Div (D1)	Dividend Yield	10 Yr. Historical EPS Growth	Indicated Equity Cost k=Div Yld + G (Cols 1+4)
1.	American States	40.69	0.94	2.31%	4.8%
2.	Aqua America	23.55	0.47	1.98%	11.3%
3.	California Water	37.58	1.20	3.19%	5.5%
4.	Connecticut Water	22.00	0.87	3.96%	3.1%
5.	Middlesex	18.85	0.72	3.81%	4.2%
6.	SJW Corp.	32.31	0.59	1.82%	8.4%
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.	GROUP AVERAGE				6.2%
16.	GROUP MEDIAN				5.2%
17.					
18.	Current Baa interest rate				6.3%
19.					
20.	Blue Chip Forecast Baa Corporate Bond Interest Rate 2008-2009 Top 10				7.7%
21.	Blue Chip Forecast Baa Corporate Bond Interest Rate 2008-2009 Bottom 10				6.3%
22.	Blue Chip Forecast Baa Corporate Bond Interest Rate 2008-2009 Consensus				6.9%
23.					
24.	* Indicated Equity Cost Below Cost of Debt				
25.					
26.	Sources:				
27.	Staff Workpapers				
28.	Federal Reserve December 14, 2006				
29.	Blue Chip Financial Forecast December 2006				
30.					
31.					

6

Far West Sewer Company
Discounted Cash Flow Analysis (Water)
Constant Growth DCF Model - Historical
Using Staff Historical Dividend Growth

Exhibit _____
 Rebuttal
 Witness: Bourassa

Line No.	(1)	(2)	(3)	(4)	(5)
	Company	Spot Price (Po)	Next Year's Div (D1)	Dividend Yield	10 Yr. Historical DPS Growth
1.	American States	40.69	0.94	2.31%	1.06%
2.	Aqua America	23.55	0.47	1.98%	6.16%
3.	California Water	37.58	1.20	3.19%	1.12%
4.	Connecticut Water	22.00	0.87	3.96%	1.26%
5.	Middlesex	18.85	0.72	3.81%	2.18%
6.	SJW Corp.	32.31	0.59	1.82%	4.24%
7.					
8.					
9.					
10.					
11.					
12.					
13.					
14.					
15.	GROUP AVERAGE				
16.	GROUP MEDIAN				
17.					
18.	Current Baa interest rate				
19.					
20.	Blue Chip Forecast Baa Corporate Bond Interest Rate 2008-2009 Top 10				
21.	Blue Chip Forecast Baa Corporate Bond Interest Rate 2008-2009 Bottom 10				
22.	Blue Chip Forecast Baa Corporate Bond Interest Rate 2008-2009 Consensus				
23.					
24.	* Indicated Equity Cost Below Cost of Debt				
25.					
26.	Sources:				
27.	Staff Workpapers				
28.	Federal Reserve December 14, 2006				
29.	Blue Chip Financial Forecast December 2006				
30.					
31.					

Indicated
 Equity Cost
 k=Div Yld + G
 (Cols.1+4)

10 Yr.
 Historical
 DPS
 Growth

Dividend
 Yield

Next
 Year's
 Div (D1)

Spot
 Price (Po)

(1)

(2)

(3)

(4)

(5)

*
 3.4%
 8.1%
 4.3%
 5.2%
 6.0%
 6.1%

*
 5.5%
 5.6%

6.3%

7.7%

6.3%

6.9%

* Indicated Equity Cost Below Cost of Debt

Sources:

Staff Workpapers

Federal Reserve December 14, 2006

Blue Chip Financial Forecast December 2006

Goodman Water Company

Rebuttal Schedules A-1, B-1, B-2, B-5, C-1, C-2, C-3, D-1, H-1,
H-2, H-3 and H-4

Goodman Water Company
 Test Year Ended September 31, 2005
 Computation of Increase in Gross Revenue
 Requirements As Adjusted

Exhibit
 Rebuttal Schedule A-1
 Page 1
 Witness: Bourassa

Line					
<u>No.</u>					
1	Fair Value Rate Base			\$	1,292,051
2					
3	Adjusted Operating Income				(75,050)
4					
5	Current Rate of Return				-5.81%
6					
7	Required Operating Income			\$	135,665
8					
9	Required Rate of Return on Fair Value Rate Base				10.50%
10					
11	Operating Income Deficiency			\$	210,715
12					
13	Gross Revenue Conversion Factor				1.5446
14					
15	Increase in Gross Revenue				
16	Requirement			\$	325,463
17					
18	% Increase				152.55%
19					
20		Present	Proposed	Dollar	Percent
21	Customer	Rates	Rates	Increase	Increase
22	(Residential Commercial, Irrigation)				
23					
24	5/8 x 3/4 Inch Residential	\$ 124,765	\$ 344,047	\$ 219,282	175.76%
25	3/4 Inch Residential	-	-	-	0.00%
26	1 Inch Residential	10,839	27,423	16,584	153.00%
27	2 Inch Residential	13,982	43,113	29,131	208.35%
28	Construction Water	13,412	21,797	8,386	
29				-	0.00%
30	Revenue Annualization	32,746	84,425	51,678	157.81%
31	Subtotal	\$ 195,744	\$ 520,805	\$ 325,061	166.06%
32					
33	Other Water Revenues	17,940	17,940	-	0.00%
34				-	0.00%
35	Total of Water Revenues (a)	\$ 213,684	\$ 538,745	\$ 325,061	152.12%
36					
37					
38					
39					
40					
41					
42	<u>SUPPORTING SCHEDULES:</u>				
43	Rebuttal B-1				
44	Rebuttal C-1				
45	Rebuttal C-3				
46	Rebuttal H-1				
47					

