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Transcript Exhibit(s)

Docket #(s): SW-02361A-05-0657

Exhibit # : S1, S2, S4-S24, A1

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To: Docket Control

Re: Black Mountain Sewer / Rates SW-02361A-05-0657
Volumes I through IV Concluded
June 7 through June 20, 2006

## STATUS OF ORIGINAL EXHIBITS

***FILED WITH DOCKET CONTROL***
***06-30-2006***

STAFF

1, 2, and 4 through 24

BLACK MOUNTAIN SEWER

1 through 22

RUCO

1 through 6, 9 through 17

TOWN OF CAREFREE

1 through 5

***EXHIBIT NUMBERS NOT UTILIZED***
***Numbers skipped or exhibit not used***

STAFF

3

RUCO

7 and 8 (Returned to RUCO)

Copy to:

Dwight D. Nodes, ACALJ (letter only)
Staff (Keith Layton, Esq.)
Black Mountain Sewer (Jay Shapiro, Esq.)
RUCO (Daniel Pozefsky, Esq.)

#1

Arizona Corporation Commission
Information for ~~Open Meeting~~
PLEASE PRINT CLEARLY

Date 6/7/06 Agenda Item No. SW-02361A-05-0657
Name BUEL WESTMORE Title BMSC RATE INCREASE
Representing (Group Affiliation) SELF - ODOR COMPLAINT
Street Address 7802 E. CAREFREE EST. CIRCLE
City CAREFREE State AZ Zip 85377
Telephone No. [480] 488-1590

☐ I am in favor ☒ I oppose ☐ I would like to speak

Comments:

#2

Arizona Corporation Commission
Information for ~~Open Meeting~~
PLEASE PRINT CLEARLY

Date 6/7/06 Agenda Item No. SW-02361A-05-0657
Name MARILYN H. COURIER Title
Representing (Group Affiliation) BOULDERS RESIDENT
Street Address 1043 BOULDER DR
City CAREFREE State CA Zip 85377
Telephone No. [480] 488-5217

☐ I am in favor ☐ I oppose ☐ I would like to speak

Comments:

#3

Arizona Corporation Commission
Information for ~~Open Meeting~~
PLEASE PRINT CLEARLY

Date June 7, 2006 Agenda Item No. SW-02361A-05-0657
Name Patty Schiano Title Pres. of the Carefree Estates HOA
Representing (Group Affiliation) Carefree Estates Resident
Street Address 7815 E. Carefree Dr
City Carefree State AZ Zip 85377
Telephone No. [480] 488-6946

☐ I am in favor ☐ I oppose ☒ I would like to speak

Comments:

#4

Arizona Corporation Commission
Information for ~~Open Meeting~~
PLEASE PRINT CLEARLY

Date 6/7/06 Agenda Item No. SW 02361A-05-0657
Name Gordon Zucker Title Black Mountain Sewer Corp.
Representing (Group Affiliation) Self, Boulders resident
Street Address 1060 Boulder Dr.
City Carefree State AZ Zip 85377
Telephone No. [480] 488-3615

☐ I am in favor ☑ I oppose ☑ I would like to speak

Comments:

#5

Arizona Corporation Commission
Information for Open Meeting
PLEASE PRINT CLEARLY

Date 6/7/06
Agenda Item No. _____
Name Tom McCahan
Title Director of Club Operations
Representing (Group Affiliation) The Boulders Resort
Street Address 34831 N. Tom Darlington Drive
City Carefree
State AZ
Zip 85377
Telephone No. [480] 488-9028

☐ I am in favor ☐ I oppose ☒ I would like to speak

Comments: _____

#6

Arizona Corporation Commission
Information for ~~Open Meeting~~
PLEASE PRINT CLEARLY

Date 6/7/06
Agenda Item No. Black Mountain Sewer SW 02361A-05-0657
Name Lester Peterson
Title _____
Representing (Group Affiliation) Boulders Homeowners Association
Street Address PO Box 3434
City Carefree
State AZ
Zip 85377
Telephone No. [480] 595-1838

☐ I am in favor ☒ I oppose ☐ I would like to speak

Comments: _____

**BEFORE THE ARIZONA CORPORATION COMMISSION**

COMMISSIONERS

JEFF HATCH-MILLER, Chairman
WILLIAM A. MUNDELL
MARC SPITZER
MIKE GLEASON
KRISTIN K. MAYES

| | |
|---|---|
| IN THE MATTER OF THE APPLICATION OF BLACK MOUNTAIN SEWER CORPORATION, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON | DOCKET NO. SW-02361A-05-0657 |

DIRECT TESTIMONY

OF

MARLIN SCOTT, JR.

UTILITIES ENGINEER

UTILITIES DIVISION

MARCH 9, 2006

ALL-STATE LEGAL®
EXHIBIT
S-1
admitted

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# EXECUTIVE SUMMARY
# BLACK MOUNTAIN SEWER CORPORATION
# DOCKET NO. SW-02361A-05-0657

## CONCLUSIONS

A. The Black Mountain Sewer Corporation ("Corporation") wastewater system's total available capacity of 1.12 million GPD is adequate to serve the present customer base and reasonable growth.

B. The Arizona Department of Environmental Quality ("ADEQ") reported the Corporation's System, Inventory #100351, had no deficiencies and is in total compliance.

## RECOMMENDATION

1. The Corporation has an outstanding Arizona Corporation Commission compliance issue. As of February 7, 2006, the required documentation has not been filed. Therefore, Staff recommends that any permanent rates and charges in this matter shall become effective on the first day of the month after the Corporation submits to Docket Control the required permit, license or franchise from the appropriate governmental authority as ordered in Decision No. 64748 (See Page 5, Line 20 in Decision.)

2. Staff recommends that the Corporation use Staff's wastewater depreciation rates by individual National Association of Regulatory Utility Commissioners category on a going-forward basis.

## INTRODUCTION

**Q. Please state your name, place of employment and job title.**

A. My name is Marlin Scott, Jr. My place of employment is the Arizona Corporation Commission ("Commission"), Utilities Division, 1200 West Washington Street, Phoenix, Arizona 85007. My job title is Utilities Engineer.

**Q. How long have you been employed by the Commission?**

A. I have been employed by the Commission since November 1987.

**Q. Please list your duties and responsibilities.**

A. As a Utilities Engineer, specializing in water and wastewater engineering, my responsibilities include: the inspection, investigation, and evaluation of water and wastewater systems; preparing reconstruction cost new and/or original cost studies, cost of service studies and investigative reports; providing technical recommendations and suggesting corrective action for water and wastewater systems; and providing written and oral testimony on rate applications and other cases before the Commission.

**Q. How many cases have you analyzed for the Utilities Division?**

A. I have analyzed approximately 430 cases covering various responsibilities for the Utilities Division.

**Q. Have you previously testified before this Commission?**

A. Yes, I have testified in 49 proceedings before this Commission.

**Q. What is your educational background?**

A. I graduated from Northern Arizona University in 1984 with a Bachelor of Science degree in Civil Engineering Technology.

**Q. Briefly describe your pertinent work experience.**

A. Prior to my employment with the Commission, I was Assistant Engineer for the City of Winslow, Arizona, for about two years. Prior to that, I was a Civil Engineering Technician with the U.S. Public Health Service in Winslow for approximately six years.

**Q. Please state your professional membership, registrations, and licenses.**

A. I am a member of the National Association of Regulatory Utility Commissioners ("NARUC") Staff Subcommittee on Water.

**PURPOSE OF TESTIMONY**

**Q. Were you assigned to provide Staff's engineering analysis and recommendation for the Black Mountain Sewer Corporation ("Corporation") in this proceeding?**

A. Yes. I reviewed the Corporation's application and responses to data requests, and I inspected the wastewater system on January 11, 2006. This testimony and its attachment present Staff's engineering evaluation.

**ENGINEERING REPORT**

**Q. Please describe the attached Engineering Report, Exhibit MSJ.**

A. Exhibit MSJ presents the details and analyses of Staff's findings, and is attached to this direct testimony. Exhibit MSJ contains the following major topics: (1) a description of the wastewater system, (2) wastewater flows, (3) growth, (4) compliance with the rules of

the Arizona Department of Environmental Quality and the Arizona Corporation Commission, and (5) depreciation rates.

Staff's conclusions and recommendations from the Engineering Report are contained in the **"EXECUTIVE SUMMARY"**, above.

**Q. Does this conclude your direct testimony?**

A. Yes, it does.

**ENGINEERING REPORT**
**For**
**Black Mountain Sewer Corporation**
**Docket No. SW-02361A-05-0657 (Rates)**

**February 8, 2006**

## A. LOCATION OF BLACK MOUNTAIN SEWER CORPORATION ("CORPORATION")

The Corporation serves the Town of Carefree and in the nearby unincorporated areas of Maricopa County, as well as portions within the northern city limits of Scottsdale. Figure A-1 shows the location of the Corporation within Maricopa County and Figure A-2 shows the approximate five square-miles of certificated area.

## B. DESCRIPTION OF WASTEWATER SYSTEM

The wastewater system was field inspected on January 11, 2006, by Marlin Scott, Jr. and Jian Liu, Staff Utilities Engineers, in the accompaniment of Charles Hernandez, Operations Manager, and Dan Schanaman, Operator, for the Corporation.

The wastewater operation consists of two systems; the northern and southern systems. The northern system operates a 160,000 gallon per day ("GPD") wastewater treatment plant ("WWTP") and the southern system diverts its wastewater flows to the City of Scottsdale wastewater system. The effluent from the WWTP is delivered to two lakes in The Boulders Golf Course. The entire Corporation's collection system operated 15 lift stations serving 1,923 service laterals during the test year of 2004. A system schematic is shown in Figure B-1 with detailed plant facility descriptions as follows:

Table 1. Wastewater Treatment Plant and Scottsdale Connection

| Name or Description | Plant Items | Location |
|---|---|---|
| Northern System's WWTP | 160,000 GPD extended aeration (designed). Operating at 120,000 GPD (permitted) | Boulders Resort |
| Southern System - Scottsdale Connection | Metered – could purchase up to 1.0 Million GPD | Scottsdale Road & Dove Valley Road |

Table 2. Lift Stations

| Location | Quantity of Pumps | Horsepower per Pump | Capacity per Pump (GPM) | Wet Well Capacity (gals.) |
|---|---|---|---|---|
| Commercial | 2 | 20 | 200 | 1,130 |
| CIE | 2 | 15 | 200 | 4,200 |
| Indian Rock | 2 | 5 | 100 | 470 |
| Sage Brush | 2 | 3 | N/A | 470 |
| Trade Center | 2 | 0.75 | N/A | 200 |
| Sentinel Rock | 2 | 15 | 370 | 1,500 |
| Carefree Highway | 2 | 25 | 350 | 1,525 |
| Stagecoach Pass | 2 | 5 | 50 | 470 |
| Peaceful Place | 2 | 1 | 15 | 470 |
| Sunset Trails | 2 | 30 | 290 | 2,600 |
| El Pedregal | 2 | 10 | 185 | 2,000 |
| Ridgeview | 2 | 5 | 100 | 470 |
| Canyon Crossings | 2 | 3 | 85 | 300 |
| Carefree Village | 2 | 3 | 85 | 1,760 |
| Indian Basket | 2 | 1 | 11 | 150 |
| | | | | |

Notes: GPM = gallons per minute and gals = gallons.

Table 3. Force Mains

| Size | Material | Length (Feet) |
|---|---|---|
| 3-inch | ACP | 915 |
| 4-inch | ACP | 9,366 |
| 6-inch | ACP | 7,460 |
| 1.25-inch | PVC | 443 |
| 1.5-inch | PVC | 5,384 |
| 2-inch | PVC | 5,155 |
| 4-inch | PVC | 2,390 |
| 6-inch | PVC | 10,353 |
| 8-inch | PVC | 10,426 |
| | | |
| | Total: | 51,892 |

Table 4. Manholes

| Type | Quantity |
|---|---|
| Standard | 974 |
| Drop | 14 |
| | |

Table 5. Cleanouts

| Quantity |
|---|
| 27 |
| |

Table 6. Collection Mains

| Diameter | Material | Length (Feet) |
|---|---|---|
| 4-inch | ABS | 720 |
| 12-inch | ABS | 9,343 |
| 6-inch | VCP | 12,760 |
| 8-inch | VCP | 71,673 |
| 10-inch | VCP | 7,675 |
| 15-inch | VCP | 1,900 |
| 6-inch | PVC | 3,046 |
| 8-inch | PVC | 80,054 |
| 10-inch | PVC | 3,455 |
| 12-inch | PVC | 565 |
| 15-inch | PVC | 6,735 |
| 6-inch | DIP | 85 |
| 8-inch | DIP | 1,280 |
| 15-inch | DIP | 165 |
| 18-inch | CIP | 130 |
| 21-inch | CIP | 74 |
| | | |
| | Total: | 199,660 |

Table 7. Service Laterals

| Size | Quantity |
|---|---|
| Residential | 1,724 |
| Commercial | 199 |
| | |
| Total: | 1,923 |

## C. WASTEWATER FLOWS

Wastewater Flows

Based on the information provided by the Corporation, wastewater flows for the year 2004 are presented in Figure C-1. The wastewater flows produced a high monthly flow of 443,160 GPD and a low monthly flow of 227,083 GPD for an average annual flow of 325,542 GPD.

System Analysis

The wastewater system's total available capacity of 1.12 million GPD (WWTP at 120,000 GPD and Scottsdale availability up to 1.0 million GPD) is adequate to serve the present customer base and reasonable growth.

## D. GROWTH

Figure D-1 depicts the customer growth using linear regression analysis. The number of service laterals was obtained from annual reports submitted to the Commission. During the test year 2004, the Corporation had 1,923 service laterals and it is projected that the Corporation could have approximately 2,550 service laterals by 2009.

## E. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY ("ADEQ") COMPLIANCE

Compliance

ADEQ reported the Corporation's system, Inventory #100351, had no deficiencies and is in total compliance.

## F. ARIZONA CORPORATION COMMISSION ("ACC") COMPLIANCE

In Decision No. 64748 (April 17, 2002), the Corporation received approval for an extension to its CC&N. One of the conditions for this approval was "that the Corporation file with the Director,

within 365 days of the effective date of this Decision, the required permit, license or franchise from the appropriate governmental authority permitting it to provide service to the extension parcels approved hereinafter or the approval for that parcel shall be rendered null and void without further Order of the Commission." This documentation was originally due April 17, 2003.

On April 14, 2003, the Corporation filed a request for a 90 day extension of time to file the documentation. This request was granted by procedural order on May 9, 2003, and extended the compliance due date to July 16, 2003.

On July 17, 2003, the Corporation filed a request for a 120 day extension to the July 16, 2003 compliance due date, stating that, "despite its best efforts, it had been unable to conclude negotiations on a proposed Operating Agreement with the Town of Carefree, Arizona." On September 12, 2003, the Corporation amended the July 17, 2003 request for extension via e-mail, requesting an additional 60 days due to the fact that the Corporation was going through some internal management restructuring. As amended, the Corporation therefore requested a 180 day extension from the July 16, 2003 deadline to January 12, 2004. This request was granted by procedural order on October 14, 2003, and extended the compliance due date to January 12, 2004.

On January 9, 2004, the Corporation submitted another request for extension of time to provide the required documentation. In that request the Corporation requested that the deadline for extension be moved from January 12, 2004 to July 12, 2004, a total of 180 days. The Corporation's request was further supported by a letter filed on January 16, 2004, from the Mayor for the Town of Carefree ("Town"). His letter described the ongoing negotiations between the Town and the Corporation.

On June 10, 2004, Staff filed a Memorandum which indicated that Staff verified that the Corporation and the Town were involved in ongoing negotiations and that even more time would be required for the requested extension in order to conclude an agreement between them. To resolve concerns raised by the Town, Staff indicated that the Corporation is taking active steps to resolve odor problems in order to reach an agreement with the Town to secure the needed documentation. Based on Staff's review of the ongoing negotiations and balancing the interests of the parties, Staff recommended a further extension for the Corporation to December 31, 2004, but indicated that it will not favor any further extensions beyond that date. Accordingly, this request was granted by procedural order on June 24, 2004, and extended the compliance due date to December 31, 2004.

As of February 7, 2006, the required documentation has not been filed. Therefore, Staff recommends that any permanent rates and charges in this matter shall become effective on the first day of the month after the Corporation submits to Docket Control the required permit, license or franchise from the appropriate governmental authority as ordered in Decision No. 64748.

## G. DEPRECIATION RATES

The Corporation has been using a depreciation rate of 5.00% in every National Association of Regulatory Utility Commissioners ("NARUC") plant category. In recent orders, the Commission has been shifting away from the use of composite rates in favor of individual depreciation rates by NARUC category. (For example, a uniform 2.50% composite rate would not really be appropriate for either vehicles or collection mains and instead, different specific retirement rates should be used.)

Staff has developed typical and customary depreciation rates within a range of anticipated equipment life. These rates are presented in Table G-1 and it is recommended that the Corporation use these depreciation rates by individual NARUC category on a going-forward basis.