Goodman Water Company
 Test Year Ended September 31, 2005
 Summary of Rate Base

Exhibit
 Rebuttal Schedule B-1
 Page 1
 Witness: Bourassa

Line No.		<u>Original Cost</u> <u>Rate base</u>	<u>Fair Value</u> <u>Rate Base</u>
1			
2	Gross Utility Plant in Service	\$ 2,365,811	\$ 2,365,811
3	Less: Accumulated Depreciation	108,511	108,511
4			
5	Net Utility Plant in Service	\$ 2,257,300	\$ 2,257,300
6			
7	<u>Less:</u>		
8	Advances in Aid of		
9	Construction	971,695	971,695
10	Contributions in Aid of		
11	Construction	-	-
12	Accumulated Amortization of CIAC	-	-
13			
14	Customer Meter Deposits	14,864	14,864
15	Deferred Income Taxes & Credits	-	-
16	Deferred Assets	-	-
17			
18			
19	<u>Plus:</u>		
20	Unamortized Finance		
21	Charges	-	-
22	Prepays	-	-
23	Deferred Assets	21,310	21,310
24	Allowance for Working Capital	-	-
25			
26			
27	Total Rate Base	\$ 1,292,051	\$ 1,292,051
28			
29			
30			
31	<u>SUPPORTING SCHEDULES:</u>		
32	Rebuttal B-2		
33	Rebuttal B-5		
34			
35			
36			

Goodman Water Company
 Test Year Ended September 31, 2005
 Original Cost Rate Base Proforma Adjustments

Exhibit
 Rebuttal Schedule B-2
 Page 1
 Witness: Bourassa
REVISED

Line No.		Adjusted at End of Test Year	<u>Adjustments</u>	Rebuttal Adjusted at end of Test Year
1	Gross Utility			
2	Plant in Service	\$ 2,348,486	17,325	\$ 2,365,811
3				
4	Less:			
5	Accumulated			
6	Depreciation	108,248	263	108,511
7				
8				
9	Net Utility Plant			
10	in Service	\$ 2,240,239	\$ 17,062	\$ 2,257,300
11				
12	Less:			
13	Advances in Aid of			
14	Construction	971,695	-	971,695
15				
16	Contributions in Aid of			
17	Construction (CIAC)	-	-	-
18				
19				
20	Accum. Amortization of CIAC	-	-	-
21				
22				
23	Customer Meter Deposits	14,864	0	14,864
24	Deferred Income Taxes	-	-	-
25	Investment Tax Credits	-	-	-
26				
27				
28	Plus:			
29	Unamortized Finance	0		
30	Charges	-	0	-
31	Prepays	-	-	-
32	Allowance for Working Capital	22,003	(694)	21,310
33		-		-
34				
35	Total	\$ 1,275,683	\$ 16,368	\$ 1,292,051

41 SUPPORTING SCHEDULES:
 42 Rebuttal B-2, pages 2

43
 44
 45
 46
 47
 48

Goodman Water Company
 Test Year Ended September 31, 2005
 Original Cost Rate Base Proforma Adjustments

Line No.	ADJUSTMENT LABEL-->	1	2	3	4	5	Rebuttal Adjusted at end of Test Year
	Adjusted at End of Test Year	Expensed Plant	Accumulated Depreciation	Working Capital			
1	Gross Utility Plant in Service	17,325					2,365,811
2							
3	Less:						
4	Accumulated Depreciation	108,248	263				108,511
5							
6							
7							
8							
9	Net Utility Plant in Service	17,325	(263)				2,257,300
10							
11	Less:						
12	Advances in Aid of Construction	971,695					971,695
13							
14							
15							
16	Contributions in Aid of Construction (CIAC)	-					-
17							
18							
19							
20	Accum. Amortization of CIAC	-					-
21							
22							
23	Customer Meter Deposits	14,864					14,864
24	Deferred Income Taxes	-					-
25	Investment Tax Credits	-					-
26							
27							
28	Plus:						
29	Unamortized Finance Charges	-					-
30							
31	Allowance for Working Capital	22,003		(694)			21,310
32							
33							
34							
35	Total	17,325	(263)	(694)			1,292,051
36							
37							
38							
39							
40							
41							
42							
43							

SUPPORTING SCHEDULES:
 Rebuttal B-2, pages 3-7

Goodman Water Company
Test Year Ended September 31, 2005
Original Cost Rate Base Proforma Adjustments
Adjustment 1

Exhibit
Rebuttal Schedule B-2
Page 3
Witness: Bourassa

Line
No.

1	<u>Capitalized Expenses</u>		
2			
3	Staff Adjustment #1 (CRM-5) Transmission and Distribution Mains	\$	17,325
4			
5			
6	Increase (Decrease) to Plant-in-Service	\$	<u>17,325</u>
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

Goodman Water Company
Test Year Ended September 31, 2005
Original Cost Rate Base Proforma Adjustments
Adjustment 2

Exhibit
Rebuttal Schedule B-2
Page 4
Witness: Bourassa

Line

No.

1	<u>Accumulated Depreciation</u>	
2		
3		
4	Accumulated Depreciation per Rebuttal Filing	\$ 108,511
5	Adjusted Accumulated Depreciation per Direct Filing	<u>108,248</u>
6		
7	Difference	\$ 263
8		
9		
10	Increase (Decrease) to Accumulated Dpreciation	<u>\$ 263</u>
11		
12		
13	<u>SUPPORTING SCHEDULES</u>	
14	Rebuttal B-2, page 2a-2f	
15		
16		
17		
18		
19		
20		

=====

Goodman Water Company
Test Year Ended September 31, 2005
Original Cost Rate Base Proforma Adjustments
Adjustment #2

Exhibit
Rebuttal Schedule B-2
Page 7
Witness: Bourassa

Line
No.

1	<u>Working Capital</u>	
2		
3	Working Capital Per Rebuttal Filing	\$ 21,310
4	Working Capital Per Direct Filing	<u>22,003</u>
5		
6		
7	Increase (Decrease) to Working Capital	<u>\$ (694)</u>
8		
9		
10		
11		
12	<u>SUPPORTING SCHEDULES</u>	
13	Rebuttal Schedule B-5	
14		
15		
16		
17		
18		
19		
20		

Goodman Water Company
Test Year Ended September 31, 2005
Computation of Working Capital

Exhibit
Rebuttal Schedule B-5
Page 1
Witness: Bourassa

Line

No.

1	Cash Working Capital (1/8 of Allowance		
2	Operation and Maintenance Expense)	\$	21,310
3	Pumping Power (1/24 of Pumping Power)		-
4	Purchased Water Treatment (1/24 of Purchased Water)		-
5			
6			
7			
8			
9	Total Working Capital Allowance	\$	21,310
10	Working Capital per Direct Filing	\$	22,003
11			
12	Increase (Decrease) in Working Capital	\$	(694)
13			
14			

15 SUPPORTING SCHEDULES:

16

17

RECAP SCHEDULES:

Rebuttal B-1

Goodman Water Company
 Test Year Ended September 31, 2005
 Income Statement

Exhibit
 Rebuttal Schedule C-1
 Page 1
 Witness: Bourassa

Line No.		Adjusted Book Results	Adjustments	Rebuttal Adjusted Results	Proposed Rate Increase	Adjusted with Rate Increase
1	Revenues					
2	Metered Water Revenues	\$ 195,408	\$ -	\$ 195,408	\$ 325,463	\$ 520,872
3	Unmetered Water Revenues	-	-	-		-
4	Other Water Revenues	17,940	-	17,940		17,940
5		<u>\$ 213,348</u>	<u>\$ -</u>	<u>\$ 213,348</u>	<u>\$ 325,463</u>	<u>\$ 538,812</u>
6	Operating Expenses					
7	Salaries and Wages	\$ 32,000	-	\$ 32,000		\$ 32,000
8	Purchased Water	-	-	-		-
9	Purchased Power	10,086	-	10,086		10,086
10	Chemicals	-	-	-		-
11	Repairs and Maintenance	9,868	-	9,868		9,868
12	Office Supplies and Expense	778	-	778		778
13	Outside Services	78,106	(174)	77,932		77,932
14	Water Testing	3,639	-	3,639		3,639
15	Rents	-	-	-		-
16	Transportation Expenses	-	-	-		-
17	Insurance - General Liability	18,253	-	18,253		18,253
18	Insurance - Health and Life	-	-	-		-
19	Regulatory Commission Expense - R	25,000	(1,875)	23,125		23,125
20	Miscellaneous Expense	2,386	(140)	2,246		2,246
21	Depreciation Expense	129,418	-	129,418		129,418
22	Taxes Other Than Income	2,635	-	2,635		2,635
23	Property Taxes	19,270	17	19,287		19,287
24	Income Tax	(41,497)	627	(40,870)	114,748	73,879
25						
26	Total Operating Expenses	<u>\$ 289,943</u>	<u>\$ (1,545)</u>	<u>\$ 288,398</u>	<u>\$ 114,748</u>	<u>\$ 403,147</u>
27	Operating Income	<u>\$ (76,594)</u>	<u>\$ 1,545</u>	<u>\$ (75,050)</u>	<u>\$ 210,715</u>	<u>\$ 135,665</u>
28	Other Income (Expense)					
29	Interest Income	-		-		-
30	Other income	-		-		-
31	Interest Expense	-		-		-
32	Other Expense	-		-		-
33						
34	Total Other Income (Expense)	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ -</u>
35	Net Profit (Loss)	<u>\$ (76,594)</u>	<u>\$ 1,545</u>	<u>\$ (75,050)</u>	<u>\$ 210,715</u>	<u>\$ 135,665</u>

39 SUPPORTING SCHEDULES:
 40 Rebuttal C-1, Page 2
 41 Rebuttal C-2

RECAP SCHEDULES:
 Rebuttal A-1

Goodman Water Company
Test Year Ended September 31, 2005
Income Statement

Line No.	ADJUSTMENT LABEL-->	1	2	3	4	5	6	7	8	Rebuttal Adjusted Results	Proposed Rate Increase	Adjusted with Rate Increase
1	Revenues									\$ 195,408	\$ 325,463	\$ 520,872
2	Metered Water Revenues	\$ 195,408								\$ 195,408	\$ 325,463	\$ 520,872
3	Unmetered Water Revenues									17,940		17,940
4	Other Water Revenues									17,940		17,940
5		\$ 213,348								\$ 213,348	\$ 325,463	\$ 538,812
6	Operating Expenses											
7	Salaries and Wages	\$ 32,000								\$ 32,000		\$ 32,000
8	Purchased Water											
9	Purchased Power	10,086								10,086		10,086
10	Chemicals											
11	Repairs and Maintenance	9,868								9,868		9,868
12	Office Supplies and Expense	778								778		778
13	Outside Services	78,106								77,932		77,932
14	Water Testing	3,639								3,639		3,639
15	Rents											
16	Transportation Expenses											
17	Insurance - General Liability									18,253		18,253
18	Insurance - Health and Life											
19	Regulatory Commission Expense - Rate Case		(1,875)									
20	Miscellaneous Expense	2,386								23,125		23,125
21	Depreciation Expense	129,418			(140)					2,246		2,246
22	Taxes Other Than Income	2,635								129,418		129,418
23	Property Taxes	19,270								2,635		2,635
24	Income Tax	(41,497)								19,287	114,748	73,879
25										(40,870)		
26	Total Operating Expenses	\$ 289,943	\$ (174)	\$ (1,875)	\$ (140)	\$ 627	\$ -	\$ -	\$ -	\$ 288,398	\$ 114,748	\$ 403,147
27	Operating Income	\$ (76,594)	\$ 174	\$ 1,875	\$ 140	\$ (627)	\$ -	\$ -	\$ -	\$ (75,050)	\$ 210,715	\$ 135,665
28	Other Income (Expense)											
29	Interest Income											
30	Other Income											
31	Interest Expense											
32	Other Expense											
33												
34	Total Other Income (Expense)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
35	Net Profit (Loss)	\$ (76,594)	\$ 174	\$ 1,875	\$ 140	\$ (627)	\$ -	\$ -	\$ -	\$ (75,050)	\$ 210,715	\$ 135,665