## FIGURES

Maricopa County Map ..... Figure A-1

Certificated Areas ..... Figure A-2

System Schematic ..... Figure B-1

Wastewater Flows ..... Figure C-1

Growth ..... Figure D-1

## TABLE

Wastewater Depreciation Rates ..... Table G-1

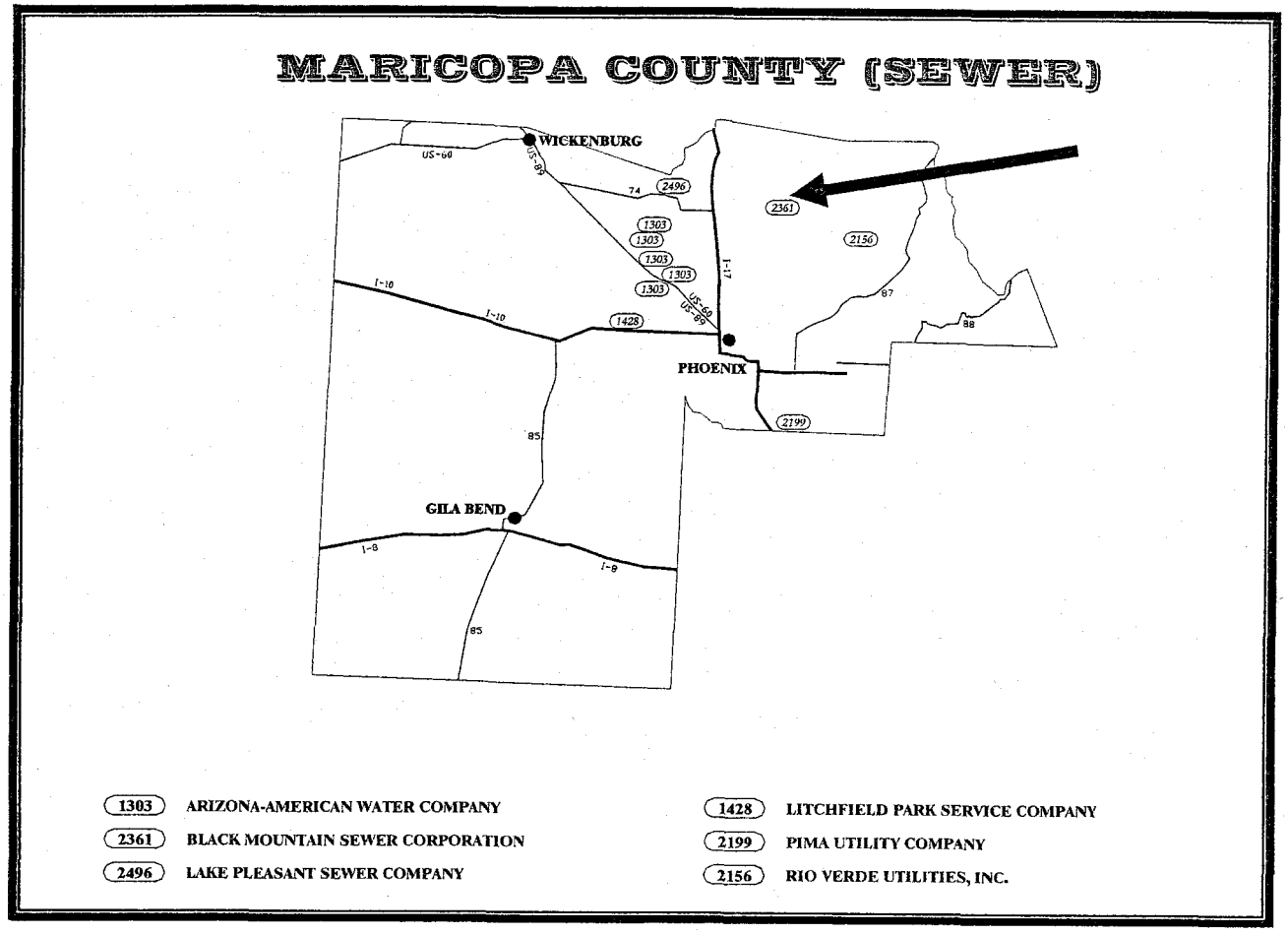


Figure A-1. Maricopa County Map

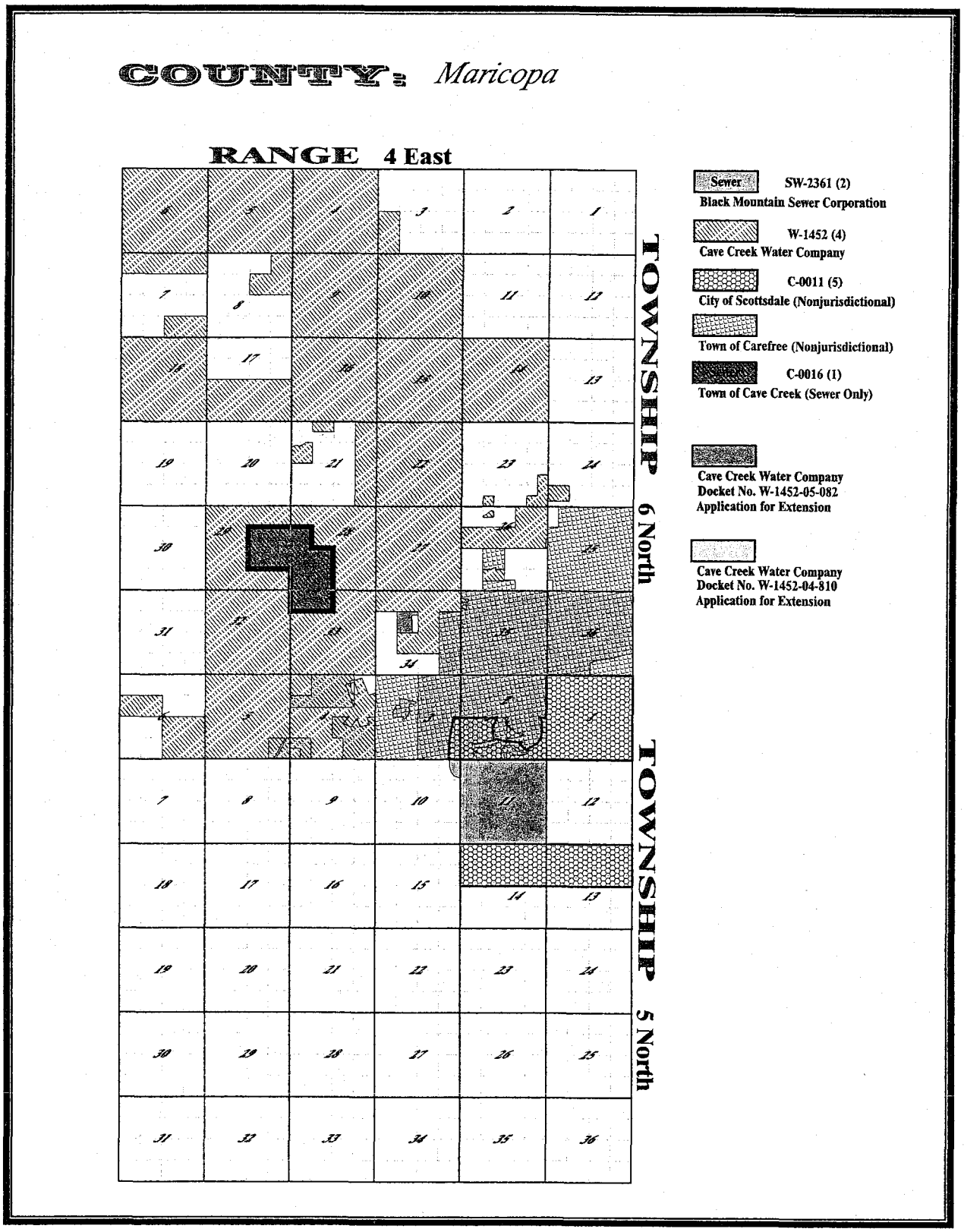


Figure A-2. Certificated Areas

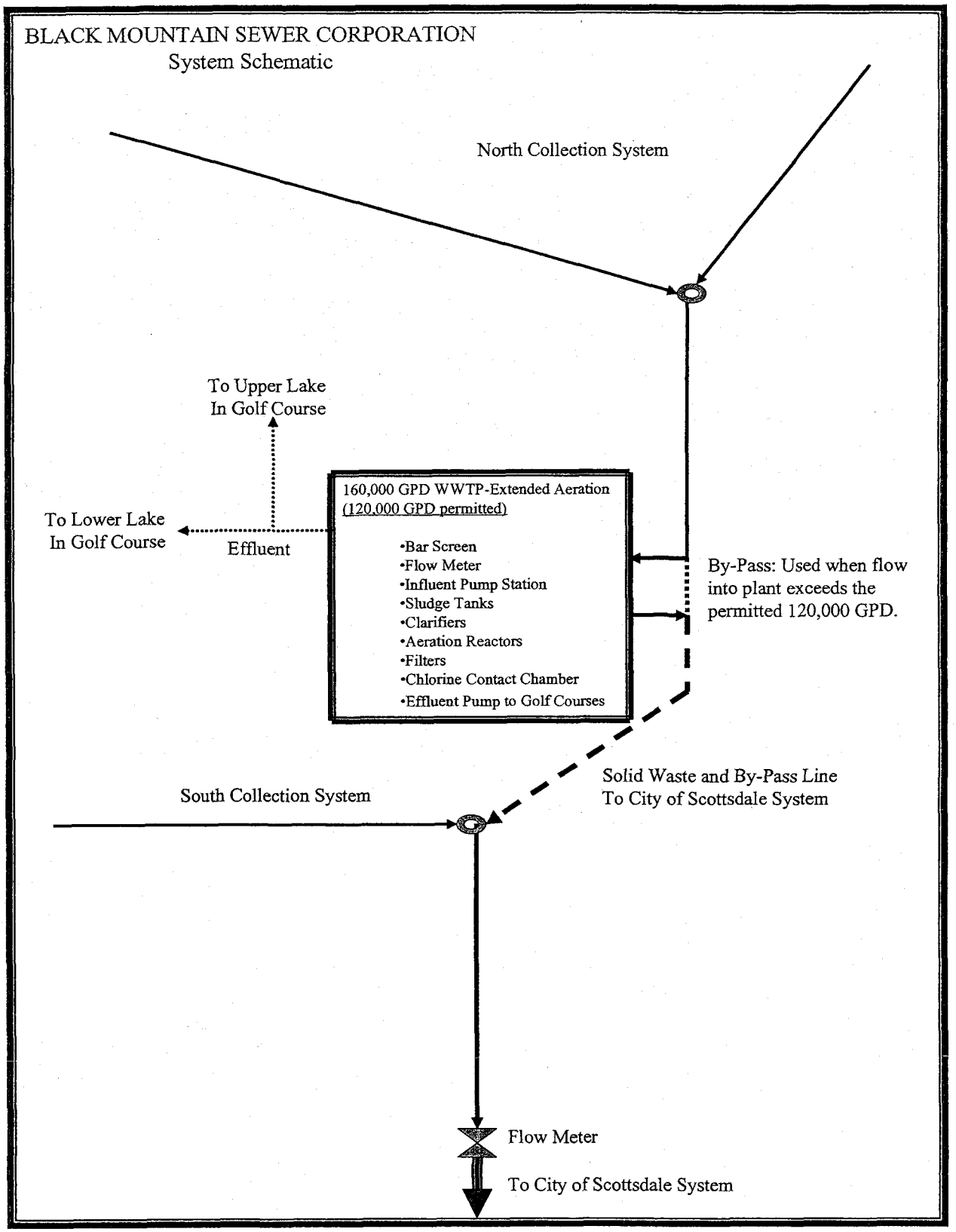


Figure B-1. System Schematic

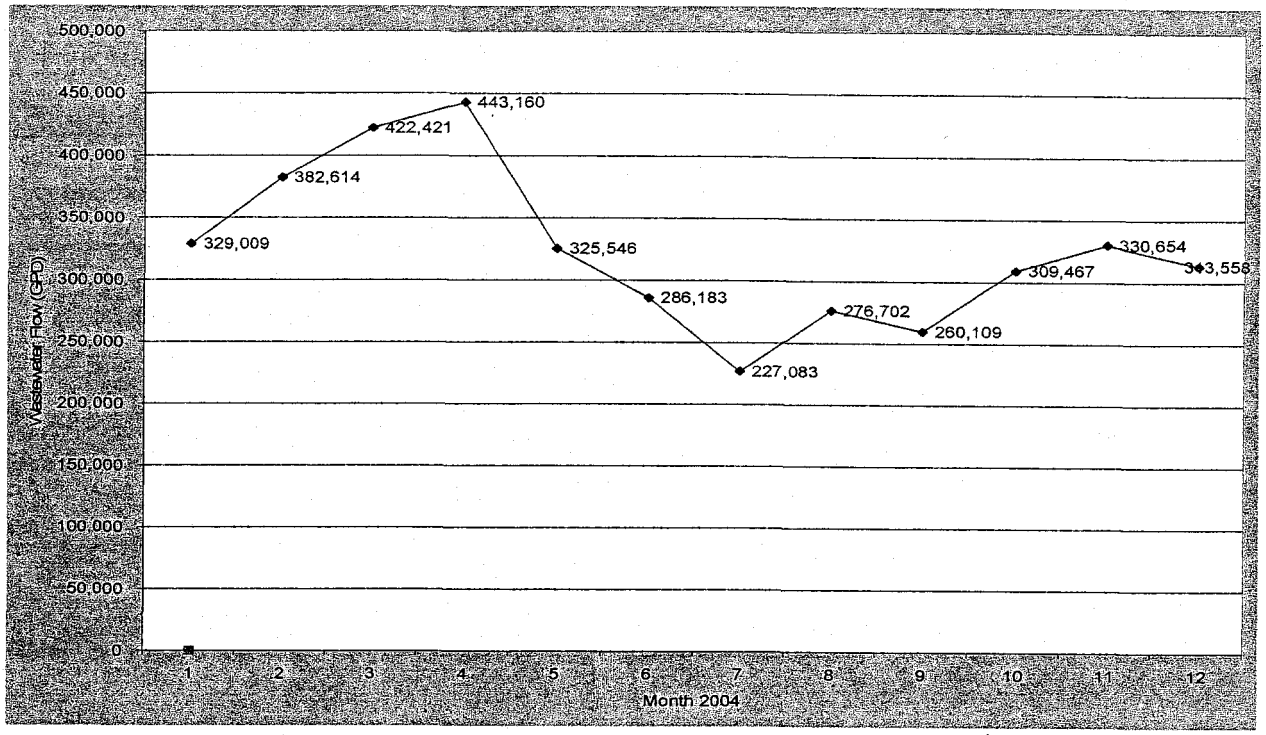


Figure C-1. Wastewater Flows

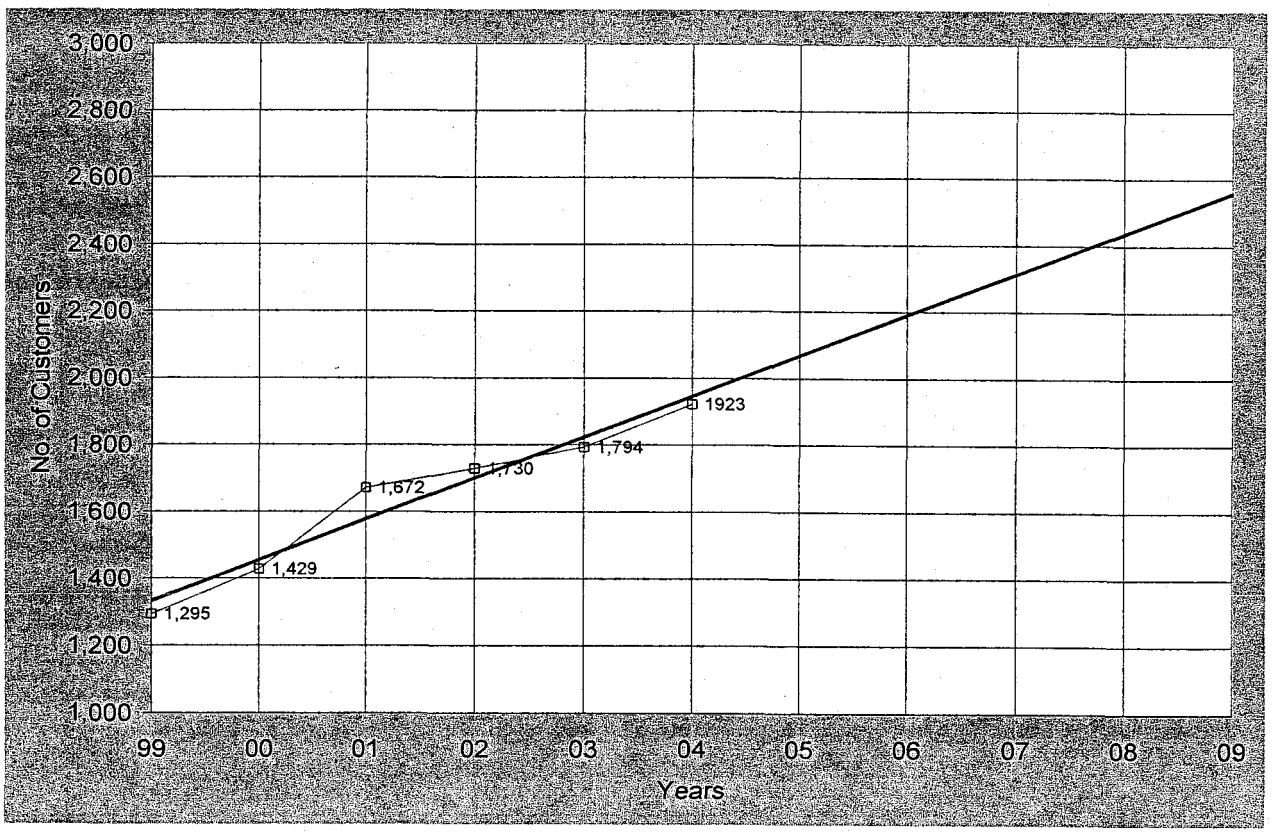


Figure D-1. Growth

Table G-1. Wastewater Depreciation Rates

| NARUC Acct. No. | Depreciable Plant | Average Service Life (Years) | Annual Accrual Rate (%) |
|---|---|---|---|
| 354 | Structures & Improvements | 30 | 3.33 |
| 355 | Power Generation Equipment | 20 | 5.0 |
| 360 | Collection Sewers – Force | 50 | 2.0 |
| 361 | Collection Sewers- Gravity | 50 | 2.0 |
| 362 | Special Collecting Structures | 50 | 2.0 |
| 363 | Services to Customers | 50 | 2.0 |
| 364 | Flow Measuring Devices | 10 | 10.0 |
| 365 | Flow Measuring Installations | 10 | 10.0 |
| 366 | Reuse Services | 50 | 2.0 |
| 367 | Reuse Meters & Meter Installations | 12 | 8.33 |
| 370 | Receiving Wells | 30 | 3.33 |
| 371 | Pumping Equipment | 8 | 12.5 |
| 374 | Reuse Distribution Reservoirs | 40 | 2.5 |
| 375 | Reuse Transmission & Distribution System | 40 | 2.5 |
| 380 | Treatment & Disposal Equipment | 20 | 5.0 |
| 381 | Plant Sewers | 20 | 5.0 |
| 382 | Outfall Sewer Lines | 30 | 3.33 |
| 389 | Other Plant & Miscellaneous Equipment | 15 | 6.67 |
| 390 | Office Furniture & Equipment | 15 | 6.67 |
| 390.1 | Computers & Software | 5 | 20.0 |
| 391 | Transportation Equipment | 5 | 20.0 |
| 392 | Stores Equipment | 25 | 4.0 |
| 393 | Tools, Shop & Garage Equipment | 20 | 5.0 |
| 394 | Laboratory Equipment | 10 | 10.0 |
| 395 | Power Operated Equipment | 20 | 5.0 |
| 396 | Communication Equipment | 10 | 10.0 |
| 397 | Miscellaneous Equipment | 10 | 10.0 |
| 398 | Other Tangible Plant | ---- | ---- |

NOTE: Acct. 398, Other Tangible Plant may vary from 5% to 50%. The depreciation rate would be set in accordance with the specific capital items in this account.

**BEFORE THE ARIZONA CORPORATION COMMISSION**

JEFF HATCH-MILLER
Chairman
WILLIAM A. MUNDELL
Commissioner
MARC SPITZER
Commissioner
MIKE GLEASON
Commissioner
KRISTIN K. MAYES
Commissioner

| | | |
|---|---|---|
| IN THE MATTER OF THE APPLICATION OF BLACK MOUNTAIN SEWER CORPORATION, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON | ) | DOCKET NO. SW-02361A-05-0657 |

SURREBUTTAL TESTIMONY

OF

MARLIN SCOTT, JR.

UTILITIES ENGINEER

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

MAY 4, 2006

ALL-STATE LEGAL®
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**EXECUTIVE SUMMARY**
**BLACK MOUNTAIN SEWER CORPORATION**
**DOCKET NO. SW-02361A-05-0657**

## CONCLUSIONS

A. Based on Black Mountain Sewer Corporation's ("Corporation") filing of the Operating Agreement, Staff withdraws its recommendation of delaying the effective date of any permanent rates and charges in this proceeding as a result of meeting Commission compliance with this Decision.

B. With the filing of the Operating Agreement, the Corporation has no other outstanding Commission compliance issues pending at this time.

## INTRODUCTION

**Q. Please state your name, place of employment and job title.**

A. My name is Marlin Scott, Jr. My place of employment is the Arizona Corporation Commission ("Commission"), Utilities Division, 1200 West Washington Street, Phoenix, Arizona 85007. My job title is Utilities Engineer.

**Q. Are you the same Marlin Scott, Jr. who submitted direct testimony on behalf of the Utilities Division?**

A. Yes.

**Q. What was the purpose of that testimony?**

A. My direct testimony provided an engineering evaluation for Black Mountain Sewer Corporation ("Corporation") for this proceeding.

**Q. What is the purpose of your surrebuttal testimony?**

A. To address a Commission compliance item with Decision No. 64748 that required the Corporation to file an Operating Agreement within the Town of Carefree.

## COMPLIANCE WITH DECISION NO. 64748

**Q. What was required of the Corporation in Decision No. 64748?**

A. In Decision No. 64748 (April 17, 2002), the Corporation received approval for an extension to its Certificate of Convenience and Necessity. One of the conditions for this approval was "that the Corporation file with the Director, within 365 days of the effective date of this Decision, the required permit, license or franchise from the appropriate governmental authority permitting it to provide service to the extension parcels approved

hereinafter or the approval for that parcel shall be rendered null and void without further Order of the Commission." This documentation was originally due April 17, 2003.

**Q. What did Staff recommend in its direct testimony?**

A. Since the required documentation had not been filed, Staff recommended that any permanent rates and charges in this matter shall become effective on the first day of the month after the Corporation submits to Docket Control the required permit, license or franchise from the appropriate governmental authority as ordered in Decision No. 64748.

**Q. Has the Corporation filed the required documentation?**

A. Yes. On April 3, 2006, the Corporation docketed the Operating Agreement.

**Q. Based on Staff's review of the filed Operating Agreement, did the Corporation satisfy the required permit, license or franchise from the appropriate governmental authority as ordered in Decision No. 64748?**

A. Yes.

**Q. Does Staff have any changes to its prior recommendation?**

A. Yes. Based on the Corporation's filing of the Operating Agreement, Staff withdraws its recommendation of delaying the effective date of any permanent rates and charges in this proceeding as a result of meeting Commission compliance with this Decision. With the filing of this Operating Agreement, the Corporation has no other outstanding Commission compliance issues pending at this time.

**Q. Does this conclude your surrebuttal testimony?**

A. Yes, it does.

**BEFORE THE ARIZONA CORPORATION COMMISSION**

JEFF HATCH-MILLER
Chairman
WILLIAM A. MUNDELL
Commissioner
MARC SPITZER
Commissioner
MIKE GLEASON
Commissioner
KRISTIN K. MAYES
Commissioner

| | | |
|---|---|---|
| IN THE MATTER OF THE APPLICATION OF BLACK MOUNTAIN SEWER CORPORATION, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON | ) | DOCKET NO. SW-02519A-00-0638 |

DIRECT

TESTIMONY

OF

PEDRO M. CHAVES

PUBLIC UTILITIES ANALYST I

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

MARCH 9, 2006

ALL-STATE LEGAL®
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Multi-Stage DCF Estimates.....PMC-8

**EXECUTIVE SUMMARY**
**BLACK MOUNTAIN SEWER CORPORATION**
**DOCKET NO. SW-02361A-05-0657**

The direct testimony of Staff witness Pedro M. Chaves addresses the following issues:

Capital Structure – Staff recommends that the Commission adopt a capital structure for Black Mountain ("Applicant") for this proceeding consisting of 0.0 percent debt and 100.0 percent equity.

Cost of Equity – Staff's estimated return on equity ("ROE") for the Applicant is based on cost of equity estimates for the sample companies ranging from 9.4 percent for the capital asset pricing model ("CAPM") to 9.7 percent for the discounted cash flow method ("DCF"). Staff's ROE recommendation does not reflect a financial risk adjustment due to the Applicant's lower financial risk in relation to the sample companies because the capital structure is reasonable. If Staff had made an adjustment for financial risk, it would have been a 0.3 percent downward adjustment.

Overall Rate of Return – Staff recommends that the Commission adopt an overall rate of return ("ROR") of 9.6 percent.

Mr. Bourassa's Testimony – The Commission should reject the Company proposed 11.0 percent ROE for the following reasons:

1. Mr. Bourassa's DCF estimates rely exclusively on analyst's forecasts. In addition Mr. Bourassa's DCF constant growth analysis does not include dividend growth.

2. Mr. Bourassa's risk premium analysis is not market based and relies on forecasted interest rates for 10-year Treasuries for 2007-2008.

## I. INTRODUCTION

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

A. My name is Pedro M. Chaves. I am a Public Utilities Analyst employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

**Q. Briefly describe your responsibilities as a Public Utilities Analyst.**

A. In my position as a Public Utilities Analyst, I perform studies to estimate the cost of capital component in rate filings to determine the overall revenue requirement and analyze requests for financing authorization.

**Q. Please describe your educational background and professional experience.**

A. I am a graduate of Arizona State University, receiving a Bachelor of Science degree in Global Business with a specialization in finance. My course of studies included classes in corporate and international finance, investments, accounting, statistics, and economics. I began employment as a Staff Public Utilities Analyst in December, 2005.

**Q. What is the scope of your testimony in this case?**

A. I provide Staff's recommended rate of return in this case. I discuss the appropriate rate of return ("ROR") for establishing the revenue requirement for Black Mountain Sewer Corporation ("Black Mountain" or "Applicant").

## SUMMARY OF TESTIMONY AND RECOMMENDATIONS

**Q. Briefly summarize how Staff's cost of capital testimony is organized.**

A. Staff's cost of capital testimony is presented in nine sections. Section I is this introduction. Section II discusses the concept of weighted average cost of capital

("WACC"). Section III presents the concept of capital structure and presents Staff's recommended capital structure for Black Mountain in this proceeding. Section IV discusses the concepts of return on equity ("ROE") and risk. Section V presents the methods employed by Staff to estimate Black Mountain's ROE. Section VI presents the findings of Staff's ROE analysis. Section VII presents Staff's final cost of equity estimates for Black Mountain. Section VIII presents Staff's ROR recommendation. Section IX presents Staff's comments on the direct testimony of the Applicant's witness, Mr. Thomas J. Bourassa. Finally, section X presents the conclusions.

**Q. Have you prepared any exhibits to accompany your testimony?**

A. Yes. I prepared eight schedules (PMC-1 to PMC-8) that support Staff's cost of capital analysis.

**Q. What is Staff's recommended rate of return for Black Mountain?**

A. Staff recommends a 9.6 percent overall ROR. Staff's ROR is based on cost of equity estimates for Black Mountain that range from 9.4 percent to 9.7 percent. Staff's recommended 9.6 percent ROR is calculated in Schedule PMC-1. Staff's ROE recommendation does not reflect a financial risk adjustment due to the Applicant's lower financial risk in relation to the sample companies because the capital structure is reasonable. If Staff had made an adjustment for financial risk, it would have been a 0.3 percent downward adjustment.

## BLACK MOUNTAIN'S PROPOSED OVERALL RATE OF RETURN

**Q. Briefly summarize the Applicant's proposed capital structure, cost of debt, return on equity and overall rate of return for this proceeding.**

A. Table 1 summarizes the Applicant's proposed capital structure, cost of debt, return on equity and overall rate of return in this proceeding:

**Table 1**

| | Weight | Cost | Weighted Cost |
|---|---|---|---|
| Long-term Debt | 0.0% | 0.0% | 0.0% |
| Common Equity | 100.0% | 11.0% | 11.0% |
| **Cost of Capital/ROR** | | | **11.0%** |

Black Mountain is proposing an overall rate of return of 11.0 percent.

## II. THE WEIGHTED AVERAGE COST OF CAPITAL

**Q. Please define the cost of capital concept.**

A. The cost of capital is the opportunity cost represented by anticipated returns or earnings that are foregone by choosing one investment over others with equivalent risk. In other words, the cost of capital is the return that stakeholders expect for committing their resources in a determined business enterprise.

**Q. What is the overall cost of capital?**

A. The overall cost of capital is equal to the WACC.

**Q. How is the WACC calculated?**

A. The WACC is calculated by adding the weighted expected returns of a firm's securities. Equation 1 that follows presents the WACC as a mathematical expression.

Equation 1.

$$WACC = \sum_{i=1}^{n} W_i * r_i$$

In this equation, $W_i$ is the weight given to the $i^{th}$ security (the proportion of the $i^{th}$ security relative to the portfolio) and $r_i$ is the expected return on the $i^{th}$ security.

**Q. Can you provide an example demonstrating application of Equation 1?**

A. Yes. For this example, assume that an entity has a capital structure composed of 55 percent debt and 45 percent equity. Also, assume that the embedded cost of debt is 8.0 percent and the expected return on equity, i.e. the cost of equity, is 11.0 percent. Calculation of the WACC is as follows:

$$WACC = (55\% * 7.0\%) + (45\% * 11.0\%)$$

$$WACC = 3.85\% + 4.95\%$$

$$WACC = 8.80\%$$

The weighted average cost of capital in this example is 8.80 percent. The entity in this example would need to earn an overall rate of return of 8.80 percent to cover its cost of capital.

## III. CAPITAL STRUCTURE

**Background**

**Q. Please explain the capital structure concept.**

A. The capital structure of a firm is the relative proportions of short-term debt, long-term debt (including capital leases), preferred stock and common stock that are used to finance the firm's assets.

**Q. How is the capital structure expressed?**

A. The capital structure of a company is expressed as the percentage of each component of the capital structure (capital leases, short-term debt, long-term debt, preferred stock and common stock) relative to the total capital (the total sum of all the components of the capital structure).

For instance, the capital structure for an entity that is financed by $25,000 of capital leases, $30,000 of long-term debt, $7,000 of preferred stock and $38,000 of common stock is shown in Table 2.

**Table 2**

| Component | | | % |
|---|---|---|---|
| Capital Leases | $25,000 | ($25,000/$100,000) | 25.0% |
| Long-Term Debt | $30,000 | ($30,000/$100,000) | 30.0% |
| Preferred Stock | $7,000 | ($7,000/$100,000) | 7.0% |
| Common Stock | $38,000 | ($38,000/$100,000) | 38.0% |
| Total | $100,000 | | 100% |

The capital structure in this example is composed of 25.0 percent capital leases, 30.0 percent long-term debt, 7.0 percent preferred stock and 38.0 percent common stock.