RECAP SCHEDULES:
Rebuttal A-1

SUPPORTING SCHEDULES:
Rebuttal C-2

Goodman Water Company
 Test Year Ended September 31, 2005
 Adjustments to Revenues and Expenses

Exhibit
 Rebuttal Schedule C-2
 Page 1
 Witness: Bourassa

Line No.	<u>Adjustments to Revenues and Expenses</u>						
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	
	<u>Outside Services</u>	<u>Rate Case Expense</u>	<u>Property Taxes</u>	<u>Miscellaneous Expense</u>	<u>Income Tax</u>		<u>Subtotal</u>
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16	174	1,875	(17)	140	(627)	-	1,545
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
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56							

Goodman Water Company
Test Year Ended September 31, 2005
Adjustment to Revenues and Expenses
Adjustment Number 1

Exhibit
Rebuttal Schedule C-2
Page 2
Witness: Bourassa

Line No.		
1	<u>Outside Services</u>	
2		
3		
4	Remove amounts for lunch with J. Shiner	(174)
5	(per Staff CRM-12)	
6		
7		
8	Total	<u>\$ (174)</u>
9		
10		
11		
12	Adjustment to Revenues/Expenses	<u>\$ (174)</u>
13		
14		
15	<u>SUPPORTING SCHEDULE</u>	
16		
17		
18		
19		
20		

Goodman Water Company
Test Year Ended September 31, 2005
Adjustment to Revenues and Expenses
Adjustment Number 2

Exhibit
Rebuttal Schedule C-2
Page 3
Witness: Bourassa

Line No.			
1	<u>Rate Case Expense</u>		
2			
3			
4	Amount Requested per Direct Filing	\$ 100,000	
5	Staff proposed reduction per CRM-13	<u>(7,500)</u>	
6	Amount Requested Per Rebuttal Filing		\$ 92,500
7			
8	Amortization Period (years)		4
9			
10	Annual Amortization of Rate Case Expense		\$ 23,125
11			
12	Annual Amount Requested Per Direct Filing		25,000
13			
14	Increase (decrease) in Rate Case Expense		\$ (1,875)
15			
16			
17	Adjustment to Revenues/Expenses		<u>\$ (1,875)</u>
18			
19			
20			
21			
22			
23			
24			
25			

Test Year Ended September 31, 2005
Adjustment to Revenues and Expenses
Adjustment Number 3

Rebuttal Schedule C-2
Page 4
Witness: Bourassa

Line
No.

1 Adjust Property Taxes to Reflect Proposed Revenues:

2		
3	Adjusted Revenues in year ended 09/30/2005	\$ 213,348
4	Adjusted Revenues in year ended 09/30/2005	213,348
5	Proposed Revenues	<u>538,812</u>
6	Average of three year's of revenue	\$ 321,836
7	Average of three year's of revenue, times 2	\$ 643,672
8	Add:	
9	Construction Work in Progress at 10%	\$ -
10	Deduct:	
11	Book Value of Transportation Equipment	<u>-</u>
12		
13	Full Cash Value	\$ 643,672
14	Assessment Ratio	<u>23.50%</u>
15	Assessed Value	151,263
16	Property Tax Rate	12.7504%
17		
18	Property Tax	19,287
19	Tax on Parcels	0
20		
21	Total Property Tax at Proposed Rates	\$ 19,287
22	Property Taxes per Direct Filing	<u>19,270</u>
23	Change in Property Taxes	<u>\$ 17</u>
24		
25		
26	Adjustment to Revenues and/or Expenses	<u>\$ 17</u>
27		
28		

Goodman Water Company
Test Year Ended September 31, 2005
Adjustment to Revenues and Expenses
Adjustment Number 4

Exhibit
Rebuttal Schedule C-2
Page 5
Witness: Bourassa

Line No.			
1	Miscellaneous Expense		
2			
3			
4	Remove amounts for lunch with J. Shiner	(140)	
5	(per Staff CRM-14)		
6			
7			
8	Total		\$ (140)
9			
10			
11			
12	Adjustment to Revenues/Expenses		\$ (140)
13			
14			
15			
16			
17			
18			
19			
20			

Goodman Water Company
 Test Year Ended September 31, 2005
 Adjustment to Revenues and Expenses
Income Tax Calculation
 Adjustment 5

Exhibit
 Schedule C-2
 Page 6
 Witness: Bourassa

Line No.	<u>Test Year Book Results</u>	<u>Test Year Adjusted Results</u>	<u>Adjusted with Rate Increase</u>	
1				
2	Net Income	\$ (75,050)	\$ 135,665	
3	Plus:			
4	Income Taxes	\$ (40,870)	\$ 73,879	
5	Operating Lease	\$ -	\$ -	
6	Synchronized Interest with Rate Base	\$ -	\$ -	
7	Taxable Income	<u>\$ (118,919)</u>	<u>\$ 209,544</u>	
8				
9				
10				
11	Income Before Taxes	<u>(118,091)</u>	<u>209,544</u>	
12	Arizona Income Before Taxes	<u>(118,091)</u>	<u>209,544</u>	
13				
14	Less Arizona Income Tax	(8,229)	14,601	
15	R: 6.97%			
16				
17	Arizona Taxable Income	<u>(109,862)</u>	<u>194,943</u>	
18	Arizona Income Taxes	<u>(8,229)</u>	<u>14,601</u>	
19				
20	Federal Income Before Taxes	(118,091)	209,544	
21				
22	Less Arizona Income Taxes	<u>(8,229)</u>	<u>14,601</u>	
23				
24	Federal Taxable Income	<u>(109,862)</u>	<u>194,943</u>	
25				
26				
27				
28	FEDERAL INCOME TAXES:			
29	15% BRACKET	(16,479)	7,500	
30	25% BRACKET	-	6,250	
31	34% BRACKET	-	8,500	Federal
32	39% BRACKET	-	37,028	Effective
33	34% BRACKET	-	-	Tax
34				Rate
35	Federal Income Taxes	<u>(16,479)</u>	<u>59,278</u>	13.95% 28.29%
36				
37				
38	Total Income Tax	<u>(24,708)</u>	<u>73,879</u>	
39				
40	Overall Tax Rate	<u>20.92%</u>	<u>35.26%</u>	
41				
42	Income Tax at Proposed Rates Effective Rate	<u>(40,870)</u>		
43				
44				
45				

Goodman Water Company
 Test Year Ended September 31, 2005
 Computation of Gross Revenue Conversion Factor

Exhibit
 Rebuttal Schedule C-3
 Page 1
 Witness: Bourassa

Line No.	<u>Description</u>	Percentage of Incremental Gross <u>Revenues</u>
1	Federal Income Taxes	28.29%
2		
3	State Income Taxes	6.97%
4		
5	Other Taxes and Expenses	<u>0.00%</u>
6		
7		
8	Total Tax Percentage	35.26%
9		
10	Operating Income % = 100% - Tax Percentage	64.74%
11		
12		
13		
14		
15	<u>1</u> = Gross Revenue Conversion Factor	
16	Operating Income %	1.5446
17		
18	<u>SUPPORTING SCHEDULES:</u>	<u>RECAP SCHEDULES:</u>
19		Rebuttal A-1
20		

Goodman Water Company
 Test Year Ended September 31, 2005
 Summary of Cost of Capital

Exhibit
 Rebuttal Schedule D-1
 Page 1
 Witness: Bourassa

Line No.	Item of Capital	End of Test Year			Adjusted End of Test Year		
		Dollar Amount	Percent of Total	(e) Cost Rate	Dollar Amount	Percent of Total	(e) Cost Rate
1	Long-Term Debt	-	0.00%	0.00%	-	0.00%	0.00%
2							
3	Stockholder's Equity (1)(2)	1,389,702	100.00%	10.50%	1,389,702	100.00%	10.50%
4							
5	Totals	1,389,702	100.00%	10.50%	1,389,702	100.00%	10.50%
6							
7							
8							
9							
10	(1) Increase Equity for expense reclassified to plant rebuttal adjustment 1, B-2, page 1						\$ 17,325

SUPPORTING SCHEDULES:

RECAP SCHEDULES:

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Line No.	Customer Classification and/or Meter Size	Total Revenues at Present Rates	Total Revenues at Proposed Rates	Dollar Change	Percent Change	Addition Bills	Addition Gallons
1	5/8 x 3/4 Inch Residential	\$124,765	\$344,047	\$ 219,282	175.76%	-	-
2	3/4 Inch Residential	-	-	-	0.00%	-	-
3	1 Inch Residential	10,839	27,423	16,584	153.00%	-	-
4	2 Inch Residential	13,982	43,113	29,131	208.35%	-	-
5	Construction Water	13,412	21,797	8,386	62.53%	-	-
6		-	-	-		-	-
7		-	-	-		-	-
8							
9							
10	Subtotals of Revenues	\$ 162,998	\$ 436,381	\$ 273,383	167.72%		
11							
12	Other Water Revenues	17,940	17,940	-	0.00%		
13							
14							
15	Subtotals of Revenues	\$ 180,938	\$ 454,321	\$ 273,383	151.09%		
16	Revenue Annualizations:						
17	5/8 Inch residential	\$ 14,345	\$ 38,370	\$ 24,024	167.47%	537	182,394
18	3/4 Inch Residential	-	-	-	0.00%	-	-
19	1 Inch Residential	18,401	46,055	27,654	150.29%	325	1,722,972
20	2 Inch Residential	-	-	-	0.00%	-	-
21	Construction Water	-	-	-	0.00%	-	-
22	Subtotal Revenue Annualization	32,746	84,425	51,678	157.81%	862	1,905,366
23							
24	Total Revenues Per Bill Count	\$ 213,684	\$ 538,745	\$ 325,061	152.12%		
25	With Annualization						
26							
27	Subtotal of Revenues Above w/o Annualization	\$ 180,938					
28	Revenues Per Annual Report	\$ 180,602					
29	Difference in Dollars	\$ 336					
30	Difference in Percentage	0.19%					
31	Tolerance Allowed by ACC Staff	0.50%					
32							
33							

Goodman Water Company
 Present and Proposed Rates
 Test Year Ended September 30, 2005