**Black Mountain's Capital Structure**

**Q. What capital structure does the Black Mountain propose?**

A. The Applicant proposes a capital structure composed of 0.0 percent debt and 100.0 percent common equity.

**Q. Is the Applicant's proposed capital structure the same capital structure recommended by Staff?**

A. Yes, it is.

**Q. How does Black Mountain's capital structure compare to capital structures of publicly traded water utilities?**

A. The Applicant's capital structure is composed of 0.0 percent debt and 100.0 percent equity. Schedule PMC-3 shows the capital structures of six publicly traded water companies ("sample water companies") as of January 2006. The average capital structure for the sample water utilities is comprised of approximately 47.2 percent debt and 52.8 percent equity.

**Q. Do you have additional comments on Black Mountain's capital structure?**

A. Yes. Black Mountain has two inter-company loans. However, Commission Decision Nos. 59944 and 60240 specify that the debt service cost for these loans is to be treated as an operating expense. Therefore, Staff did not include these loans in the Applicant's capital structure. However, regardless of how these loans are treated for rate-making purposes, the loans do exist and present financial risk in the eyes of investors.

Accordingly, Staff recognized the real financial risk presented by these loans in calculating an ROE estimate as discussed in Section VII of this testimony.

## IV. RETURN ON EQUITY

**Background**

**Q. Please define the term cost of equity capital.**

A. The cost of equity capital is determined by the market. It is the rate of return that investors expect to earn on their equity investment in an entity given its risk. In other words, the cost of equity to an entity is the investors' expected rate of return on other investments of similar risk.

**Q. Is there any relationship between interest rates and the cost of equity capital?**

A. Yes. The cost of equity tends to move in the same direction as interest rates. This relationship is integral to the capital asset pricing model ("CAPM") formula. The CAPM is a market based model used for estimating the cost of equity capital that is discussed in Section V of this testimony. Therefore, a comparison of current interest rates to historical interest rates provides insight for how the current cost of equity capital might be compared to the cost of equity capital historically.

**Q. What has been the general trend of interest rates in recent years?**

A. A chronological chart of interest rates is a good tool to show interest rate history and identify trends. Chart 1 graphs intermediate U.S. treasury rates from January 2000 to January 2006.

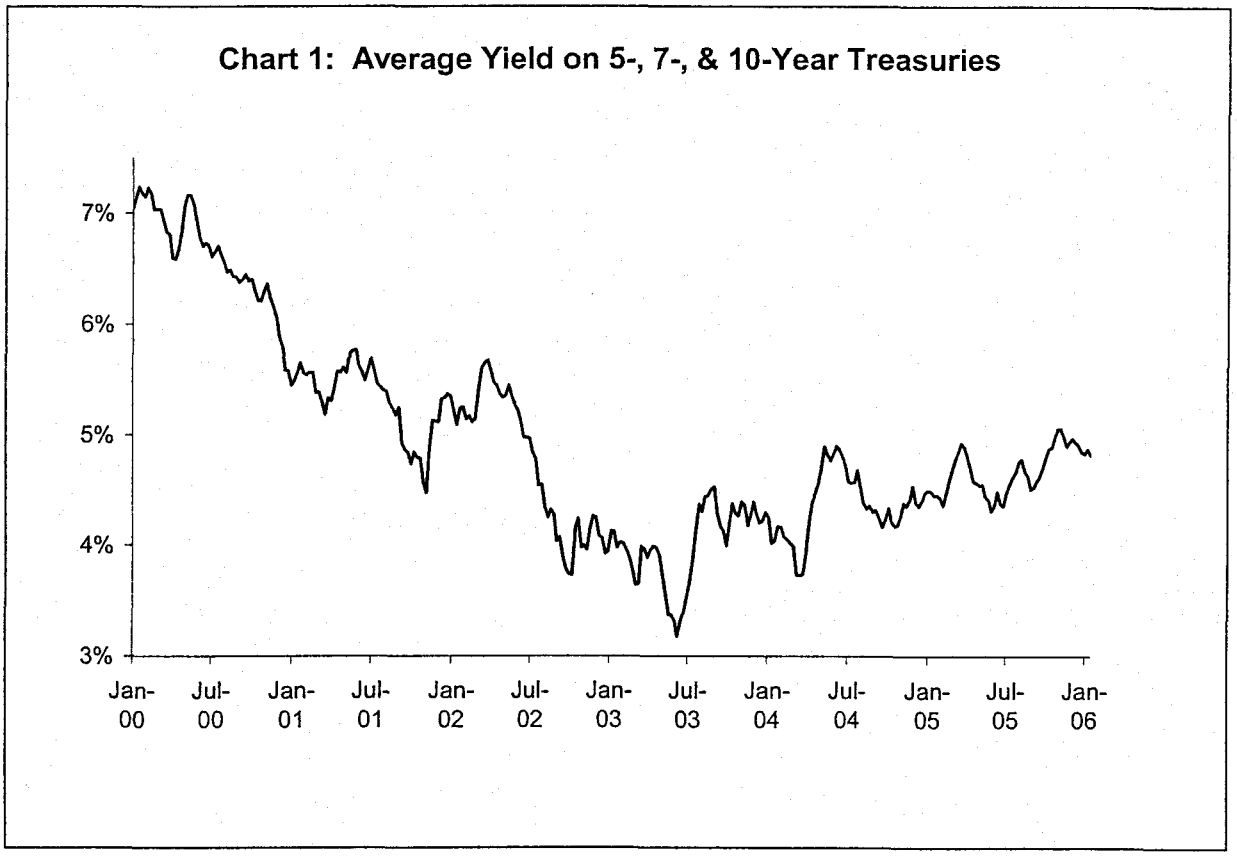
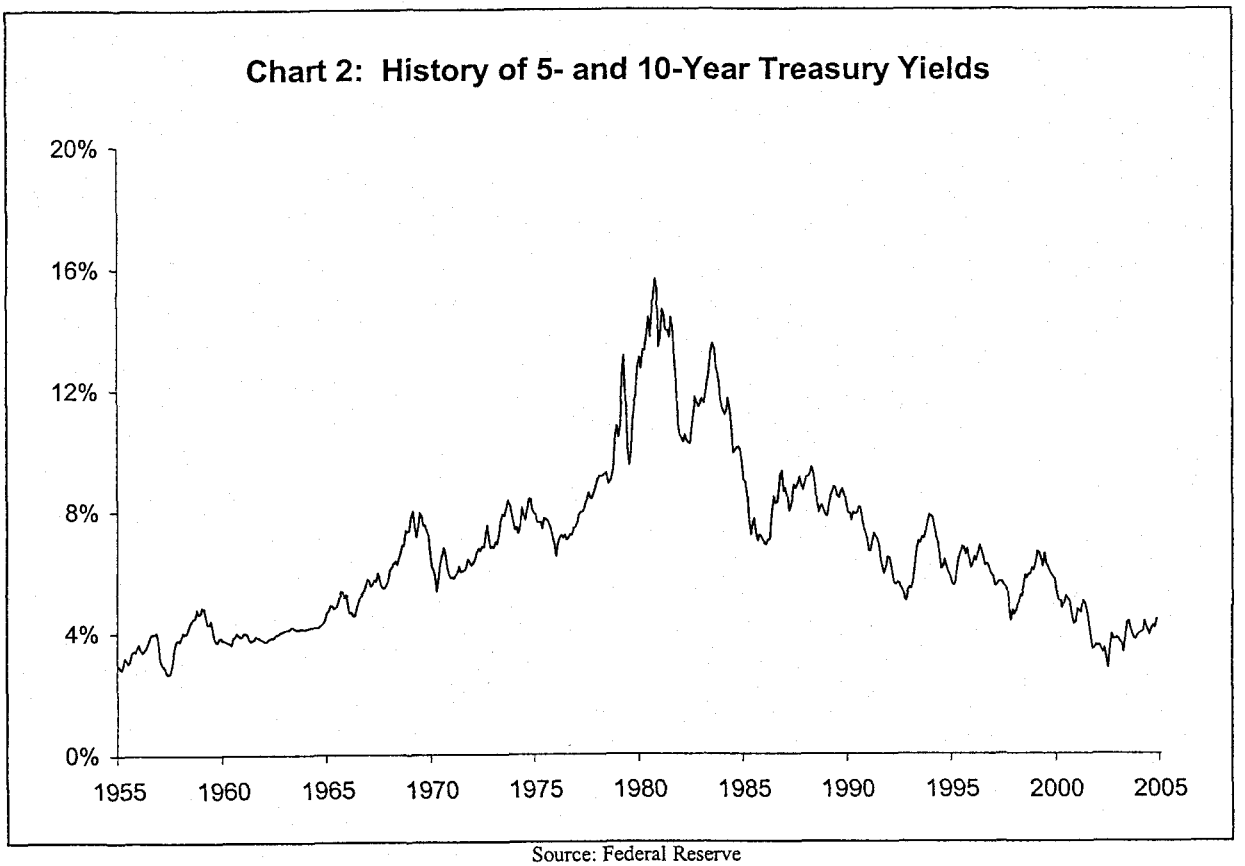



Chart 1 shows that intermediate interest rates trended downward from 2000 to mid-2003 and have remained low despite a slight upward trend in the past two years.

**Q. Where are current interest rates compared to a longer term history of interest rates and what does it suggest for capital costs?**

A. Chart 2 shows that interest rates have trended downward for more than 20 years. It also shows that interest rates over the past 40 years have been consistently higher than currently. The inference from the relationship between interest rates and the cost of equity capital is that current capital costs are low in comparison to historical capital costs.




Source: Federal Reserve

**Q. Do actual returns represent the cost of equity?**

A. No. The cost of equity represents investors' *expected* returns not realized returns.

**Q. What have historical returns been for average risk securities?**

A. Jeremy Siegel, a Wharton School finance professor, found that the average arithmetic and compound annual returns on U.S. equities have been 9.7 percent and 8.3 percent, respectively, using 200 years of data through 2001.[1]

[1] Siegel, Jeremy J. *Stocks for the Long Run*, third edition. McGraw-Hill, New York. 2002. p.13.

**Q. Is there any information available that leads to an understanding of the relationship between the equity returns required for a regulated water utility versus the market?**

A. Yes. A comparison of betas, a component of the CAPM discussed in Section V, for the water utility industry and the market provide insight into this relationship. The average beta (0.74)[2] for a water utility is lower than the theoretical average beta for all stocks (1.0). According to the CAPM formula, the cost of equity capital moves in the same direction as beta. Since the beta for the water utility industry is lower than the beta for the market, the implication is that the required return on equity for a regulated water utility is below the average required return on the market.

**Risk**

**Q. Please define risk.**

A. Risk, as it relates to an investment, is generally recognized as the variability or uncertainty of the returns on the investment. Risk is often separated into two components. Those components are market risk (systematic risk) and non-market risk (unique risk).

**Q. What is market risk?**

A. Market risk or systematic risk is the risk that changes in the stock market as a whole will cause changes in the stock price of a particular entity. Market risk is related to the economy-wide perils that affect all business such as inflation, interest rates, and general business cycles. Market risk affects all stocks and it cannot be eliminated by diversification, i.e. it is non-diversifiable. However, the impact on each entity is not necessarily the same. Accordingly, market risk is the only risk that affects the cost of equity.

[2] See Schedule PMC-6

**Q. Is there a measure for market risk?**

A. Yes. Market risk is measured by the beta. Beta reflects both the business risk and financial risk of an entity.

**Q. How are business and financial risks defined?**

A. Business risk is that risk which is associated with the fluctuation in earnings due to the basic nature of an entity's business. Financial risk is that risk which affects shareholders due to a firm's use of fixed obligation (i.e., debt) financing.

**Q. Is the cost of equity affected by both business and financial risk?**

**A.** Yes.

**Q. What is the relationship between the capital structure of a firm and its financial risk?**

A. As previously discussed, the relative proportions of short-term debt, long-term debt (including capital leases), preferred stock and common stock used to finance an entity's assets represent its capital structure. Financial risk increases as an entity includes a greater proportion of fixed obligation financing in its capital structure (i.e., as it becomes more leveraged). An increase in financial risk is reflected in the market risk measured by beta resulting in an increase in an entity's cost of equity.

**Q. How does Black Mountain's financial risk compare to the sample water companies' financial risk from the perspective of an investor that does not recognize the loan payments as operating expenses?**

A. From an investor's perspective Black Mountain's capital structure is composed of approximately 47.2 percent debt and 52.8 percent equity. Schedule PMC-3 shows the

capital structures of six publicly traded water companies ("sample water companies") as of January 2006, as well as Black Mountain's actual capital structure. As of January 2006, the sample water utilities were capitalized with approximately 51.1 percent debt and 48.9 percent equity, while Black Mountain's actual capital structure consists of approximately 47.2 percent debt and 52.8 percent equity. Thus, Black Mountain's shareholders bear less financial risk than the shareholders of the sample companies.

**Q. What is non-market risk?**

A. Non-market (unique risk) is risk related an individual entity. There is no correlation among entities for unique risk; accordingly, it can be eliminated through diversification. Specifically, investors can eliminate unique risk by holding a diversified investment portfolio.

**Q. Is unique risk measured by beta?**

A. No. Unique risk is not measured by beta.

**Q. Is the cost of equity affected by unique risk?**

A. No. Since unique or firm-specific risk can be eliminated through diversification, it does not affect the cost of equity capital.

**Q. What additional return can investors expect to account for unique risk?**

A. None. Investors who hold diversified portfolios can eliminate unique risk, and consequently do not require any related additional return. Since investors who choose to be less than fully diversified must compete in the market with fully diversified investors, the former cannot expect to be compensated for unique risk.

## V. ESTIMATING THE COST OF EQUITY

### Introduction

**Q. Did Staff directly estimate the cost of equity for the Applicant?**

A. No. Staff did not directly estimate Black Mountain's cost of equity for two reasons. First, Black Mountain's stock is not publicly traded; therefore, its cost of equity cannot be estimated because the required information is not available to perform the analysis. Second, using an average of a representative sample group reduces the potential for random fluctuations resulting in a more reliable estimate.

**Q. What companies did Staff select as proxies or comparables for Black Mountain?**

A. Staff selected six publicly traded water utilities shown in Schedule PMC-3. Staff chose these six entities because they derive most of their earnings from regulated operations, and they are currently analyzed by *The Value Line Investment Survey Small and Mid Cap Edition* ("*Value Line Small Cap*") and *The Value Line Investment Survey* ("*Value Line*") making available the necessary information to perform a cost of capital estimation for Black Mountain.

**Q. What models did Staff implement to estimate Black Mountain's cost of equity?**

A. The cost of equity is determined by the market; therefore, Staff used two market-based models to estimate the cost of equity for Black Mountain: the discounted cash flow ("DCF") model and the CAPM.

**Q. Explain why Staff chose the DCF and CAPM market-based models?**

A. Staff chose to use the DCF and CAPM models because they are widely recognized as appropriate models and have been used extensively to estimate the cost of equity. A description of the DCF model and then the CAPM model begins immediately below.

**Discounted Cash Flow Model Analysis**

**Q. Please provide a brief summary of the theory upon which the DCF method of estimating the cost of equity is based.**

A. The theory underlying the DCF method of estimating the cost of capital is that the cost of equity is that discount rate which equates the current market price to all future cash flows expected by investors. That is, the cost of equity is the rate that future expected cash flows (primarily dividends) must be discounted to equal a given market price.

In the 1960s, Professor Myron Gordon pioneered the use of the DCF method to estimate the cost of capital for a public utility. The DCF model has become widely used due to its theoretical merit and its simplicity.

**Q. How is the DCF model applied?**

A. The DCF model is applied via a mathematical formula where the current market price, the expected dividend, and projected dividend growth rate are inputs, while the discount rate (cost of equity) is the result. The formula can be applied to a sample of companies that exhibit similar risk to the entity whose cost of equity is being estimated and the results averaged to arrive at an estimate of the cost of equity for the subject entity.

**Q. Did Staff apply more than one version of the DCF Model?**

A. Yes. Staff applied two versions of the DCF model: the constant-growth DCF Model and the multi-stage or non-constant growth DCF. The constant-growth DCF Model assumes that an entity will grow indefinitely at the same rate. Alternately, the non-constant growth DCF model does not assume one constant, indefinite dividend grow rate.

*The Constant-Growth DCF*

**Q. What is the mathematical formula used in Staff's constant-growth DCF analysis?**

A. The constant-growth DCF formula used in Staff's analysis is:

Equation 2:

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

where:

| | | |
|---|---|---|
| $K$ | = | the cost of equity |
| $D_1$ | = | the expected annual dividend |
| $P_0$ | = | the current stock price |
| $g$ | = | the expected infinite annual growth rate of dividends |

Equation 2 assumes that the entity has a constant earnings retention rate and that its earnings are expected to grow at a constant rate. According to Equation 2, a stock with a current market price of $10 per share, an expected annual dividend of $0.39 per share and an expected dividend growth rate of 5.0 percent per year has a cost of equity to the entity of 8.9 percent reflected by the sum of the dividend yield ($0.39/ $10 = 3.9 percent) and the 5.0 percent annual dividend growth rate.

**Q. How did Staff calculate the dividend yield component ($D_1/P_0$) of the constant-growth DCF formula?**

A. Staff calculated the yield component of the DCF formula by dividing the expected annual dividend[3] ($D_1$) by the spot stock price ($P_0$) after the close of the market January 25, 2006, as reported by *MSN money*.

[3] Value Line Summary & Index. 01-27-06

**Q. Why did Staff use the spot stock price rather than a historical average stock price to calculate the dividend yield component of the DCF formula?**

A. Use of the current market stock price (spot stock price) is consistent with finance theory, i.e., the efficient market hypothesis. This hypothesis asserts that the current stock price reflects information investors use to form expectations of future returns. Use of a historical average of stock prices illogically discounts the most recent information in favor of less recent information. The latter is stale and is representative of underlying conditions that may have changed.

**Q. How did Staff estimate the dividend growth (g) component of the constant-growth DCF model represented by Equation 2?**

A. The dividend growth component for Staff's constant-growth DCF model is the average of six different estimation methods as shown in Schedule PMC-7. Staff computed both historical and projected growth estimates on dividend-per-share ("DPS")[4], earnings-per-share ("EPS")[5] and sustainable growth bases.

**Q. Why did Staff examine EPS growth to estimate the dividend growth component of the constant-growth DCF model?**

A. Staff examined EPS growth (both historical and projected) because dividends are dependent on earnings. Dividend distribution in excess of earnings results in capital contraction. Continued capital contraction is not sustainable in the long run, and it is inconsistent with the constant-growth DCF model. Therefore, EPS growth is an appropriate consideration for estimating expected dividend growth.

[4] Derived from information provided by *Value Line*
[5] Derived from information provided by *Value Line*

**Q. How did Staff estimate historical DPS growth?**

A. Staff estimated historical DPS growth by calculating the average rate of growth in DPS of the sample water companies from 1995 to 2004. The results of that calculation are shown in Schedule PMC-4. Staff calculated an average historical DPS growth rate of 2.4 percent for the sample water utilities for the period 1995 to 2004.

**Q. How did Staff estimate the projected DPS growth?**

A. Staff calculated an average of the projected DPS growth rates for the sample water utilities from *Value Line*. The average projected DPS growth rate is 4.7 percent as shown in Schedule PMC-4.

**Q. How did Staff calculate the historical EPS growth rate?**

A. Staff estimated historical EPS growth by calculating the average rate of growth in EPS of the sample water companies from 1995 to 2004. The results of that calculation are shown in Schedule PMC-4. Staff calculated an average historical EPS growth rate of 2.9 percent for the sample water utilities for the period 1995 to 2004.

**Q. How did Staff estimate the projected EPS growth?**

A. Staff calculated an average of the projected EPS growth rates for the sample water utilities from *Value Line*. The average projected EPS growth rate is 15.4 percent as shown in Schedule PMC-4. It is important to take into account that, as discussed later on this testimony, analysts' projections of future earnings are usually high and vary widely.

**Q. How did Staff calculate its historical and projected sustainable growth rates?**

A. Staff's historical and projected sustainable growth rates were calculated by adding their respective retention growth rate terms (br) to their respective stock financing growth rate terms (vs) as shown in Schedule PMC-5.

**Q. What is retention growth?**

A. Retention growth is the growth in dividends due to the retention of earnings. Viewed differently, an entity cannot expect to grow dividends if it does not retain any earnings. Retention growth is dependent on the percentage of earnings retained (retention ratio) and the value of earnings. Mathematically, the retention growth rate is the product of the retention ratio and the book/accounting return on equity.

**Q. What is the formula for the retention growth rate?**

A. The retention growth rate formula is:

Equation 3:

$$\text{Retention Growth Rate} = br$$

where: $b$ = the retention ratio (1 – dividend payout ratio)
$r$ = the accounting/book return on common equity

**Q. How did Staff calculate the average historical retention growth rate (br) for the sample water utilities?**

A. First, Staff calculated the retention rate for each of the sample water companies from 1995 to 2004. Then Staff calculated the mean of those results. The historical average retention (br) growth for the sample water utilities is 3.1 percent as shown in Schedule PMC-5.

**Q. How did Staff determine projected retention growth rate (br) for the sample water utilities?**

A. Staff used the retention growth projections for the sample water utilities for the period 2008 to 2010 from *Value Line*. The projected average retention growth rate for the sample water utilities is 6.3 percent as shown in Schedule PMC-5.

**Q. When can retention growth provide a reasonable estimate of future dividend growth?**

A. The retention growth rate is a reasonable estimate of future dividend growth when the retention ratio is reasonably constant and the entity's market price to book value ("market-to-book ratio") is expected to be 1.0. The average retention ratio has been reasonably constant in recent years. However, the market-to-book ratio for the sample water utilities is 2.7, notably higher than 1.0, as shown in Schedule PMC-6.

**Q. Is there any financial implication of a market-to-book ratio greater than 1.0?**

A. Yes. A market-to-book ratio greater than 1.0 implies that investors expect an entity to earn an accounting/book return on its equity that exceeds its cost of equity. The relationship between required returns and expected cash flows is readily observed in the fixed securities market. For example, assume an entity contemplating issuance of bonds with a face value of $10 million at either 5 percent or 7 percent, and thus, paying annual interest of $500,000 or $700,000, respectively. Regardless of investors' required return on similar bonds, investors will be willing to pay more for the bonds if issued at 7 percent than if the bonds are issued at 5 percent. For example, if the current interest rate required by investors is 5 percent, then they would bid $10 million for the 5 percent bonds and more than $10 million for the 7 percent bonds. Similarly, if equity investors require a 7 percent return and expect an entity to earn accounting/book returns of 11 percent, the

market will bid up the price of the entity's stock to provide the required return of 7 percent.

**Q. How has Staff generally recognized a market-to-book ratio exceeding 1.0 in its cost of equity analyses in recent years?**

A. First, Staff has assumed that investors expect the market-to-book ratio to remain greater than 1.0. Given that assumption, Staff has added a stock financing growth rate (vs) term to the retention ratio (br) term to calculate its historical and projected sustainable growth rates.

**Q. Do the historical and projected sustainable growth rates Staff uses to develop its DCF cost of equity in this case continue to include a stock financing growth rate term?**

A. Yes.

**Q. What is stock financing growth?**

A. Stock financing growth is the growth in an entity's dividends due to the sale of stock by that entity. Stock financing growth is a concept derived by Myron Gordon and discussed in his book *The Cost of Capital to a Public Utility.*[6] Stock financing growth is the product of the fraction of the funds raised from the sale of stock that accrues to existing shareholders (v) and the fraction resulting from dividing the funds raised from the sale of stock by the existing common equity (s).

**Q. What is the mathematical formula for the stock financing growth rate?**

A. The mathematical formula for stock financing growth is:

[6] Gordon, Myron J. *The Cost of Capital to a Public Utility.* MSU Public Utilities Studies, Michigan, 1974. pp 31-35.

Equation 4:

$$\text{Stock Financing Growth} = vs$$

where: $v$ = Fraction of the funds raised from the sale of stock that accrues to existing shareholders

$s$ = Funds raised from the sale of stock as a fraction of the existing common equity

**Q. How is the variable *v* presented above calculated?**

A. Variable $v$ is calculated as follows:

Equation 5:

$$v = 1 - \left(\frac{book\ value}{market\ value}\right)$$

For example, assume that a share of stock has a $40 book value and is selling for $50. Then, to find the value of $v$, the formula is applied:

$$v = 1 - \left(\frac{40}{50}\right)$$

In this example, $v$ is equal to 0.20.