Docket No.
 W-02500A-06-0281

Exhibit
 Rebuttal Schedule H-3
 Page 1
 Witness: Bourassa

Line No.	Customer Classification and Meter Size (Residential, Commercial, Irrigation)	Present Rates	Proposed Rates (a)	Percent Change
1	Monthly Usage Charge for:			
2	5/8 x 3/4 Inch	\$ 18.00	\$ 44.87	149.30%
3	3/4 Inch	27.00	67.31	149.30%
4	1 Inch	45.00	112.19	149.30%
5	1 1/2 Inch	90.00	224.37	149.30%
6	2 Inch	144.00	358.99	149.30%
7	3 Inch	270.00	673.11	149.30%
8	4 Inch	450.00	1,121.85	149.30%
9	5 Inch	N/A	N/A	
10	6 Inch	900.00	2,243.70	149.30%
11	Fire Hydrant	15.00	-	
12	Bulk Water	-	-	0.00%
13				
14	Gallons included in Minimums 5/8 x 3/4 Inch			
15	<u>Meter Only</u>			
16		1,000		
17	<u>Tier 1: (Gallon upper limit, up to, but not exceeding)</u>			
18	5/8 x 3/4 Inch	All gallons over min.		
19	3/4 Inch	All gallons over min.		
20	1 Inch	All gallons over min.		
21	1.5 Inch	All gallons over min.		
22	2 Inch	All gallons over min.		
23	3 Inch	All gallons over min.		
24	4 Inch	All gallons over min.		
25	6 Inch	All gallons over min.		
26	8 Inch	All gallons over min.		
27				
28	<u>Tier 2: (Gallon upper limit, up to, but not exceeding)</u>			
29	5/8 x 3/4 Inch	All gallons over min.		
30	3/4 Inch	All gallons over min.		
31	1 Inch	All gallons over min.		
32	1.5 Inch	All gallons over min.		
33	2 Inch	All gallons over min.		
34	3 Inch	All gallons over min.		
35	4 Inch	All gallons over min.		
36	6 Inch	All gallons over min.		
37	8 Inch	All gallons over min.		
38				

Please See Page 2

Please See Page 2

Line No.	Customer Classification and Meter Size	Present Rates		Proposed Rates		Percent Change
		Present	Proposed	Present	Proposed	
1	Tier 3: (Gallon upper limit, up to, but not exceeding)					
2	5/8 x 3/4 Inch Residential, Commercial, Irrigation					
3	3/4 Inch Residential, Commercial, Irrigation					
4	1 Inch Residential, Commercial, Irrigation					
5	1.5 Inch Residential, Commercial, Irrigation					
6	2 Inch Residential, Commercial, Irrigation					
7	3 Inch Residential, Commercial, Irrigation					
8	4 Inch Residential, Commercial, Irrigation					
9	6 Inch Residential, Commercial, Irrigation					
10	8 Inch Residential, Commercial, Irrigation					
11						
12						
13	Commodity Rates (per 1,000 gallons in excess of gallons in Each Tier)					
14	All customer classes except Bulk Water	\$ 2.20	\$ 5.02			128.18%
15	All customer classes except Bulk Water	2.20	6.72			205.45%
16	All customer classes except Bulk Water	2.20	7.72			250.91%
17						
18	Bulk Water	\$ 4.75	\$ 7.72			62.53%
19						
20						
21						
22						
23	5/8 and 3/4 Inch Meters					
24	Tier 1	-	up to 4,000	\$ 5.02		
25	Tier 2	4,001	up to 10,000	\$ 6.72		
26	Tier 3	10,001		\$ 7.72		
27						
28						
29	1 Inch Meter and Larger Meters					
30	Tier 1	-	up to 10,000	\$ 5.02		
31	Tier 2	10,001	up to 25,000	\$ 6.72		
32	Tier 3	25,001		\$ 7.72		
33						
34						

Goodman Water Company
 Present and Proposed Rates
 Test Year Ended September 30, 2005

Line No.	Meter and Service Line Charges	Present Service Line Charge	Present Meter Installation Charge	Total Present Charge	Proposed Service Line Charge	Proposed Meter Installation Charge	Total Proposed Charge
1	5/8 x 3/4 Inch	\$ 225.00	\$ 135.00	\$ 360.00	\$ 385.00	\$ 135.00	\$ 520.00
2	3/4 Inch	270.00	215.00	485.00	385.00	215.00	600.00
3	1 Inch	300.00	255.00	555.00	435.00	255.00	690.00
4	1 1/2 Inch	425.00	465.00	890.00	470.00	465.00	935.00
5	2 Inch Turbo	550.00	965.00	1,515.00	630.00	965.00	1,595.00
6	2 Inch, Compound	550.00	1,690.00	2,240.00	630.00	1,690.00	2,320.00
7	3 Inch Turbo	750.00	1,470.00	2,220.00	805.00	1,470.00	2,275.00
8	3 Inch, compound	750.00	2,265.00	3,015.00	845.00	2,265.00	3,110.00
9	4 Inch Turbo	1,375.00	2,350.00	3,725.00	1,170.00	2,350.00	3,520.00
10	4 Inch, compound	1,375.00	3,245.00	4,620.00	1,230.00	3,245.00	4,475.00
11	5 Inch	2,090.00	4,545.00	6,635.00	1,730.00	4,545.00	6,275.00
12	6 Inch Turbo	2,800.00	6,280.00	9,080.00	1,770.00	6,280.00	8,050.00
13	6 Inch, compound	2,800.00	At Cost	At Cost	At Cost	At Cost	At Cost
14	8 Inch	NA	At Cost	At Cost	At Cost	At Cost	At Cost
15	10 Inch	NA	At Cost	At Cost	At Cost	At Cost	At Cost
16	12 Inch	NA	At Cost	At Cost	At Cost	At Cost	At Cost

Other Charges:

Establishment	\$ 50.00
Establishment (After Hours)	\$ 75.00
Reconnection (Delinquent)	\$ 75.00
Reconnection (Delinquent) after hours	
Meter Test	\$ 20.00
Deposit	PER RULE
Deposit Interest	PER RULE
Re-establishment (Within 12 months)	PER RULE
NSF Check	\$ 15.00
Deferred Payment	18%
Meter Re-read	\$ 20.00
Late Fee (a)	\$ 10.00
Customer requested Meter Test	\$ 20.00

Establishment (R14-2-403.D.1)	\$ 50.00
Establishment (After Hours) (R14-2-403.D.2)	\$ 75.00
Meter Test (R14-2-408.F)	\$ 75.00
Deposit (R14-2-403.B)	\$ 20.00
Deposit Interest (R14-2-403.B.3)	PER RULE
Re-establishment (R14-2-403.D.1)	PER RULE
NSF Check (R14-2-409.F.1)	\$ 15.00
Deferred Payment (R14-2-409.G.6)	18%
Meter Re-read (R14-2-408.C.2)	\$ 20.00

(a) \$ 5.00 minimum or 1.5% of unpaid balance whichever is greater.