**Q. How is the variable *s* presented above calculated?**

A. Variable $s$ is calculated as follows:

Equation 6:

$$s = \frac{\text{Funds raised from the issuance of stock}}{\text{Total existing common equity before the issuance}}$$

For example, assume that an entity has $100 in existing equity, and it sells $10 of stock. Then, to find the value of *s*, the formula is applied:

$$s = \left(\frac{10}{100}\right)$$

In this example, *s* is equal to 10.0 percent.

**Q. What is the *vs* term when the market-to-book ratio is equal to 1.0?**

A. A market-to-book ratio equal to 1.0 reflects that investors expect an entity to earn a book/accounting return on their equity investment equal to the cost of equity. When the market-to-book ratio is equal to 1.0, none of the funds raised from the sale of stock by the entity accrues to the benefit of existing shareholders, i.e., the term *v* is equal to zero (0.0). Consequently, the *vs* term is also equal to zero (0.0). When stock financing growth is zero, dividend growth depends solely on the *br* term.

**Q. What is the affect of the *vs* term when the market-to-book ratio is greater than 1.0?**

A. A market-to-book ratio greater than 1.0 reflects that investors expect an entity to earn a book/accounting return on their equity investment greater than the cost of equity. Equation 5 shows that when the market-to-book ratio is greater than 1.0 the *v* term is also greater than zero. The excess by which new shares are issued and sold over book value per share of outstanding stock is a contribution that accrues to existing stockholders in the form of a higher book value. The resulting higher book value leads to higher expected earnings and dividends. Continued growth from the *vs* term is dependent upon the continued issuance and sale of additional shares at a price that exceeds book value per share.

**Q. What *vs* estimate did Staff calculate from its analysis of the sample water utilities?**

A. Staff estimated an average stock financing growth of 2.8 percent for the sample water utilities as shown in Schedule PMC-5.

**Q. What would occur if an entity had a market-to-book ratio greater than 1.0 due to investors expecting earnings to exceed the cost of equity capital and the entity subsequently experienced newly authorized rates equal to its cost of equity capital?**

A. There would be downward pressure on the entity's stock price to reflect the change in future expected cash flows because, in theory, the market-to-book ratio should decline to 1.0.

**Q. What is implied by Staff's continued use of the *vs* term in the historical and projected sustainable growth rates Staff uses to develop its DCF cost of equity is this case?**

A. The implication is that there are expectations regarding the market-to-book ratio continuing to exceed 1.0, and that the water utilities will continue to issue and sell stock at prices exceeding book value to provide benefits to existing shareholders. If the authorized ROEs for water utilities are established at the cost of equity capital, the market-to-book ratio should decline to 1.0. If that occurs, the stock financing term would no longer be necessary. If investors expect the average market-to-book ratio of the sample water utilities to fall to 1.0 due to authorized ROEs equaling the cost of equity capital, then Staff's inclusion of the *vs* term in its constant-growth DCF analysis might result in an over estimate of its sustainable dividend growth rate and the resulting DCF ROE estimate.

**Q. What are Staff's historical and projected sustainable growth rates?**

A. Staff's estimated historical sustainable growth rate is 5.9 percent based on an analysis of earnings retention for the sample water companies. Staff's projected sustainable growth

rate is 10.3 percent based on retention growth projected by *Value Line*. Schedule PMC-5 presents Staff's estimates of the sustainable growth rate.

**Q. What is Staff's expected infinite annual growth rate in dividends?**

A. Staff averaged historical and projected dividends per share ("DPS"), earnings per share ("EPS"), and sustainable growth estimates to calculate the expected infinite annual growth rate in dividends. Schedule PMC-7 presents the calculation of the expected infinite annual growth rate in dividends. Staff's estimate is 6.9 percent.

**Q. What is Staff's constant-growth DCF estimate?**

A. Staff's constant-growth DCF estimate is 9.8 percent, which is shown in Schedule PMC-2.

*The Multi-Stage DCF*

**Q. Why did Staff implement the multi-stage DCF model to estimate Black Mountain's cost of equity?**

A. As previously stated, Staff used the multi-stage DCF model to consider the assumption that dividends may not grow at a constant rate. Staff's multi-stage DCF model incorporates two growth rates: a near term growth rate and a long-term growth rate.

**Q. What is the mathematical formula for the multi-stage DCF?**

A. The multi-stage DCF formula is shown in the following equation:

Equation 7 :

$$P_0 = \sum_{t=1}^{n} \frac{D_t}{(1+K)^t} + \frac{D_n(1+g_n)}{K-g_n}\left[\frac{1}{(1+K)}\right]^n$$

Where : $P_0$ = current stock price
$D_t$ = dividends expected during stage 1
$K$ = cost of equity
$n$ = years of non – constant growth
$D_n$ = dividend expected in year n
$g_n$ = constant rate of growth expected after year n

As mentioned above, Staff incorporated two growth rates. This assumes that investors expect dividends to grow at a one rate in the near-term ("Stage -1 growth") and another rate in the long-term ("Stage-2 growth").

**Q. What steps did Staff take to implement its multi-stage DCF cost of equity model?**

A. First, Staff projected a stream of dividends for each of the sample water utilities using near-term and long-term growth rates. Second, Staff calculated the rate (cost of equity) which equates the present value of the forecasted stream of dividends to the current stock price for each of the sample water utilities. Then, Staff calculated an average of the individual sample company cost of equity estimates.

**Q. How did Staff calculate near-term (stage-1) growth?**

A. Staff projected four years of dividends for each of the sample water utilities. Projections for the first twelve months, to the extent available, were from *Value Line*. The dividend projections for the remainder of stage 1 reflect the average dividend growth rate calculated in Staff's constant growth DCF analysis, or 6.9 percent, as shown in Schedule PMC-7.

**Q. How did Staff estimate long-term (stage-2) growth?**

A. Staff used the arithmetic average rate of growth in gross domestic product ("GDP") from 1929 to 2005[7]. Using the GDP growth rate assumes that the water utility industry is expected to grow at the same rate as the overall economy.

**Q. What is the historical GDP growth rate that Staff used to estimate stage-2 growth?**

A. Staff used 6.8 percent to estimate the stage-2 growth rate.

**Q. What is Staff's multi-stage DCF estimate?**

A. Staff's multi-stage DCF estimate is 9.6 percent as shown in Schedule PMC-8.

**Q. What is Staff's overall DCF estimate?**

A. Staff's overall DCF estimate is 9.7 percent. Staff calculated the overall DCF estimate by averaging the constant growth DCF (9.8%) and multi-stage DCF (9.6%) estimates as shown in Schedule PMC-2.

**Capital Asset Pricing Model**

**Q. Please describe the capital asset pricing model.**

A. The Capital Asset Pricing Model is concerned with the determination of the prices of capital assets in a competitive market. The CAPM model describes the relationship between a security's investment risk and its market rate of return. This relationship identifies the expected rate of return which investors expect a security to earn so that its market return is comparable with the market returns earned by other securities of similar risk.[8] The CAPM model assumes that investors require a return that is commensurate with the level of risk associated with a particular security. The model also assumes that

[7] www.bea.doc.gov
[8] David C. Purcell; Cost of Capital – A Practitioner's Guide Pg. 6-1.

investors will sufficiently diversify their investments to eliminate any non-systematic or unique risk.[9] In 1990, Professors Harry Markowitz, William Sharpe, and Merton Miller earned the Nobel Prize in Economic Sciences for their contribution to the development of the CAPM.

**Q. What sample did Staff use to compute the CAPM to estimate Black Mountain's cost of equity?**

A. Staff used the same sample water utilities for its CAPM computation that it used for its DCF analysis.

**Q. What is the mathematical formula for the CAPM?**

A. The mathematical formula for the CAPM is:

Equation 8:

$$K = R_f + \beta (R_m - R_f)$$

where:

| | | |
|---|---|---|
| $R_f$ | = | risk free rate |
| $R_m$ | = | return on market |
| $\beta$ | = | beta |
| $R_m - R_f$ | = | market risk premium |
| $K$ | = | expected return |

The equation shows that the expected return (K) on a risky asset is equal to the risk-free interest rate ($R_f$) plus the product of the market risk premium ("Rp") ($R_m - R_f$) multiplied by beta ($\beta$) where beta represents the riskiness of the investment relative to the market.

[9] The CAPM makes the following assumptions: 1. single holding period 2. perfect and competitive securities market 3. no transaction costs 4. no restrictions on short selling or borrowing 5. the existence of a risk-free rate 6. homogeneous expectations.

**Q. What did Staff use as an estimate for the risk-free rate of interest in its historical market risk premium CAPM method?**

A. Staff calculated an estimate of the risk-free rate of interest by averaging three (five-, seven-, and ten-year) intermediate-term U.S. Treasury securities' spot rates as published in the January 26, 2006, edition of The Wall Street Journal and reflect January 25, 2006 yields to correspond with the date Staff selected the sample companies' stock spot market prices. Staff's estimated risk-free rate for use in its historical market risk premium CAPM method is 4.5 percent[10] as shown in Schedule PMC-2.

**Q. What did Staff use as an estimate for the risk-free rate of interest in its current market risk premium CAPM method?**

A. Staff used the spot rate on 30-year U.S. Treasury notes as published in the January 26, 2006 edition of *The Wall Street Journal.*

**Q. Why do U.S Treasury security spot rates provide an appropriate representation of the risk-free rate?**

A. U.S. Treasury spot rates represent a good estimate of a risk free rate because they have virtually no chance of default and are backed by the U.S. Government. In addition, they are verifiable, objective and readily available.

**Q. What does beta measure?**

A. Beta measures the systematic risk of a particular entity's stock relative to the market's beta which is 1.0. Systematic risk is the only risk that cannot be diversified away; therefore it is the only risk that is relevant when estimating an entity's required return.

[10] Average yield on 5-, 7-, and 10-year Treasury notes according to the January 26, 2006, edition of *The Wall Street Journal*: 4.40%, 4.47%, and 4.48%, respectively.

Since the market's beta is 1.0, a security with a beta higher than 1.0 is riskier than the market and a security with a beta lower than 1.0 is less risky than the market.

**Q. How did Staff estimate a proxy for Black Mountain's beta?**

A. Staff averaged the *Value Line* betas of the sample water utilities and used this average as a proxy for Black Mountain's beta. Schedule PMC-6 shows the *Value Line* betas for each of the sample water utilities. Staff's estimated beta for Black Mountain is 0.74.

**Q. What is a descriptive explanation for the expected market risk premium ($R_m - R_f$)?**

**A.** Descriptively, the expected market risk premium is the expected return on all common stocks minus the risk free rate. It is the additional amount of return over the risk-free rate that investors expect to receive from investing in the market (or an average-risk security). Staff used two approaches to calculate the market risk premium: the historical market risk premium approach and the current market risk premium approach.

**Q. What is the historical market risk premium estimate approach used by Staff?**

A. The historical market risk premium estimate approach assumes that if the long-run average market risk premium is used consistently to estimate the expected market risk premium, it should, on average, yield the correct premium. In this approach Staff assumed that the average historical market risk premium estimate is a reasonable estimate of the expected market risk premium.

**Q. How did Staff calculate the historical market risk premium?**

A. Staff calculated the historical market risk premium by averaging the historical arithmetic differences between the S&P 500 and the intermediate-term government bond income returns published in the Ibbotson Associates' *Stocks, Bonds, Bills, and Inflation 2005*

*Yearbook* for the period 1926-2004. Ibbotson Associates calculated the historical risk premium by averaging the historical arithmetic differences between the S&P 500 and the intermediate-term government bond income returns. Staff's historical market risk premium estimate is 7.2 percent as shown in Schedule PMC-2.

**Q. How did Staff calculate the current market risk premium estimate?**

A. Staff first derived a DCF ROE of 10.38 (1.6 + 8.78[11]) percent using the expected dividend yield (1.6 percent over the next twelve months) and the annual per share growth rate (8.78 percent) that *Value Line* projects for all dividend-paying stocks under its review (January 27, 2006) as inputs. Then, Staff used the DCF-derived ROE (10.38 percent), the current long-term risk-free rate (4.65 percent 30-year Treasury note) and the market's average beta of 1.0 as inputs into equation 8 to solve for the implied current market risk premium of 5.73 percent.[12]

**Q. What is the range of Staff's expected market risk premium estimates?**

A. Staff's market risk premium estimates range from 5.73 percent to 7.2 percent.

**Q. What is Staff's overall CAPM estimate?**

A. Staff's overall CAPM estimate is 9.4 percent. Staff's overall CAPM estimate is the average of the historical market risk premium CAPM (9.8 percent) and the current market risk premium CAPM (8.9 percent) estimates as shown in Schedule PMC-2.

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[11] The three to five year price appreciation is 40%. $1.40^{0.25} - 1 = 8.78\%$

[12] 10.38% = 4.65% + (1) (5.73%)

## VI. SUMMARY OF STAFF'S COST OF EQUITY ANALYSIS

**Q. What is the result of Staff's constant-growth DCF analysis to estimate of the cost of equity to the sample water utilities?**

A. Schedule PMC-2 shows the result of Staff's constant-growth DCF analysis. The result of Staff's constant-growth DCF analysis is as follows:

k = 2.9% + 6.9%

k = **9.8%**

Staff's constant-growth DCF estimate of the cost of equity to the sample water utilities is 9.8 percent.

**Q. What is the result of Staff's multi-stage DCF analysis to estimate of the cost of equity for the sample utilities?**

A. Schedule PMC-8 shows the result of Staff's multi-stage DCF analysis. The result of Staff's multi-stage DCF analysis is:

| **Company** | **Equity Cost Estimate (k)** |
|---|---|
| American States Water | 9.6% |
| California Water | 9.8% |
| Aqua America | 8.3% |
| Connecticut Water | 10.4% |
| Middlesex Water | 10.5% |
| SJW Corp | 9.1% |
| **Average** | **9.6%** |

Staff's multi-stage DCF estimate of the cost of equity for the sample water utilities is 9.6 percent.

**Q. What is Staff's overall DCF estimate of the cost of equity for the sample utilities?**

A. Staff's overall DCF estimate of the cost of equity for the sample utilities is 9.7 percent. Staff's overall DCF estimate was calculated by averaging Staff's constant growth DCF and Staff's multi-stage DCF estimates as shown in Schedule PMC-2.

**Q. What is the result of Staff's historical market risk premium CAPM analysis to estimate of the cost of equity for the sample utilities?**

A. Schedule PMC-2 shows the result of Staff's CAPM analysis using the historical risk premium estimate. The result is as follows:

$$k = 4.5\% + 0.74 * 7.2\%$$

$$k = 9.8\%$$

Staff's CAPM estimate (using the historical market risk premium) of the cost of equity to the sample water utilities is 9.8 percent.

**Q. What is the result of Staff's current market risk premium CAPM analysis to estimate the cost of equity for the sample utilities?**

A. Schedule PMC-2 shows the result of Staff's CAPM Analysis using the current market risk premium estimate. The result is:

$$k = 4.7\% + 0.74 * 5.7\%$$

$$k = 8.9\%$$

Staff's CAPM estimate (using the current market risk premium) of the cost of equity to the sample water utilities is 8.9 percent.

**Q. What is Staff's overall CAPM estimate of the cost of equity for the sample utilities?**

A. Staff's overall CAPM estimate for the sample utilities is 9.4 percent. Staff's overall CAPM estimate is the average of the historical market risk premium CAPM (9.8 percent) and the current market risk premium CAPM (8.9 percent) estimates as shown in Schedule PMC-2.

**Q. Please summarize the results of Staff's cost of equity analysis for the sample utilities.**

A. The following table shows the results of Staff's cost of equity analysis:

**Table 2**

| Method | Estimate |
|---|---|
| Average DCF Estimate | 9.7% |
| Average CAPM Estimate | 9.4% |
| **Overall Average** | **9.6%** |

Staff's average estimate of the cost of equity to the sample water utilities is 9.6 percent.

## VII. FINAL COST OF EQUITY ESTIMATES FOR BLACK MOUNTAIN

**Q. Do Black Mountain's loans affect its cost of equity despite their recognition as operating expenses for rate-making purposes?**

A. Yes. An entity's financial risk increases with increased leverage placing upward pressure on its cost of equity regardless of the rate-making recovery mechanism. The average capital structure for the sample water utilities is composed of 48.9 percent equity and 51.1 percent debt as shown on Staff Schedule PMC-3. Black Mountain's actual capital structure is composed of 52.8 percent equity and 47.2 percent debt. In this case, since Black Mountain's capital structure is less leveraged than that of the average sample water utilities' capital structure, its stockholders bear less financial risk than the sample water

utilities. Accordingly, Black Mountain's cost of equity is lower than the sample water utilities.

**Q. Has Staff quantified the effect of difference in financial risk between Black Mountain and the sample water utilities on its cost of equity?**

A. Yes. Staff used the methodology developed by Professor Robert Hamada of the University of Chicago, which incorporates capital structure theory with the CAPM, to estimate the effect of Black Mountain's capital structure on its cost of equity. Staff calculated a financial risk adjustment for Black Mountain of negative 30 basis points. Black Mountain's cost of equity adjusted for financial risk (9.3 percent) can be determined by subtracting this 0.3 percent financial risk adjustment from Staff's average estimate of the cost of equity to the sample water utilities (9.6 percent).

**Q. What is Staff's ROE estimate for Black Mountain?**

A. Staff determined an ROE estimate of 9.6 percent for the Applicant based on cost of equity estimates for the sample companies ranging from 9.4 percent for the CAPM to 9.7 percent for the DCF. Staff is not recommending adoption of the 30 basis point downward financial risk adjustment because Black Mountain's actual capital structure is reasonable, and utilities should be encouraged to maintain an adequate level of equity.

## VIII. RATE OF RETURN RECOMMENDATION

**Q. What overall rate of return did Staff determine for Black Mountain?**

A. Staff determined a 9.6 percent ROR for the Applicant as shown in Schedule PMC-1 and the following table:

**Table 3**

| | Weight | Cost | Weighted Cost |
|---|---|---|---|
| Long-term Debt | 0.0% | 0.0% | 0.0% |
| Common Equity | 100% | 9.6% | 9.6% |

## IX. STAFF RESPONSE TO APPLICANT'S COST OF CAPITAL WITNESS MR. THOMAS J. BOURASSA

**Q. Please summarize Mr. Bourassa's analyses and recommendations.**

A. Mr. Bourassa recommends an 11.0 percent ROE based on his constant growth and multi-stage growth DCF models. He also performs a bond-yield plus risk premium analysis and a comparative earning analysis to support the results of his DCF models. In addition, Mr. Bourassa asserts that Black Mountain faces additional risks not captured by the market models, such as risk of rate regulation and financial risk, and he concludes that 11.0 percent ROE presents a reasonable balance resulting from his analyses.

**Constant-Growth DCF**

**Q. Does Staff have any comments on Mr. Bourassa's sole reliance on analysts' forecasts to estimate DPS growth in his constant growth DCF estimates?**

A. Yes. Analysts' forecasts are known to be overly optimistic. Sole use of analysts' forecasts to calculate the growth in dividends (g), causes inflated growth, and consequently, inflated cost of equity estimates. Furthermore, sole reliance on analysts' forecasts of earnings growth to forecast DPS is inappropriate because it assumes that investors do not look at other relevant information such as past dividend and earnings growth.

**Q. Does Staff have any comments on the study cited by Mr. Bourassa, conducted by David A. Gordon, Myron J. Gordon and Lawrence I. Gould[13] that he asserts support exclusive use of analysts' forecasts in the DCF model?**

A. Yes. The article cited by Mr. Bourassa does not conclude that investors ignore past growth when pricing stocks; therefore, it does not support the sole use of analysts' forecast in the DCF model.

**Q. Does Professor Gordon recommend relying exclusively on analysts' forecasts as the measure of growth in the DCF model?**

A. No. Subsequent to the study cited by Mr. Bourassa[14], Professor Gordon provided the keynote address at the 30th Financial Forum of the Society of Utility and Regulatory Financial Analysts, in which he stated:

> I understand that companies coming before regulatory agencies liked and advocated the high growth rates in security analyst forecasts for arriving at their cost of equity capital. Instead of rejecting these forecasts, I understand that FERC and other regulatory agencies have decided to compromise with them. In particular, in arriving at the cost of equity for company X, the FERC has decided to arrive at the growth rate in my dividend growth model by using an average of two growth rates. One is security analysts forecast of the short-term growth rate in earnings provided by IBES or Value Line and the other a more long run and typically lower figure such as the past growth in GNP.
>
> Such an average can be questioned on various grounds. However, my judgment is that between the short-term forecast alone and its average with the past growth rate in GNP, *the latter may be a more reasonable figure.*[15] (Emphasis added)

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[13] Gordon, David A., Myron J. Gordon, Lawrence I. Gould. "Choice Among Methods of Estimating Share Yield." *The Journal of Portfolio Management.* Spring 1989. pp. 50-55. (Bourassa's direct testimony, page 36, footnote.)

[14] Ibid.

[15] Gordon, M. J. Keynote Address at the 30th Financial Forum of the Society of Utility and Regulatory Financial Analysts. May 8, 1998. Transparency 3.

Simply stated, Professor Gordon would temper the typically higher analysts' forecasts with the typically lower GNP growth rate by averaging the two.

**Q. How does Staff respond to Mr. Bourassa's statement, "Logically, in estimating future growth, financial institutions and analyst have taken into account all relevant historical information on a company as well as other more recent information. To the extent that past results provide useful indications of future growth prospects, analysts' forecasts would already incorporate that information."? (Bourassa's Direct Testimony, Page 36, line 4-8)**

A. The appropriate growth rate to use in the DCF formula is the dividend growth rate expected by *investors*, not analysts. Therefore, while analysts may have considered historical measures of growth, it is reasonable to assume that investors rely to some extent on past growth as well. This calls for consideration of both analysts' forecasts as well as past growth.

**Q. Can Staff provide further evidence to support its assertion that exclusive reliance on analysts' forecasts of earnings growth in the DCF model would result in inflated cost of equity estimates?**

A. Yes. Experts in the financial community have commented on the optimism in analysts' forecasts of future earnings.[16] A study cited by David Breman in his book *Contrarian Investment Strategies: The Next Generation* found that *Value Line* analysts were optimistic in their forecasts by 9 percent annually, on average for the 1987 – 1989 period.

[16] See Seigel, Jeremy J. Stocks for the Long Run. 2002. McGraw-Hill. New York. p. 100. Dreman, David. *Contrarian Investment Strategies: The Next Generation*. 1998. Simon & Schuster. New York. pp. 97-98. Malkiel, Burton G. *A Random Walk Down Wall Street*. 2003. W.W. Norton & Co. New York. p. 175.
Testimony of Professors Myron J. Gordon and Lawrence I. Gould, consultant to the Trial Staff (Common Carrier Bureau), FCC Docket 79-63, p. 95.

Another study conducted by David Dreman found that between 1982 and 1997, analysts overestimated the growth of earnings of companies in the S&P 500 by 188 percent.

In addition, Burton Malkiel of Princeton University studied the one-year and five-year earnings forecasts made by some of the most respected names in the investment business. His results showed that the five-year estimates of professional analysts, when compared with actual earnings growth rates, were much worse than the predictions from several naïve forecasting models, such as the long-run rate of growth of national income. In the following excerpt from Professor Malkiel's book A Random Walk Down Wall Street, he discusses the results of his study:

> When confronted with the poor record of their five-year growth estimates, *the security analysts honestly, if sheepishly, admitted that five years ahead is really too far in advance to make reliable projections*. They protested that although long-term projections are admittedly important, they really ought to be judged on their ability to project earnings changes one year ahead. Believe it or not, it turned out that their one-year forecasts were even worse than their five-year projections.
>
> The analysts fought back gamely. They complained that it was unfair to judge their performance on a wide cross section of industries, because earnings for high-tech firms and various "cyclical" companies are notoriously hard to forecast. *"Try us on utilities," one analyst confidently asserted. At the time they were considered among the most stable group of companies because of government regulation. So we tried it and they didn't like it. Even the forecasts for the stable utilities were far off the mark.*[17] (Emphasis added)

**Q. Are investors aware of the problems related to analysts' forecasts?**

A. Yes. In addition to books, there are numerous published articles appearing in *The Wall Street Journal* and other financial publications that cast doubt as to how accurate research

[17] Malkiel, Burton G. A Random Walk Down Wall Street. 2003. W.W. Norton & Co. New York. p. 175

analysts are in their forecasts.[18] To the extent that investors are aware of the bias in analysts' projections of future earnings, they will make appropriate adjustments.

**Q. Should DPS growth be considered in a DCF analysis?**

A. Yes. The omission of historical DPS growth in a DCF analysis implies that investors do not take into account dividend growth when pricing stocks. As previously mentioned on section V of this testimony, the current market price of a stock is equal to the present value of all expected future dividends, not future earnings. Professor Jeremy Siegel from the Wharton School of Finance stated:

> Note that the price of the stock is always equal to the present value of all future *dividends* and not the present value of future earnings. Earnings not paid to investors can have value only if they are paid as dividends or other cash disbursements at a later date. Valuing stock as the present discounted value of future earnings is manifestly wrong and greatly overstates the value of the firm.[19]

In other words, investors pay attention to earnings as long as they are paid as dividends. Earnings can easily be overstated, but if investors do not receive dividends or other cash disbursement at a later date, then such earnings are meaningless.

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[18] See Smith, Randall & Craig, Suzanne. "Big Firms Had Research Ploy: Quiet Payments Among Rivals." *The Wall Street Journal*. April 30, 2003. Brown, Ken. "Analysts: Still Coming Up Rosy." *The Wall Street Journal*. January 27, 2003. p. C1. Karmin, Craig. "Profit Forecasts Become Anybody's Guess." *The Wall Street Journal*. January 21, 2003. p. C1. Gasparino, Charles. "Merrill Lynch Investigation Widens." *The Wall Street Journal*. April 11, 2002. p. C4. Elstein, Aaron. "Earnings Estimates Are All Over the Map." *The Wall Street Journal*. August 2, 2001. p. C1. Dreman, David. "Don't Count on those Earnings Forecasts." *Forbes*. January 26, 1998. p. 110.
[19] Seigel, Jeremy J. Stocks for the Long Run. 2002. McGraw-Hill. New York. P. 93.

**Multi-Stage DCF**

**Q. Does Staff have any comments on Mr. Bourassa's sole reliance on forecasted earnings growth for the near-term ("Stage -1 growth") in his multi-stage DCF?**

A. Yes. As previously discussed, exclusive reliance on forecasted earnings growth for the near-term (Stage-1 growth) is inappropriate since analysts forecasts of earnings growth are known to be overly optimistic. Exclusive reliance on forecasted earnings growth likely results in inflated cost of equity estimates.

**Risk Premium**

**Q. Please describe Mr. Bourassa's risk premium analysis.**

A. Mr. Bourassa computed the average risk premium for (1) actual returns for the ten years 1995 to 2004 and (2) authorized returns for the ten years 1995 to 2004 compared to the 10-year Treasury rate on Black Mountain's proxies. Then, he adds the average risk premium for each method to the forecasted interest rates for 10-year Treasuries for 2007-2008.

**Q. Does Staff have any comments on Mr. Bourassa's risk premium method to estimate Black Mountain's cost of equity?**

A. Yes. First, Mr. Bourassa's analysis is not market based. Actual and authorized returns are not market based data. The cost of equity is determined by the market, not by actual or authorized returns. Second, Mr. Bourassa's risk premium method to estimate Black Mountain's cost of equity relies on forecasted interest rates for 10-year Treasuries for 2007-2008. Analysts who forecast future rates do not have any more information about the future than what is already reflected in the current rate.

According to Nancy L. Jacob of the University of Washington and R. Richardson Pettit of the University of Houston:

> While we know something about many of the factors that determine interest rates (money supply, the demand for loanable funds, etc.) little evidence exists to suggest these factors can be predicted with enough accuracy to successfully predict the rates.[20]

As previously stated, the best forecast of tomorrow's yield is simply today's yield. "Professional forecasts of financial variables are notoriously unreliable and appear to be getting worse, not better, over time." "The direction of interest rates [bond yields] cannot be predicted any better than by the flip of a coin."[21]

**Q. How does Staff respond to Mr. Bourassa's statement (regarding the use of projected interest rates for 2007 – 2008), "I have used this period because it is the period in which Black Mountain's rates will be in effect." (Bourassa's Direct Testimony, page 38, lines 23 & 24)**

A. As discussed above, Mr. Bourassa relies on the faulty assumption that interest rates can be predicted.

**Comparative Earnings**

**Q. Please describe Mr. Bourassa's comparative earnings analysis.**

A. Mr. Bourassa compares the actual and authorized returns reported in AUS Utility Reports to the results of his DCF and risk premium methods. He then considers Value Line's forecasts of the composite equity return for the water utility industry for the years 2005,

[20] Jacob, Nancy L., R. Richardson Pettit. *Investments*. Irwin. Homewood, Ill. 1988. p. 499.
[21] Kihm, Steven G. "The Superiority of Spot Yields in Estimating Cost of Capital." *Public Utilities Fortnightly*. February 1, 1996. pp. 42-45.

2006, and for the three years 2008 to 2010 as support for his cost of equity estimate of 11 percent.

**Q. Does Staff have any comments on Mr. Bourassa's comparative earnings method to estimate Black Mountain's cost of equity?**

A. Yes. First, as mentioned previously, actual and authorized returns are not market based. The cost of equity is determined by the market; hence, actual and authorized returns are not reliable indicators of the cost of equity. These methods are not consistent with modern financial theory. Second, Mr. Bourassa relies on forecasts of the composite equity return for the water utility industry. As previously discussed, analyst's forecasts are known to be overly optimistic.

## X. CONCLUSION

**Q. Please summarize Staff's recommendations.**

A. Staff recommends that the Commission adopt a capital structure for Black Mountain in this proceeding composed of 0.0 percent debt and 100.0 percent equity.

Staff also recommends that the Commission adopt a 9.6 percent ROR for the Applicant, based on Staff's cost of equity estimates that range from 9.4 percent to 9.7 percent.

**Q. Does this conclude your direct testimony?**

A. Yes, it does.

**Black Mountain Sewer Corporation**
Capital Structure
And Weighted Average Cost of Capital
Staff Recommended and Company Proposed

| [A] | [B] | [C] | [D] |
|---|---|---|---|
| Description | Weight (%) | Cost | Weighted Cost |
| Staff Recommended Structure | | | |
| Debt | 0.0% | 0.0% | 0.0% |
| Common Equity | 100.0% | 9.6% | 9.6% |
| Weighted Average Cost of Capital/ROR | | | **9.6%** |
| Company Proposed Structure | | | |
| Debt | 0.0% | 0.0% | 0.0% |
| Common Equity | 100.0% | 11.0% | 11.0% |
| Weighted Average Cost of Capital/ROR | | | **11.0%** |

**[D] : [B] x [C]**

**Supporting Schedule: PMC-3**

Black Mountain Sewer Corporation
Final Cost of Equity Estimates
Sample Water Utilities

| [A] | [B] | | [C] | | [D] | | [E] |
|---|---|---|---|---|---|---|---|
| **DCF Method** | | | $D_1/P_0$ [1] | + | g [2] | = | k |
| Constant Growth DCF Estimate | | | 2.9% | + | 6.9% | = | 9.8% |
| Multi-Stage DCF Estimate | | | | | | = | 9.6% |
| **Average of DCF Estimates** | | | | | | | **9.7%** |
| **CAPM Method** | Rf | + | $\beta$ [5] | x | (Rp) | = | k |
| Historical Market Risk Premium[3] | 4.5% | + | 0.74 | x | **7.2%** [6] | = | 9.8% |
| Current Market Risk Premium[4] | 4.7% | + | 0.74 | x | 5.7% [7] | = | 8.9% |
| **Average of CAPM Estimates** | | | | | | | **9.4%** |
| | | | | | **Average** | | **9.6%** |
| | | | | | Financial risk adjustment | | -0.3% |
| | | | | | **Total** | | **9.3%** |

1 MSN Money and Value Line

2 PMC-7

3 Wall Street Journal (Rf) 5, 7, and 10 year Treasury rates

4 Wall Street Journal (Rf) 30 Year Treasury bond rate

5 Value Line

6 Historical Market Risk Premium (Rp) from Ibbotson Associates SBBI 2005 Yearbook

7 Testimony

Black Mountain Sewer Corporation
Average Capital Structure of Sample Water Utilities

| [A] | [B] | [C] | [D] |
|---|---|---|---|
| Company | Debt | Common Equity | Total |
| American States Water | 50.8% | 49.2% | 100.0% |
| California Water | 48.7% | 51.3% | 100.0% |
| Aqua America | 56.2% | 43.8% | 100.0% |
| Connecticut Water | 44.9% | 55.1% | 100.0% |
| Middlesex Water | 60.7% | 39.3% | 100.0% |
| SJW Corp | 45.1% | 54.9% | 100.0% |
| Average Sample Water Utilities | **51.1%** | **48.9%** | **100.0%** |
| Black Mountain Sewer Corporation[1] | **47.2%** | **52.8%** | **100.0%** |

**Source:**

**Sample Water Companies from Value Line**

**1 : Reflects actual capital structure. However, Staff adopted 100 percent equity as the capital structure for determining the rate of return to be consistent with treating the loan payments as operating expense.**

Black Mountain Sewer Corporation
Growth in Earnings and Dividends
Sample Water Utilities

| [A] | [B] | [C] | [D] | [E] |
|---|---|---|---|---|
| Company | Dividends Per Share 1995 to 2004 DPS[1] | Dividends Per Share Projected DPS[1] | Earnings Per Share 1995 to 2004 EPS[1] | Earnings Per Share Projected EPS[1] |
| American States Water | 0.9% | 1.9% | 0.2% | 18.9% |
| California Water | 1.0% | 2.3% | 2.2% | 10.2% |
| Aqua America | 5.3% | 9.9% | 8.2% | 17.0% |
| Connecticut Water | 1.1% | No Projection | 1.9% | No Projection |
| Middlesex Water | 2.0% | No Projection | 0.7% | No Projection |
| SJW Corp | 3.8% | No Projection | 4.0% | No Projection |
| Average Sample Water Utilities | **2.4%** | **4.7%** | **2.9%** | **15.4%** |

1 Value Line

Black Mountain Sewer Corporation
Sustainable Growth
Sample Water Utilities

| [A] | [B] | [C] | [D] | [E] | [F] |
|---|---|---|---|---|---|
| Company | Retention Growth **1995 to 2004** br | Retention Growth Projected br | Stock Financing Growth vs | Sustainable Growth **1995 to 2004** br + vs | Sustainable Growth Projected br + vs |
| American States Water | 2.5% | 6.7% | 1.4% | 3.9% | 8.1% |
| California Water | 2.5% | 4.8% | 2.9% | 5.4% | 7.7% |
| Aqua America | 4.2% | 7.4% | 7.6% | 11.8% | 15.0% |
| Connecticut Water | 3.0% | No Projection | 0.5% | 3.5% | No Projection |
| Middlesex Water | 1.4% | No Projection | 4.4% | 5.8% | No Projection |
| SJW Corp | 5.0% | No Projection | 0.0% | 5.0% | No Projection |
| Average Sample Water Utilities | **3.1%** | **6.3%** | **2.8%** | **5.9%** | **10.3%** |

**[B]: Value Line**
**[C]: Value Line**
**[D]: Value Line and MSN Money**
**[E]: [B]+[D]**
**[F]: [C]+[D]**

Black Mountain Sewer Corporation
Selected Financial Data of Sample Water Utilities

| [A] | [B] | [C] | [D] | [E] | [F] | [G] |
|---|---|---|---|---|---|---|
| Company | Symbol | Spot Price 1/25/2006 | Book Value | Mkt To Book | *Value Line* Beta $\beta$ | Raw Beta $\beta raw$ |
| American States Water | AWR | **32.65** | 15.74 | 2.1 | **0.75** | 0.60 |
| California Water | CWT | **40.83** | 15.73 | 2.6 | **0.75** | 0.60 |
| Aqua America | WTR | **27.82** | 6.21 | 4.5 | **0.80** | 0.67 |
| Connecticut Water | CTWS | **24.25** | 11.30 | 2.1 | **0.75** | 0.60 |
| Middlesex Water | MSEX | **18.45** | 8.25 | 2.2 | **0.75** | 0.60 |
| SJW Corp | SJW | **48.29** | 19.99 | 2.4 | **0.65** | 0.45 |
| Average | | | | **2.7** | **0.74** | **0.58** |

**[C]: Msn Money**

**[D]: Value Line**

**[E]: [C] / [D]**

**[F]: Value Line**

**[G]: -0.35 + [F] / 0.67**

Black Mountain Sewer Corporation
Calculation of Expected Infinite Annual Growth in Dividends
Sample Water Utilities

| [A] | [B] |
|---|---|
| Description | g |
| DPS Growth - Historical[1] | 2.4% |
| DPS Growth - Projected[1] | 4.7% |
| EPS Growth - Historical[1] | 2.9% |
| EPS Growth - Projected[1] | 15.4% |
| Sustainable Growth - Historical[2] | 5.9% |
| Sustainable Growth - Projected[2] | 10.3% |
| Average | **6.9%** |

1 Schedule PMC-4

2 Schedule PMC-5

Black Mountain Sewer Corporation
Multi-Stage DCF Estimates
Sample Water Utilities

| [A] | [B] | [C] | [D] | [E] | [F] | [H] | [I] |
|---|---|---|---|---|---|---|---|
| Company | Current Mkt. Price ($P_o$)[1] 1/25/2006 | Projected Dividends[2] (Stage 1 growth) ($D_t$) $d_1$ | $d_2$ | $d_3$ | $d_4$ | Stage 2 growth[3] ($g_n$) | Equity Cost Estimate ($K$)[4] |
| American States Water | 32.7 | 0.92 | 0.98 | 1.05 | 1.12 | 6.8% | 9.6% |
| California Water | 40.8 | 1.22 | 1.30 | 1.39 | 1.49 | 6.8% | 9.8% |
| Aqua America | 27.8 | 0.44 | 0.47 | 0.50 | 0.54 | 6.8% | 8.3% |
| Connecticut Water | 24.3 | 0.88 | 0.94 | 1.01 | 1.08 | 6.8% | 10.4% |
| Middlesex Water | 18.5 | 0.69 | 0.74 | 0.79 | 0.85 | 6.8% | 10.5% |
| SJW Corp | 48.3 | 1.15 | 1.23 | 1.31 | 1.40 | 6.8% | 9.1% |
| | | | | | | Average | **9.6%** |

$$P_0 = \sum_{t=1}^{n} \frac{D_t}{(1+K)^t} + \frac{D_n(1+g_n)}{K-g_n}\left[\frac{1}{(1+K)}\right]^n$$

Where : $P_0$ = current stock price

$D_t$ = dividends expected during stage 1

$K$ = cost of equity

$n$ = years of non – constant growth

$D_n$ = dividend expected in year n

$g_n$ = constant rate of growth expected after year n

1 [B] see schedule PMC-6

2 Derived from Value Line Information

3 Average annual growth in GDP 1929 - 2005 in current dollars.

4 Internal Rate of Return of Projected Dividends

**BEFORE THE ARIZONA CORPORATION COMMISSION**

JEFF HATCH-MILLER
Chairman
WILLIAM A. MUNDELL
Commissioner
MARC SPITZER
Commissioner
MIKE GLEASON
Commissioner
KRISTIN K. MAYES
Commissioner

| | | |
|---|---|---|
| IN THE MATTER OF THE APPLICATION OF BLACK MOUNTAIN SEWER CORPORATION, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON | ) | DOCKET NO. SW-02361A-05-0657 |

SURREBUTTAL

TESTIMONY

OF

PEDRO M. CHAVES

PUBLIC UTILITIES ANALYST I

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

MAY 4, 2006

ALL-STATE LEGAL®
EXHIBIT
S-5
admitted

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**EXECUTIVE SUMMARY**
**BLACK MOUNTAIN SEWER CORPORATION**
**DOCKET NO. SW-02361A-05-0657**

The surrebuttal testimony of Staff witness Pedro M. Chaves addresses the following issues:

Capital Structure – Staff recommends that the Arizona Corporation Commission ("Commission") adopt a capital structure for Black Mountain ("Applicant") for this proceeding consisting of 0.0 percent debt and 100.0 percent equity.

Cost of Equity – Staff's estimated return on equity ("ROE") for the Applicant is based on cost of equity estimates for the sample companies of 9.5 percent for the capital asset pricing model ("CAPM") and 9.6 percent for the discounted cash flow method ("DCF"). Staff's ROE recommendation does not reflect a financial risk adjustment due to the lower financial risk reflected in the Applicant's capital structure in relation to that of the sample companies because the Applicant's capital structure is reasonable and the Applicant should be encouraged, not discouraged, to maintain a healthy capital structure. If Staff had made an adjustment for financial risk, it would have been a 0.5 percent downward adjustment.

Overall Rate of Return – Staff recommends that the Commission adopt an overall rate of return ("ROR") of 9.6 percent.

Response to Mr. Bourassa's Rebuttal Testimony – The Commission should reject the Company proposed 11.0 percent ROE for the following reasons:

1. Mr. Bourassa's DCF estimates rely exclusively on analyst's forecasts. In addition, dividend growth is absent from Mr. Bourassa's DCF constant growth analysis.

2. Mr. Bourassa's risk premium analysis is not market based and inappropriately relies on forecasted interest rates for 10-year Treasuries for 2007-2008.

3. The Applicant's cost of capital witness is unable to demonstrate how claimed additional risks are not captured by market models.

## I. INTRODUCTION

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

A. My name is Pedro M. Chaves. I am a Public Utilities Analyst employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

**Q. Are you the same Pedro M. Chaves who filed direct testimony in this case regarding cost of capital?**

A. Yes, I am.

**Q. What is the purpose of your surrebuttal testimony in this proceeding?**

A. The purpose of my surrebuttal testimony in this proceeding is to present an update of Staff's cost of capital analysis and related recommendations for Black Mountain Sewer Corporation ("Black Mountain" or "Applicant") and to respond to the rebuttal testimony of Black Mountain witness Mr. Thomas J. Bourassa.

**Q. Please explain how Staff's surrebuttal testimony is organized.**

A. Staff's surrebuttal testimony is presented in four sections. Section I is this introduction. Section II discusses Staff's updated cost of capital analysis. Section III presents Staff's comments on the rebuttal testimony of the Applicant's cost of capital witness, Mr. Thomas J. Bourassa. Lastly, Section IV presents Staff's recommendations.

## II. UPDATED COST OF CAPITAL ANALYSIS

**Q. Did Staff update its analysis concerning the Applicant's cost of equity ("ROE") since it filed its Direct Testimony?**

A. Yes. Staff updated the ROE analysis to reflect more current information. Surrebuttal schedules PMC-1 to PMC-8 support Staff's updated ROE analysis.

**Q. What is the updated COE estimate?**

A. Staff's updated ROE estimate is 9.6 percent. Staff's ROE is based on cost of equity estimates for the sample companies of 9.5 percent for the capital asset pricing model ("CAPM") and 9.6 percent for the discounted cash flow method ("DCF"), as evidenced in Surrebuttal Schedule PMC-2. Staff's recommended ROE does not include a 50 basis point downward financial risk adjustment that would be applicable as quantified by the Hamada equation. Staff's ROE recommendation does not reflect a financial risk adjustment due to the lower financial risk reflected in the Applicant's capital structure in relation to that of the sample companies because the Applicant's capital structure is reasonable and the Applicant should be encouraged, not discouraged, to maintain a healthy capital structure.

**Q. What is Staff recommending for Black Mountain's ROE?**

A. Staff recommends a 9.6 percent ROE for Black Mountain which reflects its updated cost of equity estimates.

**Q. Did Staff update its analysis concerning the Applicant's overall rate of return ("ROR")?**

A. Yes.

**Q. What is Staff's updated ROR recommendation for Black Mountain?**

A. Staff recommends a 9.6 percent overall rate of return for Black Mountain. Staff's recommendation is based on a COE of 9.6 percent and a capital structure of 0.0 percent debt and 100.0 percent equity as shown on Surrebuttal Schedule PMC-1.

## III. RESPONSE TO THE REBUTTAL TESTIMONY OF THE APPLICANT'S COST OF CAPITAL WITNESS MR. THOMAS J. BOURASSA

**Q. Does Mr. Bourassa change the concluding recommendations of his direct testimony?**

A. No. Mr. Bourassa reiterates his recommended 11.0 percent ROR based on a DCF analysis with the sole use of analysts' forecasts, with a risk premium analysis (based on analysts' forecasts as well) as a check for reasonableness.

**Q. How does Staff respond to Mr. Bourassa's statement,**

> **"Q. Do you agree with Mr. Chaves' arguments that comparable earnings analysis and the risk premium analysis (sic) are invalid because they are not market based?**
>
> **A. No. The comparable earnings approach does not deal with market data, but that is not the basis on which to evaluate the approach I employed. As I have testified, the risk premium approach is founded on directly observable market interest rates."**[1]

A. First, Mr. Bourassa's comment is not an accurate representation of Staff's testimony. Staff does not assert that earnings analysis and the risk premium analysis are invalid. For clarification, Staff's testimony is that these methods are not reliable indicators of the cost of equity, not that they are invalid. Second, as mentioned in Staff's direct testimony[2] Mr.

[1] Thomas J. Bourassa's rebuttal testimony; page 55.
[2] Pedro M. Chaves' ("PMC") Direct Testimony, page 40.

Bourassa's risk premium method relies on forecasted interest rates for 10-year Treasuries for 2007-2008. As discussed at length in Staff's direct testimony, analysts who forecast future rates do not have any more information about the future than what is already reflected in the current rate. Historically, forecasted interest rates have not been reliable.

**Q. Please respond to Mr. Bourassa's statement, "Unless checks for reasonableness of the inputs and outputs of an analysis are made, the finance models may produce unrealistic results. Staff's DCF analysis, for example, relies heavily on inputs to the DCF model that skew the results downward. Staff relies on historical dividend per share growth and historical earnings per share growth in its application of the DCF model."[3]**

A. Mr. Bourassa correctly notes that the inputs of finance models affect the outcomes. Generally, the most controversial aspect of a DCF analysis is the choice of inputs for the growth rate. Staff's methodology gives equal weight to historical <u>and</u> projected EPS, DPS, and sustainable growth components to provide a balanced and reasonable outcome that avoids the skewing that can occur by a less balanced analysis such as that prepared by the Company's witness. Calculation of Staff's DCF growth rate component is shown in Schedule PMC-7. Historical growth information is available to investors, and investors can reasonably be expected to use that information.

If Staff were to exclude historical dividends and historical EPS, the lowest growth components, as did the Company's witness, it would also be appropriate to exclude the highest grow components to maintain a balanced outcome. For example, if Staff were to discard the two highest and lowest growth estimates in Schedule PMC-7, Staff's growth

[3] Thomas J. Bourassa's Direct Testimony. Page 56.

estimate would have been 4.8 percent vis-à-vis the 6.3 percent growth rate included in Staff's DCF analysis.

**Q. Does Staff have any comments on Mr. Bourassa's concern that Staff did not compute separate DCF results for historical DPS growth and historical EPS growth[4]?**

A. Mr. Bourassa would prefer that Staff separately calculate a separate cost of equity for each of the six growth rates presented on Schedule PMC-7 under the erroneous presumption that the result for any growth rate would be discarded if it were unacceptably low based on his criteria. This is the same faulty, asymmetrical argument, as previously discussed, that he makes for discarding historical growth rates. It is unreasonable to assume that investors ignore information that suggests low outcomes and accept all information that suggests high outcomes. If Staff were to exclude historical DPS growth and historical EPS growth, the lowest growth components, as did the Company's witness, it would also be appropriate to exclude projected DPS growth and projected EPS growth, the highest growth components, to maintain a balanced outcome. If Staff had discarded the two highest and lowest growth factors, Staff's DCF constant growth cost of equity estimate would have been 7.9 percent vis-à-vis the 9.4 percent included in Staff's DCF analysis.

**Q. How does Staff respond to Mr. Bourassa's contention about Staff expecting the market-to-book ratio to decline to 1.0[5]?**

A. Mr. Bourassa's comments misinterpret Staff's comments regarding the market-to-book ratio. Staff testified that, in theory, the market-to-book ratio should decline to 1.0, if an entity had a market-to book ratio greater than 1.0 due to investors expecting earnings to exceed the cost of equity capital and the entity subsequently experience newly and

[4] Ibid. Page 62-63.
[5] Ibid. Page 57.

authorized rates equal to its cost of equity capital[6]. Nonetheless, as stated in Staff's direct testimony, Staff has assumed that investors expect the market-to-book ratio to remain greater than 1.0. Given that assumption, Staff added a stock financing growth rate (vs) term to the retention ratio (br) term to calculate its historical and projected sustainable growth rates[7]. Thus, Staff has utilized modern financial theory to account for the fact that investors might expect a market-to-book ratio greater than 1.0.