Goodman Water Company
 Bill Comparison of Present and Proposed Rates
 Customer Classification 5/8 Inch Meter
 Test Year Ended September 30, 2005
 (Excludes all Revenue Related Taxes)

Exhibit
 Rebuttal Schedule H-4
 Page 1
 Witness: Bourassa

<u>Usage</u>	<u>Present</u> <u>Bill</u>	<u>Proposed</u> <u>Bill</u>	<u>Dollar</u> <u>Increase</u>	<u>Percent</u> <u>Increase</u>
-	\$ 18.00	\$ 44.87	\$ 26.87	149.30%
1,000	18.00	49.89	\$ 31.89	177.19%
2,000	20.20	54.91	\$ 34.71	171.85%
3,000	22.40	59.93	\$ 37.53	167.56%
4,000	24.60	64.95	\$ 40.35	164.04%
5,000	26.80	71.67	\$ 44.87	167.44%
6,000	29.00	78.39	\$ 49.39	170.32%
7,000	31.20	85.11	\$ 53.91	172.80%
8,000	33.40	91.83	\$ 58.43	174.95%
9,000	35.60	98.55	\$ 62.95	176.84%
10,000	37.80	105.27	\$ 67.47	178.50%
12,000	42.20	120.71	\$ 78.51	186.05%
14,000	46.60	136.15	\$ 89.55	192.18%
16,000	51.00	151.59	\$ 100.59	197.24%
18,000	55.40	167.03	\$ 111.63	201.51%
20,000	59.80	182.47	\$ 122.67	205.14%
25,000	70.80	221.07	\$ 150.27	212.25%
30,000	81.80	259.67	\$ 177.87	217.45%
35,000	92.80	298.27	\$ 205.47	221.42%
40,000	103.80	336.87	\$ 233.07	224.54%
45,000	114.80	375.47	\$ 260.67	227.07%
50,000	125.80	414.07	\$ 288.27	229.15%
60,000	147.80	491.27	\$ 343.47	232.39%
70,000	169.80	568.47	\$ 398.67	234.79%
80,000	191.80	645.67	\$ 453.87	236.64%
90,000	213.80	722.87	\$ 509.07	238.11%
100,000	235.80	800.07	\$ 564.27	239.30%

Present Rates:
 Monthly Minimum: \$ 18.00
 Gallons in Minimum 1,000
 Charge Per 1,000 Gallons \$ 2.20

Proposed Rates:
 Monthly Minimum: \$ 44.87
 Gallons in Minimum -
 Charge Per 1,000 Gallons
 Up to 4,000 \$ 5.02
 Up to 10,000 \$ 6.72
 Over 10,001 \$ 7.72

Average Usage				
5,509	\$ 27.92	\$ 75.09	\$ 47.17	168.96%
Median Usage				
4,500	\$ 25.70	\$ 68.31	\$ 42.61	165.81%

Goodman Water Company
 Bill Comparison of Present and Proposed Rates
 Customer Classification 1 Inch Meter
 Test Year Ended September 30, 2005
 (Excludes all Revenue Related Taxes)

Exhibit
 Rebuttal Schedule H-4
 Page 2
 Witness: Bourassa

<u>Usage</u>	<u>Present Bill</u>	<u>Proposed Bill</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
-	\$ 45.00	\$ 112.19	\$ 67.19	149.30%
1,000	47.20	117.21	\$ 70.01	148.32%
2,000	49.40	122.23	\$ 72.83	147.42%
3,000	51.60	127.25	\$ 75.65	146.60%
4,000	53.80	132.27	\$ 78.47	145.85%
5,000	56.00	137.29	\$ 81.29	145.15%
6,000	58.20	142.31	\$ 84.11	144.51%
7,000	60.40	147.33	\$ 86.93	143.92%
8,000	62.60	152.35	\$ 89.75	143.36%
9,000	64.80	157.37	\$ 92.57	142.85%
10,000	67.00	162.39	\$ 95.39	142.37%
12,000	71.40	175.83	\$ 104.43	146.25%
14,000	75.80	189.27	\$ 113.47	149.69%
16,000	80.20	202.71	\$ 122.51	152.75%
18,000	84.60	216.15	\$ 131.55	155.49%
20,000	89.00	229.59	\$ 140.59	157.96%
25,000	100.00	263.19	\$ 163.19	163.19%
30,000	111.00	301.79	\$ 190.79	171.88%
35,000	122.00	340.39	\$ 218.39	179.00%
40,000	133.00	378.99	\$ 245.99	184.95%
45,000	144.00	417.59	\$ 273.59	189.99%
50,000	155.00	456.19	\$ 301.19	194.31%
60,000	177.00	533.39	\$ 356.39	201.35%
70,000	199.00	610.59	\$ 411.59	206.83%
80,000	221.00	687.79	\$ 466.79	211.21%
90,000	243.00	764.99	\$ 521.99	214.81%
100,000	265.00	842.19	\$ 577.19	217.81%

Present Rates:
 Monthly Minimum: \$ 45.00
 Gallons in Minimum -
 Charge Per 1,000 Gallons \$ 2.20

Proposed Rates:
 Monthly Minimum: \$ 112.19
 Gallons in Minimum -
 Charge Per 1,000 Gallons
 Up to 10,000 \$ 5.02
 Up to 25,000 \$ 6.72
 Over 25,001 \$ 7.72

Average Usage	3,816	\$ 53.39	\$ 131.34	\$ 77.95	145.98%
Median Usage	500	\$ 46.10	\$ 114.70	\$ 68.60	148.80%