**Q. Does Staff have any comments regarding Mr. Bourassa's statement, "The all-industry average return on equity was 15.4%, which is also substantially higher than the returns on equity being earned by the sample group of (...) publicly traded water utilities."[8]?**

A. This example, as mentioned by Mr. Bourassa, is from a special edition published by *Business Week* entitled "Investment Outlook Scoreboard 2004". The 15.4 percent industry average return on equity to which Mr. Bourassa alludes reflects the average return on equity of all 900 largest U.S. publicly held companies selected by *Business Week*. This example is not meaningful, since it is not representative of utilities. The study cited by Mr. Bourassa segregates the sample companies into 24 industries, one of them being utilities. The average return on equity for the utilities industry group is 9.6 percent.

[6] PMC Direct Testimony. Page 23, lines 5 - 10
[7] Ibid. Page 20, lines 6-9
[8] Thomas J. Bourassa's Direct Testimony. Page 58 - 59.

**Q. Does Staff have any comment regarding Mr. Bourassa's concerns that Staff did not use *Value Line's* published projected DPS and EPS growth rates, and that Staff's projected growth rates are overly optimistic and are far greater than those of analysts[9]?**

A. Yes. Staff calculates the DPS and EPS growth rates based on *Value Line's* projections instead of directly using *Value Line's* given projections to reflect projections that exclude nonrecurring gains and losses. Staff revisited its DPS and EPS growth rate calculations and encountered an error. The corrected DPS and EPS growth rates are 3.8 percent and 12.1 percent, respectively, as shown in Surrebuttal Schedule PMC-7.

**Q. How does Staff respond to Mr. Bourassa's assertion that Staff has ignored additional risks that result from the Company's small size and other firm-specific characteristics[10]?**

A. The Commission has previously ruled that firm size does not warrant recognition of a risk premium[11]. In addition, it is important to remember that Black Mountain is a wholly owned subsidiary of Algonquin Water Services, which in turn is a wholly owned subsidiary of Algonquin Power Income Fund. Therefore, unlike a small company, Black Mountain has access to the markets via its parent company. Regarding firm-specific characteristics mentioned by the Applicant's cost of equity analyst, as mentioned in Staff's direct testimony, firm-specific risk can be eliminated through diversification and therefore it does not affect the cost of equity. Since investors who choose to be less than fully diversified must compete in the market with fully diversified investors, the former cannot expect to be compensated for firm-specific risk[12].

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[9] Ibid. Page 63 - 64.
[10] Ibid. Page 71.
[11] Examples can be found in Decision Nos. 64282 and 64727.
[12] PMC Direct Testimony. Page 12

**Q. What is Staff's response to Mr. Bourassa's comment that the results of the CAPM should not be relied on this case[13]?**

A. Yes. Staff is aware that the CAPM, akin to any other models for estimating the cost of equity, has limitations. However, as mentioned in Staff's direct testimony, Staff chose to use the CAPM model because it is widely recognized as an appropriate model and it has been used extensively to estimate the cost of equity[14]. Furthermore, the CAPM is market based which makes it a preferable model to calculate the cost of equity.

## IV. STAFF RECOMMENDATIONS

**Q. What are Staff's recommendations for Black Mountain's cost of capital?**

A. Staff makes the following recommendations for Black Mountain's cost of capital:

1. Staff recommends a capital structure of 0.0 percent debt and 100.0 percent equity.
2. Staff recommends a cost of equity of 9.6 percent.
3. Staff recommends an overall rate of return of 9.6 percent.

**Q. Does this conclude your Surrebutal testimony?**

A. Yes, it does.

[13] Thomas J. Bourassa's Direct Testimony. Page 73
[14] PMC Direct Testimony. Page 12.

**Black Mountain Sewer Corporation**
Capital Structure
And Weighted Average Cost of Capital
Staff Recommended and Company Proposed

| [A] | [B] | [C] | [D] |
|---|---|---|---|
| Description | Weight (%) | Cost | Weighted Cost |
| Staff Recommended Structure | | | |
| Debt | 0.0% | 0.0% | 0.0% |
| Common Equity | 100.0% | 9.6% | 9.6% |
| Weighted Average Cost of Capital/ROR | | | **9.6%** |
| Company Proposed Structure | | | |
| Debt | 0.0% | 0.0% | 0.0% |
| Common Equity | 100.0% | 11.0% | 11.0% |
| Weighted Average Cost of Capital/ROR | | | **11.0%** |

[D] : [B] x [C]

***Supporting Schedule: PMC-3***

Black Mountain Sewer Corporation
Final Cost of Equity Estimates
Sample Water Utilities

| [A] | [B] | | [C] | | [D] | | [E] |
|---|---|---|---|---|---|---|---|
| **DCF Method** | | | $D_1/P_0$ [1] | + | g [2] | = | k |
| Constant Growth DCF Estimate | | | 3.1% | + | 6.3% | = | 9.4% |
| Multi-Stage DCF Estimate | | | | | | = | 9.8% |
| **Average of DCF Estimates** | | | | | | | **9.6%** |
| **CAPM Method** | Rf | + | $\beta$ [5] | x | (Rp) | = | k |
| Historical Market Risk Premium[3] | 4.8% | + | 0.74 | x | 7.1% [6] | = | 10.1% |
| Current Market Risk Premium[4] | 4.9% | + | 0.74 | x | 5.4% [7] | = | 8.9% |
| **Average of CAPM Estimates** | | | | | | | **9.5%** |
| | | | | | **Average** | | **9.6%** |
| | | | Financial risk adjustment | | | | -0.5% |
| | | | | | **Total** | | **9.1%** |

1 MSN Money and Value Line

2 PMC-7

3 Wall Street Journal (Rf) 5, 7, and 10 year Treasury rates

4 Wall Street Journal (Rf) 30 Year Treasury bond rate

5 Value Line

6 Historical Market Risk Premium (Rp) from Ibbotson Associates SBBI 2006 Yearbook

7 Testimony

Black Mountain Sewer Corporation
Average Capital Structure of Sample Water Utilities

| [A] | [B] | [C] | [D] |
|---|---|---|---|
| Company | Debt | Common Equity | Total |
| American States Water | 50.8% | 49.2% | 100.0% |
| California Water | 48.7% | 51.3% | 100.0% |
| Aqua America | 56.2% | 43.8% | 100.0% |
| Connecticut Water | 44.9% | 55.1% | 100.0% |
| Middlesex Water | 60.7% | 39.3% | 100.0% |
| SJW Corp | 62.1% | 37.9% | 100.0% |
| Average Sample Water Utilities | **53.9%** | **46.1%** | **100.0%** |
| Black Mountain Sewer Corporation[1] | **42.7%** | **57.3%** | **100.0%** |

**Source:**

**Sample Water Companies from Value Line**

**1 : Reflects actual capital structure. However, Staff adopted 100 percent equity as the capital structure for determining the rate of return to be consistent with treating the loan payments as operating expense.**

Black Mountain Sewer Corporation
Growth in Earnings and Dividends
Sample Water Utilities

| [A] | [B] | [C] | [D] | [E] |
|---|---|---|---|---|
| Company | Dividends Per Share 1995 to 2004 DPS[1] | Dividends Per Share Projected DPS[1] | Earnings Per Share 1995 to 2004 EPS[1] | Earnings Per Share Projected EPS[1] |
| American States Water | 0.9% | 1.5% | 0.2% | 14.9% |
| California Water | 1.0% | 1.9% | 2.2% | 8.0% |
| Aqua America | 5.3% | 7.9% | 8.2% | 13.4% |
| Connecticut Water | 1.1% | No Projection | 1.9% | No Projection |
| Middlesex Water | 2.0% | No Projection | 0.7% | No Projection |
| SJW Corp | 3.8% | No Projection | 4.0% | No Projection |
| Average Sample Water Utilities | **2.4%** | **3.8%** | **2.9%** | **12.1%** |

1 Value Line

Black Mountain Sewer Corporation
Sustainable Growth
Sample Water Utilities

| [A] | [B] | [C] | [D] | [E] | [F] |
|---|---|---|---|---|---|
| Company | Retention Growth **1995 to 2004** br | Retention Growth Projected br | Stock Financing Growth vs | Sustainable Growth **1995 to 2004** br + vs | Sustainable Growth Projected br + vs |
| American States Water | 2.5% | 6.7% | 1.5% | 4.0% | 8.2% |
| California Water | 2.5% | 4.8% | 3.0% | 5.6% | 7.8% |
| Aqua America | 4.2% | 7.4% | 7.6% | 11.8% | 15.0% |
| Connecticut Water | 3.0% | No Projection | 0.5% | 3.5% | No Projection |
| Middlesex Water | 1.4% | No Projection | 4.4% | 5.9% | No Projection |
| SJW Corp | 5.0% | No Projection | 0.0% | 5.0% | No Projection |
| Average Sample Water Utilities | **3.1%** | **6.3%** | **2.8%** | **6.0%** | **10.3%** |

**[B]: Value Line**
**[C]: Value Line**
**[D]: Value Line and MSN Money**
**[E]: [B]+[D]**
**[F]: [C]+[D]**

Black Mountain Sewer Corporation
Selected Financial Data of Sample Water Utilities

| [A] | [B] | [C] | [D] | [E] | [F] | [G] |
|---|---|---|---|---|---|---|
| Company | Symbol | Spot Price 4/5/2006 | Book Value | Mkt To Book | *Value Line* Beta $\beta$ | Raw Beta $\beta$ *raw* |
| American States Water | AWR | **37.45** | 15.86 | 2.4 | **0.75** | 0.60 |
| California Water | CWT | **44.57** | 15.82 | 2.8 | **0.75** | 0.60 |
| Aqua America | WTR | **27.45** | 6.30 | 4.4 | **0.80** | 0.67 |
| Connecticut Water | CTWS | **25.16** | 11.38 | 2.2 | **0.75** | 0.60 |
| Middlesex Water | MSEX | **18.79** | 8.30 | 2.3 | **0.75** | 0.60 |
| SJW Corp | SJW | **25.74** | 10.07 | 2.6 | **0.65** | 0.45 |
| Average | | | | **2.8** | **0.74** | **0.58** |

[C]: Msn Money

[D]: Value Line

[E]: [C] / [D]

[F]: Value Line

[G]: -0.35 + [F] / 0.67

Black Mountain Sewer Corporation
Calculation of Expected Infinite Annual Growth in Dividends
Sample Water Utilities

| [A] | [B] |
|---|---|
| Description | g |
| DPS Growth - Historical[1] | 2.4% |
| DPS Growth - Projected[1] | 3.8% |
| EPS Growth - Historical[1] | 2.9% |
| EPS Growth - Projected[1] | 12.1% |
| Sustainable Growth - Historical[2] | 6.0% |
| Sustainable Growth - Projected[2] | 10.3% |
| Average | **6.3%** |

1 Schedule PMC-4

2 Schedule PMC-5

Black Mountain Sewer Corporation
Multi-Stage DCF Estimates
Sample Water Utilities

| [A] | [B] | [C] | [D] | [E] | [F] | [H] | [I] |
|---|---|---|---|---|---|---|---|
| Company | Current Mkt. Price ($P_o$)[1] 4/5/2006 | Projected Dividends[2] (Stage 1 growth) ($D_t$) $d_1$ | $d_2$ | $d_3$ | $d_4$ | Stage 2 growth[3] ($g_n$) | Equity Cost Estimate ($K$)[4] |
| American States Water | 37.5 | 0.91 | 0.97 | 1.03 | 1.10 | 6.8% | 9.2% |
| California Water | 44.6 | 1.21 | 1.29 | 1.37 | 1.45 | 6.8% | 9.4% |
| Aqua America | 27.5 | 0.44 | 0.47 | 0.50 | 0.53 | 6.8% | 8.3% |
| Connecticut Water | 25.2 | 0.88 | 0.93 | 0.99 | 1.05 | 6.8% | 10.2% |
| Middlesex Water | 18.8 | 0.69 | 0.73 | 0.78 | 0.83 | 6.8% | 10.4% |
| SJW Corp | 25.7 | 1.14 | 1.21 | 1.29 | 1.37 | 6.8% | 11.1% |

Average **9.8%**

$$P_0 = \sum_{t=1}^{n} \frac{D_t}{(1+K)^t} + \frac{D_n(1+g_n)}{K-g_n}\left[\frac{1}{(1+K)}\right]^n .$$

Where : $P_0$ = current stock price
$D_t$ = dividends expected during stage 1
$K$ = cost of equity
$n$ = years of non – constant growth
$D_n$ = dividend expected in year n
$g_n$ = constant rate of growth expected after year n

1 [B] see schedule PMC-6

2 Derived from Value Line Information

3 Average annual growth in GDP 1929 - 2005 in current dollars.

4 Internal Rate of Return of Projected Dividends

Black Mountain Sewer Corporation
Final Cost of Equity Estimates
Sample Water Utilities

| [A] | [B] | | [C] | | [D] | | [E] |
|---|---|---|---|---|---|---|---|
| **DCF Method** | | | $D_1/P_0$ [1] | + | g [2] | = | k |
| Constant Growth DCF Estimate | | | 2.8% | + | 6.2% | = | 9.0% |
| Multi-Stage DCF Estimate | | | | | | = | 9.6% |
| **Average of DCF Estimates** | | | | | | | **9.3%** |
| **CAPM Method** | Rf | + | β [5] | x | (Rp) | = | k |
| Historical Market Risk Premium[3] | 4.5% | + | 0.74 | x | **7.2%** [6] | = | 9.8% |
| Current Market Risk Premium[4] | 4.7% | + | 0.74 | x | 5.7% [7] | = | 8.9% |
| **Average of CAPM Estimates** | | | | | | | **9.4%** |
| | | | | | **Average** | | **9.4%** |
| | | | | | Financial risk adjustment | | -0.3% |
| | | | | | **Total** | | **9.1%** |

1 MSN Money and Value Line

2 PMC-7

3 Wall Street Journal (Rf) 5, 7, and 10 year Treasury rates

4 Wall Street Journal (Rf) 30 Year Treasury bond rate

5 Value Line

6 Historical Market Risk Premium (Rp) from Ibbotson Associates SBBI 2005 Yearbook

7 Testimony

EXHIBIT
S-6
admitted
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Black Mountain Sewer Corporation
Calculation of Expected Infinite Annual Growth in Dividends
Sample Water Utilities

| [A] | [B] |
|---|---|
| Description | g |
| DPS Growth - Historical[1] | 2.4% |
| DPS Growth - Projected[1] | 3.8% |
| EPS Growth - Historical[1] | 2.9% |
| EPS Growth - Projected[1] | 12.1% |
| Sustainable Growth - Historical[2] | 5.9% |
| Sustainable Growth - Projected[2] | 10.3% |
| Average | **6.2%** |

1 Schedule PMC-4

2 Schedule PMC-5

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EXHIBIT
S-7
admitted

Bourassa's Rejoinder Schedule D-4.9

| Company | Po | D1 | Div. Yld | g | Indicated COE |
|---|---|---|---|---|---|
| American States | 38.18 | 0.91 | 2.38% | 6.33% | 8.7% |
| Aqua America | 22.52 | 0.44 | 1.95% | 9.00% | 11.0% |
| California Water | 38.42 | 1.15 | 2.99% | 6.83% | 9.8% |
| Connecticut Water | 24.61 | 0.85 | 3.45% | 6.54% | 10.0% |
| Middlesex | 19.24 | 0.68 | 3.53% | 4.00% | |
| SJW Corp. | 22.99 | 0.57 | 2.48% | 6.54% | 9.0% |

| | |
|---|---|
| Average = | 9.7% |
| Median = | 9.8% |

Bourassa's Rejoinder Schedule D-4.9 Inclusive of Middlesex's indicated cost of equity

| Company | Po | D1 | Div. Yld | g | Indicated COE |
|---|---|---|---|---|---|
| American States | 38.18 | 0.91 | 2.38% | 6.33% | 8.7% |
| Aqua America | 22.52 | 0.44 | 1.95% | 9.00% | 11.0% |
| California Water | 38.42 | 1.15 | 2.99% | 6.83% | 9.8% |
| Connecticut Water | 24.61 | 0.85 | 3.45% | 6.54% | 10.0% |
| Middlesex | 19.24 | 0.68 | 3.53% | 4.00% | 7.5% |
| SJW Corp. | 22.99 | 0.57 | 2.48% | 6.54% | 9.0% |

| | |
|---|---|
| Average = | 9.3% |
| Median = | 9.4% |

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**BEFORE THE ARIZONA CORPORATION COMMISSION**

JEFF HATCH-MILLER
Chairman
WILLIAM A. MUNDELL
Commissioner
MARC SPITZER
Commissioner
MIKE GLEASON
Commissioner
KRISTIN K. MAYES
Commissioner

| | | |
|---|---|---|
| IN THE MATTER OF THE APPLICATION OF BLACK MOUNTAIN SEWER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTYAND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON. | ) | DOCKET NO. SW-02361A-05-0657 |

DIRECT

TESTIMONY

OF

CRYSTAL S. BROWN

PUBLIC UTILITIES ANALYST V

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

MARCH 9, 2006

ALL-STATE LEGAL®
EXHIBIT
S-9
admitted

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# EXECUTIVE SUMMARY
# BLACK MOUNTAIN SEWER COMPANY, INC.
# DOCKET NO. SW-02361A-05-0657

Black Mountain Sewer Company ("Black Mountain" or "Company") is a certificated Arizona public service corporation that provided wastewater utility service to 1,923 customers during 2004 primarily in the Town of Carefree, in unincorporated portions of Maricopa County and portions of the City of Scottsdale.

On September 16, 2005, Black Mountain filed an application for a permanent rate increase. The Company states that it incurred an adjusted test year operating loss of $14,233 resulting in a negative 1.6 percent rate of return.

Black Mountain proposed a $163,231, or 13.47 percent, revenue increase from $1,211,806 to $1,375,037. The proposed revenue increase would produce an operating income of $97,619 for an 11.0 percent rate of return on an original cost rate base of $887,449.

Staff recommends a full accounting of the hook up fees and that excess fees be refunded to customers by a method to be determined outside this rate proceeding.

Staff recommends a $30,495, or 2.53 percent, revenue increase from $1,205,452 to $1,235,947. Staff's proposed revenue increase would produce an operating income of $39,857 for a 9.6 percent rate of return on an original cost rate base of $415,172. Staff's recommended rates would increase the typical residential bill from $38.00 to $38.98, for an increase of $0.98 or 2.58 percent.

## INTRODUCTION

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

A. My name is Crystal S. Brown. I am a Public Utilities Analyst V employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

**Q. Briefly describe your responsibilities as a Public Utilities Analyst V.**

A. I am responsible for the examination and verification of financial and statistical information included in utility rate applications. In addition, I develop revenue requirements, prepare written reports, testimonies, and schedules that include Staff recommendations to the Commission. I am also responsible for testifying at formal hearings on these matters.

**Q. Please describe your educational background and professional experience.**

A. I received a Bachelor of Science Degree in Business Administration from the University of Arizona and a Bachelor of Science Degree in Accounting from Arizona State University.

Since joining the Commission, I have participated in numerous rate cases and other regulatory proceedings involving large electric, gas, telecommunications, and water utilities. I have testified on matters involving regulatory accounting and auditing. During the past six years, I have attended utility-related seminars on regulation, accounting, finance and income taxes designed to provide continuing and updated education in these areas. Various professional and industry organizations sponsored these seminars.

I have been employed by the Commission as a regulatory auditor and a rate analyst since August 1996.

**Q. What is the scope of your testimony in this case?**

A. I am presenting Staff's analysis and recommendations in the areas of rate base, operating revenues and expenses, revenue requirement, and rate design regarding Black Mountain Sewer Company, Inc.'s ("Black Mountain" or "Company") application for a permanent rate increase. Staff witness Pedro Chaves is presenting Staff's cost of capital recommendations. Staff witness Marlin Scott, Jr. is presenting Staff's engineering analysis and recommendations.

**Q. What is the basis of your recommendations?**

A. I performed a regulatory audit of Black Mountain's application to determine whether sufficient, relevant, and reliable evidence exists to support the Company's requested rate increase. The regulatory audit consisted of examining and testing the financial information, accounting records, and other supporting documentation and verifying that the accounting principles applied were in accordance with the Commission adopted National Association of Regulatory Utility Commissioners ("NARUC") Uniform System of Accounts ("USOA").

**BACKGROUND**

**Q. Please review the background of this application.**

A. Black Mountain Sewer Company ("Black Mountain" or "Company") is a certificated Arizona public service corporation that provided wastewater utility service to 1,923 customers during 2004 primarily in the Town of Carefree, in unincorporated portions of Maricopa County and portions of the City of Scottsdale.

In March 2001, Black Mountain became a wholly owned subsidiary of Algonquin Water Resources. Algonquin Water Resources is Black Mountain's only shareholder. Algonquin Water Resources is a wholly owned subsidiary of Algonquin Power Income Fund[1] (Algonquin Water Resources and Algonquin Power Income Fund are collectively referred to as "Algonquin").

In addition to Black Mountain, Algonquin owns three other companies located in Arizona: Litchfield Park Service Company, Gold Canyon Sewer Company, and Bella Vista Water Company. Algonquin has a contract to manage and operate Black Mountain. Algonquin also owns and/or operates five utility systems in Illinois and Texas.

Black Mountain's current rates were authorized in Decision No. 59944, dated December 26, 1996.

**Q. What are the primary reasons for the Company's requested permanent rate increase?**

A. According to the Company, the primary reasons are to recover increased operating expenses and to earn its authorized rate of return.

[1] Algonquin Power Income Fund is an investment trust that owns or has interests in a portfolio of utility companies in the United States and Canada, including 48 hydroelectric facilities, five natural gas cogeneration facilities, 18 alternative fuels facilities and 15 water reclamation and distribution facilities.

**CONSUMER SERVICE**

**Q. Please provide a brief history of customer complaints received by the Commission regarding Black Mountain.**

A. Staff reviewed the Commission's records and found two opinions and two inquiries concerning the rate case as of February 24, 2006. For the period of 2003 to 2006, the Commission received five complaints concerning the quality of service, construction, and rates; and two inquiries concerning the rates and other Commission questions. All complaints and inquiries have been resolved and closed.

**SUMMARY OF PROPOSED REVENUES**

**Q. Please summarize the Company's filing.**

A. The Company proposes total annual operating revenue of $1,371,019. This represents an increase of $163,279, or 13.52 percent, over Test Year revenue of $1,207,740.

**Q. Please summarize Staff's recommended revenue.**

A. Staff recommends a $30,495, or 2.53 percent, revenue increase from $1,205,452 to $1,235,947. Staff's proposed revenue increase would produce an operating income of $39,857 for a 9.6 percent rate of return on an original cost rate base of $415,172. Staff's recommended rates would increase the typical residential bill from $38.00 to $38.98, for an increase of $0.98 or 2.58 percent.

**Q. What Test Year did Black Mountain use in this filing?**

A. Black Mountain's rate filing is based on the twelve months ended December 31, 2004 ("Test Year").

**Q. Please summarize the rate base and operating income recommendations and adjustments addressed in your testimony for Black Mountain.**

A. My testimony addresses the following issues:

Post-Test Year Plant – This adjustment decreases Plant in Service by $94,297 to remove plant that was not used and useful during the Test Year.

Affiliate Plant Costs – This adjustment decreases Plant in Service by $163,103 to remove profit capitalized from affiliate billings and computer and software costs that should be recorded in the affiliates' plant accounts.

Expensed Plant Costs, Plant In Service – This adjustment increases Plant in Service by $20,048 to reflect plant that the Company expensed when paid rather than capitalized and depreciated.

Contributions in Aid of Construction ("CIAC") and Amortization of CIAC – This adjustment increases the CIAC balance by $296,133 and the Amortization of CIAC balance by $46,663 to properly reflect all hook-up fees paid by customers.

Customer Deposits – This adjustment decreases rate base by $9,435 to remove a refunded deposit that the Company inadvertently classified as customer deposits and to reflect test year-end customer deposits.

Deferred Income Taxes – This adjustment increases rate base by $164,000 to recognize in rate base a net deferred income tax asset for Black Mountain that was recorded at the parent company level.

Working Capital – This adjustment decreases rate base by $140,020 to eliminate the Company's selective recognition of components that only increase working capital.

Expensed Plant Costs, Operating Expenses – This adjustment decreases operating expenses by $20,048 to remove plant costs that the Company inappropriately expensed.

Affiliate Expenses – This adjustment decreases operating expense by $25,406 to remove expenses that should have been allocated or directly charged to the Company's affiliates.

Bad Debt Expense – This adjustment decreases operating expenses by $5,926 to remove bad debt expense that was not actually incurred.

Depreciation Expense – This adjustment decreases operating expenses by $53,439. This adjustment reflects Staff's calculation of depreciation expense based upon Staff's recommended plant balances and removes the depreciation expense directly related to the Post-Test Year ("PTY") plant.

Nonrecurring & Other Expenses – This adjustment decreases operating expenses by $5,428 to reflect Staff's adjustments to certain contract services.

Scottsdale Capacity Operating Lease Expense – This adjustment decreases operating expense by $27,801 to remove the Company's proposed pro forma to gross-up income tax expense on the premium portion of its debt service incurred to acquire treatment capacity from Scottsdale that is recognized for ratemaking as an operating lease expense.

Food and Beverages – This adjustment decreases operating expenses by $664 to remove expenses that are not needed to provide wastewater service.

Property Tax Expense – This adjustment decreases operating expense by $1,692 to reflect Staff's calculation of the Company's property tax expense.

Income Tax Expense – This adjustment increases operating expenses by $103,621 to reflect the income tax obligation on Staff's adjusted test year taxable income.

ACC Assessment – This adjustment decreases operating expense by $2,288 to remove revenues and expenses that should be treated as pass-through items.

**RATE BASE**

**Fair Value Rate Base**

**Q. Did the Company prepare a Schedule showing the elements of Reconstruction Cost New Rate Base?**

A. No, the Company did not. The Company requested that its original cost rate base ("OCRB") be treated as its fair value rate base.

**Rate Base Summary**

**Q. Please summarize Staff's adjustments to Black Mountain's rate base shown on Schedules CSB-3 and CSB-4.**

A. Staff's adjustments to Black Mountain's rate base resulted in a net decrease of $565,603, from $887,449 to a $415,172. This decrease was primarily due to Staff: (1) removing capitalized affiliate profit and plant that was not completed and serving customers during the Test Year; (2) increasing the CIAC and amortization of CIAC balances to properly

reflect all hook-up fees paid by customers; and (3) removing the Company's selective recognition of working capital components.

**Rate Base Adjustment No. 1 – Utility Plant In Service, Post-Test Year Plant**

**Q. What is Black Mountain proposing for Utility Plant in Service and Post-Test Year Plant?**

A. Black Mountain is proposing $8,464,745 for Utility Plant in Service. The amount is composed of $8,370,448 that was recorded in the Company's plant accounts and in service during the Test Year and $94,297 in Post-Test Year ("PTY") plant as shown on Schedule CSB-4.

**Q. Please describe the Post-Test Year Plant.**

A. The $94,297 in PTY plant is composed of $24,706 for gravity sewer collection mains and $69,590 for an on-site sodium hypo chlorite generation system. All of the PTY plant was under construction at the end of the Test Year.

**Q. What is Staff's recommended treatment for the Post-Test Year Plant?**

A. Staff recommends excluding the PTY plant and the related PTY operating expense (i.e., depreciation expense) from rates.

**Q. What is the effect of Black Mountain's proposal to include Post-Test Year plant in rate base?**

A. Black Mountain's proposal to include the $94,297 of PTY plant in rate base over-states the revenue requirement, and ultimately, the rates paid by the Company's 1,923 customers. The over-stated revenue requirement occurs because the PTY plant creates a

mismatch between the revenues, expenses incurred and the plant used to provide service in the Test Year and amounts requested for recovery in rates.

In the absence of extraordinary circumstances, the costs of the historical test year should be used in the development of the revenue requirement. These costs are consistent with the matching principal and result in plant in service measured at the same date as other rate base components and with revenues and expenses of the same accounting period.

**Q. When is recognition of PTY plant in rate base appropriate?**

A. By definition PTY plant is mismatched with the revenues, expenses and rate base components of the test year. Matching is one of the most fundamental principles of accounting and rate-making. The absence of matching distorts the meaning of and reduces the usefulness of operating income and rate of return for measuring the fairness and reasonableness of rates. Accordingly, recognizing PTY plant in rate base should be granted only in special and unusual cases where failure to do so would create an inequity.

Staff recognizes two such cases:

1. When the magnitude of the investment relative to the utility's total investment is such that not including the PTY plant in the cost of service would jeopardize the utility's financial health; and
2. When all of the following conditions exist:
   a. the cost of the PTY plant is significant and substantial,
   b. the net impact on revenue and expenses for the PTY plant is known and insignificant,
   c. the PTY plant is prudent and necessary for the provision of service and reflects appropriate, efficient, effective, and timely decision-making,

d. the funding source(s) and amounts for the PTY plant are known and recognized in the rate application,

e. the PTY plant is in service at the time of the rate filing,

f. the PTY plant is recorded in a completed plant account(s) in the general ledger and auditable records are available at the time of the rate filing, and

g. all related retirements are recorded in the general ledger and recognized in the rate filing.

**Q. Would excluding the PTY plant from rate base jeopardize the Company's financial health?**

A. No, excluding the $94,297 of PTY plant would not jeopardize the Company's financial health because the amount is a small percentage of the Company's net plant.

**Q. Does the PTY plant meet all of the conditions of the second case necessary for inclusion in rate base?**

A. No, it does not. The amount of the plant is not substantial. The impact on revenues and expenses for the PTY plant cannot be measured with sufficient accuracy to determine that it is insignificant. The PTY plant was not needed to correct any service related problem for Test Year customers.

**Q. What is Staff recommending?**

A. Staff recommends decreasing plant in service by $94,297 to remove all PTY plant from rate base as shown on Schedules CSB-4 and CSB-5.

**Rate Base Adjustment No. 2 – Affiliate Costs and Capitalized Affiliate Profit**

**Q. Did Staff make adjustments to remove affiliate plant costs and the capitalized profit on affiliate billings?**

A. Yes, Staff discusses each item separately.

Capitalized Affiliate Profit

**Q. Do affiliates charge a profit on activities they perform for Black Mountain?**

A. Yes, in response to Staff data request CSB 1.52, the Company indicated that affiliate billings include profit.

**Q. Does Black Mountain capitalize (i.e. record in its plant accounts) profit included in billings from affiliates?**

A. Yes. In response to Staff data request CSB-1.52, the Company indicated that the entire billing, including the profit, is capitalized when the costs pertain to a capital project. The Company has included the profit component of the affiliate billings in plant in service. Consequently, by doing so, it has included the affiliate profit in rate base.

Additionally, in response to Staff data request CSB 10.1, the Company provided documentation showing that $20,871 of affiliate profit that was capitalized in its 2001 through 2004 plant additions. The profit was $1,666, $13,148, $3,102, and $2,955 for the years 2001, 2002, 2003, and 2004, respectively as shown on Schedule CSB 6, Page 3 of 4, Columns D, E, F, and G.

**Q. Would this inflated rate base due to affiliate profit (i.e., revenues exceeding all costs) exist if Black Mountain employed its workers directly?**

A. No, it would not. The Company could employ the workers directly and avoid the mark-up on the labor costs.

**Q. Did Black Mountain seek competitive bids for the contract services it received from its affiliates?**

A. No. Competitive bids were not obtained.

**Q. What explanation did Black Mountain provide for not seeking competitive bids?**

A. The Company stated that only Algonquin had the unique experience and expertise needed to operate and manage Black Mountain.

**Q. Did Black Mountain discuss the nature of the "essential services and management expertise" that only Algonquin and no other company could provide?**

A. Yes. The Company's response to Staff data request CSB 5.4 stated that the essential services were "services necessary for proper and efficient continuing operations of the Company as well as long-term financial and strategic development of the business".

**Q. Does this response demonstrate any unique characteristics recognizable to Staff that suggest that only Algonquin could provide these services for Black Mountain?**

A. No.

**Q. Does Black Mountain perform these services for any unaffiliated companies?**

A. No, it does not.

**Q. What are the risks and/or effects of Black Mountain's exclusive use of labor from an unregulated affiliate have on rate payers?**

A. Algonquin can effectively circumvent the Commission's ability to regulate the return on equity it earns from owning and operating Black Mountain. Algonquin can increase the effective return of equity invested in Black Mountain by increasing the profit included in billings to Black Mountain that are subsequently included in the revenue requirement authorized by the Commission for Black Mountain.

**Q. Does Staff have concerns about the cost documentation from Black Mountain's affiliates?**

A. Yes. Staff found that the Company did not always provide underlying cost documentation for billings from its affiliates.

**Q. Why are invoices issued from the Company's affiliates that have no additional supporting cost documentation a concern to Staff?**

A. It is a concern because, as noted above, related party transactions have sometimes been known to be recorded at inflated costs. Additionally, the Company did not use competitive bids to help ensure it received the best price for its contractual services.

**Q. Should the value of plant included in rate base exceed the actual cost of materials, labor and appropriate overhead incurred to purchase or construct them?**

A. No. Only the actual cost of materials, labor and overhead of the affiliate (exclusive of any profit) should be recognized in rate base. Black Mountain should be required to provide invoices as evidence to support the actual costs of the affiliate. The Arizona Administrative Code R14-2-610 D.1 states that "Each utility shall keep general and auxiliary accounting records reflecting the cost of its properties . . . and all other

accounting and statistical data necessary to give complete and authentic information as to its properties . . ." (emphasis added). Staff concludes that Black Mountain's practices fall short of this standard.

**Q. What initial steps could the Commission take to reduce the risk that Algonquin is circumventing the Commission return of equity regulatory authority?**

A. First, order Black Mountain to require its affiliates to segregate the cost and profit portions in their billings to Black Mountain. Second, order Black Mountain to maintain records to separately accounting for those profits. Third, order Black Mountain to identify the amount of affiliate profits included in the requested revenue requirement in future rate filings. As an alternative to the above, the Commission could require Black Mountain to obtain competitive bids.

Affiliate Plant Costs, Computer Equipment and Software

**Q. Does Black Mountain share property, plant, or equipment with any affiliates?**

A. Yes, according to Black Mountain's response to Staff data request CSB 1.45, the Company shares computer equipment with three affiliates.

**Q. What is the cost of the shared computer equipment and software addition?**

A. The cost is $142,232 as shown on Schedule CSB-6, Pages 2 through 4.

**Q. What was the source of the funding for the computer equipment and software?**

A. According to the Company's response to Staff data request CSB 1.45, Black Mountain hook-up fees funded these acquisitions.

**Q. Is the purchase of computer equipment and software an allowable use of hook-up fee collections under the conditions set forth in Decision 59944?**

A. No, it is not.

**Q. What other evidence does Staff have to indicate that affiliate plant costs were directly charged to Black Mountain?**

A. In the Company's response to Staff data request CSB 2.7, Staff noted invoices directly related to Bella Vista Water Company among the invoices sent to support the 2004 Office Furniture and Equipment addition.

**Q. What is the effect of not properly allocating or directly charging the plant costs to Black Mountain's affiliates?**

A. Plant in service is overstated and the rates to customers are unfairly increased.

**Q. What is Staff recommending for the capitalized affiliate profit and affiliate computer equipment?**

A. Staff recommends decreasing Plant in Service by $163,103 as shown on Schedules CSB-4 and CSB-6, Page 2 of 4.

**Rate Base Adjustment No. 3 – Expensed Plant**

**Q. What guidance should companies use in determining whether a cost should be capitalized by recording it in a plant account or treated as an operating expense?**

A. The Arizona Administrative Code R14-2-610 D.1 requires sewer companies to maintain their accounting records in accordance with the NARUC USOA. It states that "Each utility shall maintain its books and records in conformity with the Uniform System of Accounts for Class A, B, C and D Sewer Utilities" (emphasis added).

Further, the NARUC USOA provides a listing of plant accounts and the types of costs that should be recorded in each account. Utilities should use the plant account listing and Accounting Instruction No. 14 "Utility Plant – Components of Construction Costs" to determine what costs should be recorded as plant.

**Q. Did Black Mountain expense costs that, according to the NARUC USOA, should be recorded in plant accounts?**

A. Yes, the Company expensed plant costs and the labor cost incurred for installing plant as shown on Schedule CSB-7.

**Q. What is the effect of expensing plant?**

A. The matching principle is violated. The NARUC USOA requires utilities to follow accrual accounting. The matching principle is the underlying basis of accrual accounting. The matching principle requires that revenues in an accounting period be matched to the expenses incurred during that same accounting period.

The practice of expensing plant violates the matching principle because the entire cost of the asset is matched to only one accounting period even though the asset will benefit many accounting periods. Adherence to the matching principle and the NARUC USOA requires that the cost of an asset that benefits more than one accounting period be capitalized (by recording it in a plant account) and depreciated over the asset's useful life.

**Q. What is Staff recommending?**

A. Staff recommends increasing plant in service by $20,892 to reclassify plant that was incorrectly recorded as an operating expense as shown on Schedules CSB-4 and CSB-7.

**Rate Base Adjustment No. 4 – Contributions in Aid of Construction ("CIAC") and Amortization of CIAC**

**Q. What did the Company propose for CIAC and Amortization of CIAC?**

A. The Company proposed $5,346,615 and $3,308,578, respectively, for the CIAC and Amortization of CIAC as shown on Schedule CSB-4.

**Q. What is the primary source of the CIAC?**

A. The primary source is hook-up fees.

**Q. Is the Company required to file an annual report detailing the annual amount of hook-up fees and the uses of those funds?**

A. Yes.

**Q. Did Staff review the hook-up fee reports and other information for the Company's hook up fees?**

A. Yes, Staff reviewed hook up fee reports for the years 2000 through 2004 that were filed with the Commission. Staff also reviewed Company prepared work papers[2] of hook-up fee collections for the years 1994 through 1999.

**Q. Was there a difference between the annual hook up fee collection reported in the hook up fee reports and the annual fee collections used to calculate the $5,346,615 CIAC balance reported in the Company's application?**

A. Yes, there were differences as shown on Column F of Schedule CSB-8, Page 1.

[2] Company response to RUCO 1.8.

**Q. How did Staff calculate the CIAC and Accumulated CIAC balances?**

A. Staff started with the ending CIAC balance per Staff from the last rate case. To this balance, Staff added the collections reported in the annual hook up fee reports and the Company provided work papers.

**Q. What did Staff calculate for the CIAC and Accumulated CIAC balances?**

A. Staff calculated $6,096,454 and $3,355,241 for the CIAC and Amortization of CIAC balances, respectively.

**Q. What is Staff recommending?**

A. Staff recommends increasing the CIAC and Amortization of CIAC balances by $296,133 and $46,663, respectively, as shown on Schedules CSB-4, and CSB-8.

**Rate Base Adjustment No. 5 – Customer Deposits**

**Q. Is Black Mountain proposing to include Customer Deposits in the rate base calculation?**

A. Yes, Black Mountain is proposing to treat $3,000 as a customer deposit that increases its rate base as shown on Schedule CSB-4.

**Q. Are Customer Deposits normally treated as an addition or deduction from rate base?**

A. Customer Deposits are a deduction in the calculation of rate base.

**Q. Why are Customer Deposits normally deducted from rate base?**

A. Customer deposits are deducted from rate base in order to recognize customer provided capital.

**Q. Why did the Company proposed to add the customer deposits to rate base?**

A. Black Mountain inadvertently recorded a deposit that was refunded to Black Mountain as a customer deposit.[3]

**Q. What was the Company's customer deposit balance at the end of the Test Year?**

A. The balance was $6,435 as shown on Schedule CSB-9.

**Q. Should the Test Year-end customer deposit balance be reflected as a deduction from rate base?**

A. Yes, because the balance reflects customer provided capital.

**Q. What is Staff recommending?**

A. Staff recommends decreasing rate base by $9,435 to reflect removal of the $3,000 refund and to reflect the Test Year-end customer deposit balance in rate base as shown on Schedules CSB-4 and CSB-9.

**Rate Base Adjustment No. 6 – Deferred Income Taxes**

**Q. What are deferred income taxes?**

A. Deferred income taxes are the computed tax difference between income taxes calculated for rate-making purposes and the actual income taxes that a Company pays to the United States Treasury and the State of Arizona. The primary cause of the income tax difference is the straight line depreciation method used for rate making purposes and accelerated depreciation method used for federal and state income tax reporting purposes.

[3] CSB 5.12

**Q. When should deferred income taxes be recorded in the financial statements?**

A. Statement of Financial Accounting Standards ("SFAS") No. 109, Accounting for Income Taxes, requires companies to use deferred tax accounting to recognize income tax timing differences when they occur. Also, the Internal Revenue requires that timing differences related to using straight line and accelerated depreciation methods be normalized by recording deferred income taxes.

**Q. Does Black Mountain have an income tax timing difference that would result in deferred income taxes?**

A. Yes. Black Mountain uses straight line depreciation for rate-making purposes and accelerated depreciation for income tax purposes. In response to the Residential Utility Consumer Office's ("RUCO") data request number 2.7, the Company indicated that it had a deferred income tax credit (liability) of $360,000.

**Q. Did Black Mountain reflect the $360,000 in deferred income tax credit in rate base?**

A. No. Black Mountain indicated that the $360,000 was recognized at the parent company level. Black Mountain did not reflect the deferred tax credit in its rate base calculation.

**Q. For rate-making purposes, should the $360,000 in deferred income tax credit be reflected in the rate base calculation?**

A. Yes, because customers are providing cash for all or a portion of the income taxes through rates before Black Mountain pays its federal and state taxes. The accumulated balance of deferred income tax credits are a cost free source of cash to use until it must pay the United States Treasury. Recognition of deferred income taxes in rate base is required by the Internal Revenue Service ("IRS") normalization rules. Failure to comply with normalization rules could result in the IRS denying Black Mountain from using

accelerated depreciation. The result would be the loss of cost free capital and increased costs to ratepayers.

**Q. In addition to a deferred tax credit of $360,000, does the Company have a deferred tax debit (asset)?**

A. Yes. In response to RUCO 2.7, the Company indicated that it had a deferred tax asset of $524,000 resulting from the Company's AIAC.

**Q. What is the net amount of the $360,000 deferred tax liability and $524,000 deferred tax asset?**

A. The net amount is $164,000 as shown on Schedule CSB-10.

**Q. What is Staff recommending?**

A. Staff recommends increasing rate base by $164,000 as shown on Schedules CSB-4 and CSB-10.

**Rate Base Adjustment No. 7 – Working Capital**

**Q. What is Black Mountain proposing for working capital?**

A. Black Mountain is proposing $9,512 for prepaid expenses and $130,508 for cash working capital as shown on Schedule CSB-4. Staff will discuss the adjustment to each item separately.

**Prepaid Expenses**

**Q. What is the amount in Prepaid Expenses that Black Mountain is proposing to include in the Working Capital calculation?**

A. Black Mountain is proposing $9,512 in prepaid expenses in the working capital calculation.

**Q. Does Black Mountain's proposal to include Prepaid Expenses in the Working Capital calculation represent an inequitable, selective adjustment to increase rate base?**

A. Yes, it does. As Staff will discuss further in Adjustment No. 7, Cash Working Capital, the Company failed to reflect any customer provided capital in its working capital requirement because it chose not to conduct a lead-lag study.

Cash working capital can be a positive or negative component of rate base.[4] A net negative Working Capital could result if the result of a lead-lag study was a negative cash working capital that exceeds the prepaid expense balance.

It is inequitable to ignore a major component of the Working Capital analysis and selectively recognize other components.

**Cash Working Capital**

**Q. How much of Black Mountain's proposed Working Capital is represented by cash working capital?**

A. Black Mountain's Working Capital includes $130,508 for cash working capital.

[4] A positive number indicates cash was provided by investors to pay operating expenses before receipt of revenues from customers. A negative number indicates customer sales revenue was received by a company prior to the company paying operating expenses.

**Q. How did Black Mountain calculate the cash working capital it proposes to include in rate base?**

A. Black Mountain calculated cash working capital using the "formula method" which is equal to one-eighth of the operating expenses less depreciation, taxes, purchased water, and purchased pumping power expense, plus one twenty-fourth of purchased water and purchased pumping power expense.

**Q. Is it appropriate for a company the size of Black Mountain to use the formula method to calculate cash working capital?**

A. No, it is not. In general, the formula method is appropriate for only Class D and E companies due to the small size of the utilities, the cost and time involved in performing the lead-lag study, and the relatively minor impact on rate base.

**Q. What are the problems inherent in using the allowance methodology?**

A. It always yields a positive result effectively ignoring cash working capital provided by rate payers.

**Q. What method provides a more accurate measurement of the company's cash working capital?**

A. The lead-lag method is recognized as the most accurate measure of the cash working capital.

**Q. Does Black Mountain's proposal to use the formula method to calculate cash working capital represent an inequitable, selective adjustment to increase rate base?**

A. Yes. The Company has ignored a large component of Working Capital (i.e., cash working capital) represented by revenues received and expenses paid. The impact on Working

Capital of revenues and expenses can be calculated using a lead-lag study. A lead-lag study is recognized as the most accurate method to calculate cash working capital.

The Company chose not to conduct a lead-lag study, and accordingly, omitted a major component of Working Capital. It is inequitable to ignore a major component of the Working Capital analysis and selectively recognize other components. Had a lead-lag study been conducted, it might have shown that Cash Working Capital is a negative component of rate base.

**Q. What factors imply that a lead-lag study could result in Cash Working Capital being a negative component of rate base?**

A. Black Mountain has proposed $189,622 for "operating lease" payments for the City of Scottsdale to treat a large portion of its sewage flow and $45,745 for property taxes. These "operating lease payments" and property taxes would be a component of a lead-lag study. Black Mountain collects cash used to make these payments prior to the dates payment is due. For the period that Black Mountain holds these funds before payment, they are a source of cost-free capital. If a lead-lag study were performed, this source of cost-free cash would be a significant negative factor in calculation of the net working capital.

**Q. What is Staff recommending for the Prepaid Expenses and Cash Working Capital Allowance?**

A. Staff recommends removing $140,020 (i.e., $9,512 in Prepaid Expenses and $130,508 for the Cash Working Capital Allowance) as shown on Schedules CSB-4 and CSB-11.

**Operating Income**

**Operating Income Summary**

**Q. What are the results of Staff's analysis of Test Year revenues, expenses and operating income?**

A. As shown on Schedules CSB-12 and CSB-13 Staff's analysis resulted in Test Year revenues of $1,205,452, expenses of $1,182,901 and operating margin of $22,551.

**Operating Income Adjustment No. 1 – Expensed Plant**

**Q. Did Black Mountain inappropriately record as operating expenses costs that should have been capitalized and depreciated?**

A. Yes, as Staff discussed in Rate Base Adjustment No. 4, Expensed Plant, Black Mountain inappropriately recorded as operating expenses costs that according to the NARUC USOA and the matching principle should be capitalized and depreciated as shown on Schedule CSB 14.

**Q. What treatment does Staff recommend for the Company's expensed plant costs?**

A. Staff recommends that the costs be treated consistent with the NARUC USOA and the matching principle. Staff recommends including these costs in rate base and excluding them from Test Year operating expenses.

**Q. What is Staff recommending?**

A. Staff recommends decreasing operating expenses by $20,048 as shown on Schedules CSB-13 and CSB-14.

**Operating Income Adjustment No. 2 – Affiliate Expenses**

**Q. Do Black Mountain's proposed Test Year operating expenses include costs that should have been allocated or directly charged to its affiliates?**

A. Yes, Staff determined that certain claimed long distance and paging services should be allocated or directly charged to the Company's affiliates as shown on Schedule CSB-15. Staff discusses each separately below.

Profit Included In Affiliate Billings

**Q. What affiliates provide services for Black Mountain?**

A. Algonquin Power Systems, Algonquin Power Trust, and Algonquin Water Services provide contractual services for Black Mountain.

**Q. What were the charges from these affiliates to Black Mountain?**

A. Algonquin Power Systems billed $27,311, Algonquin Power Trust billed $32,017, and Algonquin Water Services billed $275,460, for a total of $332,604 in billings from affiliates.

**Q. Is a profit percentage included in the billings from Black Mountain's affiliates?**

A. Yes, in response to Staff data request CSB-1.52, the Company indicated that affiliate billings include a 6.5 percent profit.

**Q. Is the Company requesting recovery of its affiliate's profit?**

A. Yes, it is.

**Q. Did Staff calculate the amount of profit included in these affiliate billings?**

A. Yes. As shown on schedule CSB-15, Line 21, Staff calculated that these affiliate billing include $21,761 of profit.

Long Distance Phone Charges of Affiliates

**Q. What amount in long distance charges were reported in the Miscellaneous Expense account for Black Mountain?**

A. The Company reported $2,186 for AT&T long distance telephone charges as shown on Schedule CSB-15, Line 8.

**Q. Did Staff perform an analysis of the long distance phone calls?**

A. Yes, Staff's analysis showed that the Company made calls to approximately 20 states over a 10 month period with regular calls made to Canada and Texas.