Goodman Water Company
 Bill Comparison of Present and Proposed Rates
 Customer Classification Residential 2 Inch
 Test Year Ended September 30, 2005
 (Excludes all Revenue Related Taxes)

Exhibit
 Rebuttal Schedule H-4
 Page 3
 Witness: Bourassa

Usage	Present Bill	Proposed Bill	Dollar Increase	Percent Increase
-	\$ 144.00	\$ 358.99	\$ 214.99	149.30%
1,000	146.20	364.01	\$ 217.81	148.98%
2,000	148.40	369.03	\$ 220.63	148.67%
3,000	150.60	374.05	\$ 223.45	148.37%
4,000	152.80	379.07	\$ 226.27	148.08%
5,000	155.00	384.09	\$ 229.09	147.80%
6,000	157.20	389.11	\$ 231.91	147.53%
7,000	159.40	394.13	\$ 234.73	147.26%
8,000	161.60	399.15	\$ 237.55	147.00%
9,000	163.80	404.17	\$ 240.37	146.75%
10,000	166.00	409.19	\$ 243.19	146.50%
12,000	170.40	422.63	\$ 252.23	148.02%
14,000	174.80	436.07	\$ 261.27	149.47%
16,000	179.20	449.51	\$ 270.31	150.84%
18,000	183.60	462.95	\$ 279.35	152.15%
20,000	188.00	476.39	\$ 288.39	153.40%
25,000	199.00	509.99	\$ 310.99	156.28%
30,000	210.00	548.59	\$ 338.59	161.23%
35,000	221.00	587.19	\$ 366.19	165.70%
40,000	232.00	625.79	\$ 393.79	169.74%
45,000	243.00	664.39	\$ 421.39	173.41%
50,000	254.00	702.99	\$ 448.99	176.77%
60,000	276.00	780.19	\$ 504.19	182.68%
70,000	298.00	857.39	\$ 559.39	187.72%
80,000	320.00	934.59	\$ 614.59	192.06%
90,000	342.00	1,011.79	\$ 669.79	195.85%
100,000	364.00	1,088.99	\$ 724.99	199.17%
150,000	474.00	1,474.99	\$ 1,000.99	211.18%
200,000	584.00	1,860.99	\$ 1,276.99	218.66%
250,000	694.00	2,246.99	\$ 1,552.99	223.77%
300,000	804.00	2,632.99	\$ 1,828.99	227.49%
350,000	914.00	3,018.99	\$ 2,104.99	230.31%
400,000	1,024.00	3,404.99	\$ 2,380.99	232.52%
450,000	1,134.00	3,790.99	\$ 2,656.99	234.30%
500,000	1,244.00	4,176.99	\$ 2,932.99	235.77%

Present Rates:
 Monthly Minimum: \$ 144.00
 Gallons in Minimum
 Charge Per 1,000 Gallons \$ 2.20

Proposed Rates:
 Monthly Minimum: \$ 358.99
 Gallons in Minimum -
 Charge Per 1,000 Gallons
 Up to 10,000 \$ 5.02
 Up to 25,000 \$ 6.72
 Over 25,001 \$ 7.72

Average Usage				
111,083	\$ 388.38	\$ 1,174.55	\$ 786.17	202.42%
Median Usage				
-	\$ 144.00	\$ 358.99	\$ 214.99	149.30%

Goodman Water Company
 Bill Comparison of Present and Proposed Rates
 Customer Classification Construction Water
 Test Year Ended September 30, 2005
 (Excludes all Revenue Related Taxes)

Exhibit
 Rebuttal Schedule H-4
 Page 4
 Witness: Bourassa

<u>Usage</u>	<u>Present</u> <u>Bill</u>	<u>Proposed</u> <u>Bill</u>	<u>Dollar</u> <u>Increase</u>	<u>Percent</u> <u>Increase</u>
-	\$ -	\$ -	\$ -	0.00%
1,000	4.75	7.72	2.97	62.53%
2,000	9.50	15.44	5.94	62.53%
3,000	14.25	23.16	8.91	62.53%
4,000	19.00	30.88	11.88	62.53%
5,000	23.75	38.60	14.85	62.53%
6,000	28.50	46.32	17.82	62.53%
7,000	33.25	54.04	20.79	62.53%
8,000	38.00	61.76	23.76	62.53%
9,000	42.75	69.48	26.73	62.53%
10,000	47.50	77.20	29.70	62.53%
12,000	57.00	92.64	35.64	62.53%
14,000	66.50	108.08	41.58	62.53%
16,000	76.00	123.52	47.52	62.53%
18,000	85.50	138.96	53.46	62.53%
20,000	95.00	154.40	59.40	62.53%
25,000	118.75	193.00	74.25	62.53%
30,000	142.50	231.60	89.10	62.53%
35,000	166.25	270.20	103.95	62.53%
40,000	190.00	308.80	118.80	62.53%
45,000	213.75	347.40	133.65	62.53%
50,000	237.50	386.00	148.50	62.53%
60,000	285.00	463.20	178.20	62.53%
70,000	332.50	540.40	207.90	62.53%
80,000	380.00	617.60	237.60	62.53%
90,000	427.50	694.80	267.30	62.53%
100,000	475.00	772.00	297.00	62.53%

Present Rates:
 Monthly Minimum: \$ -
 Gallons in Minimum
 Charge Per 1,000 Gallons \$ 4.75

Proposed Rates:
 Monthly Minimum: \$ -
 Gallons in Minimum -
 Charge Per 1,000 Gallons \$ 7.72

Average Usage					
1,411,750	\$	6,705.81	\$	10,898.71	\$ 4,192.90 62.53%
Median Usage					
1,411,750	\$	6,705.81	\$	10,898.71	\$ 4,192.90 62.53%