**Q. Does Staff agree that all of the long distance expenses should be directly charged to Black Mountain?**

A. No, in response to Staff data request CSB 2.15, the Company indicated that long distance calls to Texas should be removed because workers at the Black Mountain location perform work for the Company's Texas affiliate.

**Q. Does the Company keep a log of its long distance phone calls in order to properly allocate the costs?**

A. No, it does not.[5]

[5] Response to Staff data request CSB 2.15 b.

**Q. What is the effect of Black Mountain's failure to properly allocate costs to affiliates?**

A. The Company's operating expenses are overstated and, accordingly, its requested rates are overstated.

**Q. Did Staff quantify the amount of costs that should have been directly charged and/or allocated to the Company's affiliates?**

A. Yes. As shown on Schedule CSB-15, Staff identified $514 of costs related directly to Texas and $161 of costs directly related to Gold Canyon Sewer Company. Since Black Mountain does not keep a log of the long distance phone calls, Staff allocated the $1,672 (i.e., $2,186 – $514) remaining claimed phone charges equally among the Black Mountain and three affiliates resulting in an additional $1,254 ($1,672 x .75) disallowance.

Paging Services Costs for Affiliates

**Q. What amount did Black Mountain include in the Miscellaneous Expense account for paging services?**

A. The Company claimed $2,651 for Teletouch, a paging/tracking service.

**Q. Does the amount Black Mountain claimed for this service as Miscellaneous Expense on Schedule C-1 include costs attributable to any of its affiliates?**

A. Yes. As shown on Schedule 15, Line 14, Black Mountain included $1,716 in costs for the paging/tracking services of its Texas affiliates: Woodmark and Timberlake sewer companies.

**Q. What is the effect of Black Mountain's proposal to include costs for affiliates in the recoverable costs for Arizona rate payers?**

A. It overstates the Company's cost to service its customers.

**Q. What is Staff recommending for the affiliate expenses?**

A. Staff recommends decreasing operating expenses by $25,406 to remove affiliate expenses as shown on Schedules CSB-13 and CSB-15.

**Operating Income Adjustment No. 3 – Bad Debt Expense**

**Q. Did the Company include a provision for bad debt in the Test Year expenses?**

A. Yes, Black Mountain included $5,926 for bad debt expense in Test Year expenses.

**Q. Did Staff analyze the revenues, bad debt provision, and actual bad debt write-offs for the years 2002, 2003, and 2004?**

A. Yes. Staff determined that the Company had no actual write-offs of bad debt expense for those years.

**Q. What effect does recognizing the Company's proposed Bad Debt Expense have on the revenue requirement?**

A. It increases the revenue requirement and allows recovery of an expense the Company did not experience in the Test Year.

**Q. What is Staff recommending?**

A. Staff recommends decreasing operating expense by $5,926 to remove Bad Debt Expense as shown on Schedules CSB-13 and CSB-16.

**Operating Income Adjustment No. 4 – Depreciation Expense**

**Q. What amount in depreciation expense is Black Mountain proposing?**

A. Black Mountain is proposing depreciation expense of $126,749. The amount is composed of $318,903 of recorded depreciation expense on plant that was used and useful during the

Test Year plus $5,136 on plant that was under construction at the end of the Test Year less $197,290 for amortization expense for CIAC.

**Q. Did the Company record any depreciation expense in the Test Year that should not be recognized in rates?**

A. Yes. The Test Year depreciation recorded by the Company does not reflect Staff recommended adjustments to plant balances. Staff's plant balances differ from the Company's primarily due to the removal of capitalized affiliate billings from plant in service. Staff recommends depreciation expense of $73,310.

**Q. When would recognition of depreciation expense related to PTY be appropriate?**

A. Depreciation expense related to PTY plant should be recognized only when the PTY plant is recognized. This is essential to preserve the matching principle as previously discussed in this testimony regard the adjustment to PTY plant.

**Q. What treatment does Staff recommend for the Company's pro forma adjustment for PTY depreciation expense?**

A. Since Staff recommends disallowance of the PTY plant, Staff also recommends disallowance of the Company's pro forma post-test year depreciation expense.

**Q. What is Staff recommending?**

A. Staff recommends decreasing depreciation expense by $53,439 as shown on Schedules CSB-13 and CSB-17.

**Operating Income Adjustment No. 5 – Nonrecurring and Other Expense**

**Q. Has Staff prepared a schedule identifying operating expenses that should be disallowed due to their nonrecurring nature?**

A. Yes. Staff identified certain legal and transportation expenses that should be adjusted as shown on Schedule CSB-18.

**Q. What legal expense did Staff adjust?**

A. Staff removed $3,228 in legal expenses from the cost of service. The expense was incurred for an operating agreement with the Town of Carefree that was not in effect by December 31, 2004[6]. Staff recommends that the Company defer these costs and amortize them over the life of the contract. Costs that result in multi-year benefits should be distributed over the benefit period in accordance to the matching principle.

**Q. What transportation expense did Staff adjust?**

A. Staff removed $2,200 for a truck rental contract that expired in March 2004[7] from the cost of service. The Company's transportation expenses for the years 2002, 2003, and 2004 were $0, $2,525, and $4,870, respectively. Staff concluded that the $2,200 amount should be removed from the cost of service as it was nonrecurring.

**Q. What is Staff recommending?**

A. Staff recommends decreasing operating expenses by $5,428 as shown on Schedules CSB-13 and CSB-18.

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[6] The Company has not filed a signed agreement as of February 17, 2006 (CSB-5.8).
[7] CSB 9.2

**Operating Income Adjustment No. 6 – Scottsdale Operating Lease**

**Q. What amount is Black Mountain proposing for the Scottsdale Operating Lease expense?**

A. Black Mountain is proposing $189,622 for the Scottsdale Operating Lease expense as shown on Schedule CSB-19. The proposed amount includes $27,801 as a gross-up factor for income taxes on the principal portion of its loan payments (recognized for rate-making purposes as an operating lease expense).

**Q. Is the Company's proposal to gross-up the principal portion of its loan payments for income taxes appropriate?**

A. The principal payments cannot be deducted for calculating the Company's income tax liability. If loan principal payments are deducted to determine the amount of the income tax expense included in rates, the different treatments of the principal payments for tax and rate-making need to be recognized. The Company's proposed gross-up is one method to remedy that difference.

However, Staff recommends a different and cleaner method that does not create a difference in the treatment of the principal payments that requires no gross-up provision. Staff's method is simply not to deduct the loan payments to determine the taxable income for rate-making purposes.

Treating the loan payments as operating expenses for rate-making purposes does not also require deducting the loan payments to calculate taxable income for rate-making purposes. Staff recognized the loan payments in the same manner for calculating income tax expense to include in rates as the Company will for determining its tax liability. Staff's method results in higher taxable income and higher income tax expense included in rates than the

Company's method, thus, eliminating the need for a gross-up provision in operating lease expense. The Company's method causes an understatement of the income tax expense included in rates that must be offset by a gross-up provision.

**Q. What is Staff recommending?**

A. Staff recommends decreasing operating expenses by $27,801 to remove the gross-up for income taxes on the Scottsdale Operating Lease expense as shown on Schedules CSB-13 and CSB-19.

**Operating Income Adjustment No. 7 – Food and Beverages**

**Q. What amount for food and beverages did Black Mountain include in the cost of service?**

A. Black Mountain included $664 for beverages as shown on Schedule CSB-20.

**Q. What rate-making treatment does Staff recommend for these types of expenses?**

A. Since these costs are not necessary to provide service, Staff recommends that they be recognized as non-operating expenses and excluded from the revenue requirement.

**Q. What is Staff recommending?**

A. Staff recommends decreasing operating expense by $664 as shown on Schedules CSB-13 and CSB-20.

**Operating Income Adjustment No. 8 – Property Taxes**

**Q. What is Black Mountain proposing for Property Taxes?**

A. Black Mountain is proposing $45,745 for property taxes.

**Q. Did Staff make any adjustment to the Property Tax Expense?**

A. Yes. Staff's adjustment reflects Staff's calculation of the property tax expense using Staff's recommended revenues as shown on Schedule CSB-21.

**Q. What is Staff recommending?**

A. Staff recommends decreasing operating expense by $1,692 as shown on Schedules CSB-13 and CSB-21.

**Operating Income Adjustment No. 9 – Income Taxes**

**Q. What is the Company proposing for Test Year Income Tax Expense?**

A. Black Mountain is proposing a negative $6,544 for Test Year Income Tax Expense as shown on Schedule CSB-24.

**Q. Did Staff make any adjustments to Test Year Income Tax Expense?**

A. Yes. Staff's adjustment reflects Staff's calculation of the income tax expense based upon Staff's adjusted Test Year taxable income as shown on Schedule CSB-22.

**Q. What is Staff recommending?**

A. Staff recommends increasing Test Year Income Tax Expense by $103,621 as shown on Schedules CSB-12 and CSB-22.

**Operating Income Adjustment No. 10 – Arizona Corporation Commission Gross Revenue Assessment**

**Q. What amount did the Company include in the revenue requirement for the ACC assessment?**

A. The Company included $2,288 for the ACC assessment.

**Q. What is the appropriate treatment of the ACC assessment charges?**

A. The ACC Assessment should be removed from the cost of service and treated as a pass through item similar to sales taxes.

**Q. What is Staff recommending?**

A. Staff recommends decreasing operating revenue and operating expense by $2,288 to remove the effects of the ACC assessment as shown on Schedules CSB-13.

**RATE DESIGN**

**Q. Has Staff prepared a schedule summarizing the present, Company proposed, and Staff recommended rates and service charges?**

A. Yes. Schedule CSB-24 provides a summary of the Company's present, Company's proposed, and Staff's recommended rates.

**Q. Please summarize the present rate design.**

A. The present monthly customer charge for the residential customers is $38.00 with no commodity charge. Regular commercial customers pay $0.15236 per gallon per day of sewer flow[8] and no monthly service charge. Special commercial customers pay only a monthly customer charge that varies by customer based on an estimate for each customer's sewer volume flow.

**Q. Please summarize the Company's proposed rate design.**

A. The Company is proposing an approximate 13.65 percent increase for all residential, commercial, and effluent customers.

[8] Flow volume is based on the average daily flows set forth in the *Engineering Bulletin No. 12*, Table 1, published by the Arizona Department of Environmental Quality (June 1989).

**Q. Please summarize Staff's recommended rate design.**

A. Staff recommends an approximate 2.52 percent increase for all residential, commercial, and effluent customers. Staff's rate design is presented in Schedule CSB-24.

**Q. Does Staff recommend any changes to the Company's Hook-up Fee?**

A. Yes. Staff recommends elimination of Black Mountain's Hook up Fee.

**Q. Please provide some background on the Company's hook-up fee?**

A. Black Mountain was authorized to charge a hook-up fee when its Certificate of Convenience and Necessity ("CC&N") was granted in 1980. At that time, it was a relatively small company with little ability to attract the capital necessary to build its back bone plant to fund growth. At the present time, Black Mountain is owned by Algonquin Power Income Fund with approximately $800 million in assets.

**Q. What did Decision No. 59944 state concerning the hook-up fee in the Company's prior rate proceeding?**

A. In Decision No. 59944 (p. 10 at line 5), it states " . . . <u>the Commission may rescind the hook-up fee</u> . . . Such reasons . . . shall include, but are not limited to, failure to track and account for hook-up fees, misuse of hook-up fees, or no need for additional capital . . (emphasis added).

**Q. Did Black Mountain use the hook-up fees for any items that were not provided for in Decision No. 59944.**

A. Yes. The Company purchased computer equipment totaling approximately $142,232, vehicles totaling approximately $20,000, and land totaling $451,000 from the hook-up fees.

**Q. Please discuss the $451,000 purchase of land from the hook-up fees.**

A. In March of 2001, Algonquin purchased all of the shares of Boulders Carefree Sewer Company. All of the ownership of Boulders existing sewer plant was transferred to Boulders with the exception of the land. The Company had all of its plant built on the land but had no land recorded in its plant accounts. To Staff's knowledge Boulder's Carefree Sewer Company was not making lease payments to the original shareholders in exchange for the privilege of using the land.

**Q. Was the land purchased to increase capacity of the sewer plant or to serve growth?**

A. No. The documentation provided by the Company to support the recorded cost of the land acquisition shows that the land acquired was the site of the plant assets.

**Q. Was the land purchase an arm's- length transaction whose cost was supported with an appraisal report?**

A. No, the land was purchased from an affiliate, and no appraisal report was provided to support the cost of the land.

**Q. During the prior rate proceeding, did Staff encounter problems determining how the Company used the hook up fee collections?**

A. Yes, and as a consequence, the Commission set forth rules governing what types of purchases that can be made with the hook-up fees.

**Q. What is the relationship between hook-up fees and the Company's rate base?**

A. The Hook up fees are the primary source of the Company's CIAC, and CIAC is the Company's major source of capital funding. In short, hook-up fees have supplanted investment resulting in a relatively negligible rate base.

**Q. What is Staff's Conclusion regarding the hook-up fee?**

A. Staff concludes that the hook-up fee should be eliminated because Black Mountain (a) has access to the capital markets via Algonquin and (b) used a total of $613,232 in hook-up fees to purchase computer equipment totaling approximately $142,232, vehicles totaling approximately $20,000, and land totaling $451,000 outside of the purposes allowed by Decision No. 59944.

**Q. What else does Staff recommend concerning the hook-up fees?**

A. First, Staff recommends that the $613,232 be reimbursed to Black Mountain. Second, Staff recommends a full accounting of the hook-up fees be filed with the Commission showing an ending balance that includes the reimbursements. Finally, Staff recommends that the excess fees be refunded to customers. Staff will make a recommendation on a methodology on the refunding outside of this rate proceeding.

**Q. Does Staff recommend any changes to the Company's Service Charges?**

A. Yes. Staff recommends that a provision to pay interest on customer deposits be added.

**Q. Does this conclude your direct testimony?**

A. Yes, it does.

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Schedule CSB-1

**REVENUE REQUIREMENT**

| LINE NO. | DESCRIPTION | [A] COMPANY ORIGINAL COST | [B] STAFF ORIGINAL COST |
|---|---|---|---|
| 1 | Adjusted Rate Base | $ 887,449 | $ 415,172 |
| 2 | Adjusted Operating Income (Loss) | $ (14,233) | $ 22,551 |
| 3 | Current Rate of Return (L2 / L1) | -1.60% | 5.43% |
| 4 | Required Rate of Return | 11.00% | 9.60% |
| 5 | Required Operating Income (L4 * L1) | $ 97,619 | $ 39,857 |
| 6 | Operating Income Deficiency (L5 - L2) | $ 111,852 | $ 17,306 |
| 7 | Gross Revenue Conversion Factor | 1.45980 | 1.76213 |
| 8 | Increase In Gross Revenue (L7 * L6) | $ 163,279 | $ 30,495 |
| 9 | Adjusted Test Year Revenue | $ 1,207,740 | $ 1,205,452 |
| 10 | Proposed Annual Revenue (L8 + L9) | $ 1,371,019 | $ 1,235,947 |
| 11 | Required Increase in Revenue (%) (L8/L9) | 13.52% | 2.53% |

References:
Column [A]: Company Schedules A-1, C-1, C-3, & D-1
Column [B]: Staff Schedules CSB-2, CSB-3, & CSB-7

Black Mountain Sewer Company
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Test Year Ended December 31, 2004

Schedule CSB-2

**GROSS REVENUE CONVERSION FACTOR**

| LINE NO. | DESCRIPTION | (A) | (B) | (C) | (D) |
|---|---|---|---|---|---|
| | *Calculation of Gross Revenue Conversion Factor:* | | | | |
| 1 | Billings | 1.000000 | | | |
| 2 | Uncollectible Factor | 0.000000 | | | |
| 3 | Revenues | 1.000000 | | | |
| 4 | Less: Combined Federal and State Tax Rate (Line 12) | 0.432505 | | | |
| 5 | Subtotal (L3 - L4) | 0.5675 | | | |
| 6 | **Revenue Conversion Factor (L1 / L5)** | **1.76213** | | | |
| | *Calculation of Effective Tax Rate:* | | | | |
| 7 | Operating Income Before Taxes (Arizona Taxable Income) | 100.0000% | | | |
| 8 | Arizona State Income Tax Rate | 6.9680% | | | |
| 9 | Federal Taxable Income (L7 - L8) | 93.0320% | | | |
| 10 | Applicable Federal Income Tax Rate (Line 34) | 39.0000% | | | |
| 11 | Effective Federal Income Tax Rate (L9 x L10) | 36.2825% | | | |
| 12 | Combined Federal and State Income Tax Rate (L8 +L11) | 43.2505% | | | |

Black Mountain Sewer Company
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Test Year Ended December 31, 2004

Schedule CSB-3

## RATE BASE - ORIGINAL COST

| LINE NO. | | (A) COMPANY AS FILED | (B) STAFF ADJUSTMENTS | (C) STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Plant in Service | $ 8,464,745 | $ (237,352) | $ 8,227,393 |
| 2 | Less: Accumulated Depreciation | 4,366,379 | - | 4,366,379 |
| 3 | Net Plant in Service | $ 4,098,366 | $ (237,352) | $ 3,861,014 |
| | *LESS:* | | | |
| 4 | Advances in Aid of Construction (AIAC) | $ 1,315,900 | $ - | $ 1,315,900 |
| 5 | Service Line and Meter Advances | $ - | $ - | $ - |
| 6 | Contributions in Aid of Construction (CIAC) | $ 5,346,615 | $ 296,133 | $ 5,642,748 |
| 7 | Less: Accumulated Amortization | 3,308,578 | 46,663 | 3,355,241 |
| 8 | Net CIAC | $ 2,038,037 | 342,796 | $ 2,287,507 |
| 9 | Total Advances and Contributions | $ 3,353,937 | $ 342,796 | $ 3,603,407 |
| 10 | Customer Deposits | $ (3,000) | $ 9,435 | $ 6,435 |
| 11 | Accumulated Deferred Income Taxes | $ - | $ 164,000 | $ 164,000 |
| | *ADD:* | | | |
| 12 | Prepayments | $ 9,512 | $ (9,512) | $ - |
| 13 | Working Capital | $ 130,508 | $ (130,508) | $ - |
| 14 | **Total Rate Base** | $ 887,449 | $ (565,603) | $ 415,172 |

References:
Column [A], Company Schedule B-1, Page 1
Column [B]: Schedule CSB-4
Column [C]: Column [A] + Column [B]

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Schedule CSB-4

**SUMMARY OF RATE BASE ADJUSTMENTS**

| LINE NO. | PLANT IN SERVICE<br>Acct. No. - Plant Description | [A]<br>COMPANY AS FILED | [B]<br>Adj No.1<br>Post Test Year Plant<br>Ref: Sch CSB-5 | [C]<br>ADJ No. 2<br>Affiliate Costs & Capitalized Profits<br>Ref: Sch CSB-6 | [D]<br>ADJ No. 3<br>Expensed Plant<br>Ref: Sch CSB-7 | [E]<br>ADJ No. 4<br>CIAC & Amort of CIAC<br>Ref: Sch CSB-8 | [F]<br>ADJ No. 5<br>Customer Deposits<br>Ref: Sch CSB-9 | [G]<br>ADJ No. 6<br>Deferred Income Taxes<br>Ref: Sch CSB-10 | [H]<br>ADJ No. 7<br>Working Capital<br>Ref: Sch CSB-11 | [I]<br>STAFF AS ADJUSTED |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 353 - Land and Land Rights | $ 461,446 | $ - | $ (146) | $ - | $ - | $ - | $ - | $ - | $ 461,300 |
| 3 | 354 - Structures and Improvements | 1,245,292 | - | (5,387) | - | - | - | - | - | 1,239,905 |
| 4 | 360 - Collection Services - Force | 228,785 | - | (205) | - | - | - | - | - | 228,580 |
| 5 | 361 - Collection Services - Gravity | 3,608,619 | - | (1,361) | 7,286 | - | - | - | - | 3,614,545 |
| 6 | 363 - Services to Customers | 158,802 | - | (1,584) | - | - | - | - | - | 157,218 |
| 7 | 364 - Flow Measuring Devices | 39,878 | - | (49) | - | - | - | - | - | 39,829 |
| 8 | 365 - Flow Measuring Installations | 158,358 | - | (2,154) | - | - | - | - | - | 156,205 |
| 9 | 370 - Receiving Wells | 696,506 | - | (369) | - | - | - | - | - | 696,137 |
| 10 | 371 - Effluent Pumping Equipment | 451,705 | - | (360) | 2,913 | - | - | - | - | 454,258 |
| 11 | 381 - Plant Sewers | 121,651 | - | (1,152) | 2,790 | - | - | - | - | 123,289 |
| 12 | 389 - Other Plant and Miscellaneous Equip | 738,804 | - | (5,185) | 7,059 | - | - | - | - | 740,678 |
| 13 | 390 - Office Furniture and Equipment | 365,512 | - | (145,152) | - | - | - | - | - | 220,360 |
| 14 | 391 - Transportation Equipment | 87,811 | - | - | - | - | - | - | - | 87,811 |
| 15 | 394 - Laboratory Equipment | 7,279 | - | - | - | - | - | - | - | 7,279 |
| 16 | Total Plant in Service - Actual | $ 8,370,448 | $ - | $ (163,103) | $ 20,048 | $ - | $ - | $ - | $ - | $ 8,227,393 |
| 17 | Pro-forma Adjustment | 94,297 | (94,297) | - | - | - | - | - | - | - |
| 18 | Total Plant in Service | $ 8,464,745 | $ (94,297) | $ (163,103) | $ 20,048 | $ - | $ - | $ - | $ - | $ 8,227,393 |
| 19 | Less: Accumulated Depreciation - Actual | $ 4,441,760 | - | - | - | - | - | - | - | $ 4,441,760 |
| 20 | Less: Accumulated Depreciation - Pro Forma | 75,381 | - | - | - | - | - | - | - | 75,381 |
| 21 | Total Accumulated Depreciation - Adjusted | $ 4,366,379 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ 4,366,379 |
| 22 | Net Plant in Service | $ 4,098,366 | $ (94,297) | $ (163,103) | $ 20,048 | $ - | $ - | $ - | $ - | $ 3,861,014 |
| 23 | *LESS:* | | | | | | | | | |
| 24 | Advances in Aid of Construction (AIAC) | $ 1,315,900 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ 1,315,900 |
| 25 | Service Line and Meter Advances | $ - | - | - | - | - | - | - | - | $ - |
| 26 | Contributions in Aid of Construction (CIAC) | $ 5,800,321 | - | - | - | 296,133 | - | - | - | $ 6,096,454 |
| 27 | Less: CIAC - Pro Forma | 453,706 | - | - | - | - | - | - | - | 453,706 |
| 28 | Total CIAC - Adjusted | $ 5,346,615 | $ - | $ - | $ - | $ 296,133 | $ - | $ - | $ - | $ 5,642,748 |
| 29 | Less: Accumulated Amortization | $ 3,486,218 | - | - | - | 46,663 | - | - | - | $ 3,532,881 |
| 30 | Less: Accumulated Amort - Pro Forma | 177,640 | - | - | - | - | - | - | - | 177,640 |
| | | $ 3,308,578 | $ - | $ - | $ - | $ 46,663 | $ - | $ - | $ - | $ 3,355,241 |
| 31 | Net CIAC | $ 2,038,037 | - | - | - | 249,470 | - | - | - | $ 2,287,507 |
| 32 | Total Advances and Net Contributions | $ 3,353,937 | - | - | - | 249,470 | - | - | - | $ 3,603,407 |
| 33 | Customer Deposits | $ (3,000) | - | - | - | - | 9,435 | - | - | $ 6,435 |
| 34 | Accumulated Deferred Income Taxes | - | - | - | - | - | - | 164,000 | - | 164,000 |
| 35 | *ADD:* | | | | | | | | | |
| 36 | Prepaid Expenses | $ 9,512 | - | - | - | - | - | - | (9,512) | $ - |
| 37 | Working Capital Allowance | 130,508 | - | - | - | - | - | - | (130,508) | - |
| 38 | **Total Rate Base** | $ 887,449 | $ (94,297) | $ (163,103) | $ 20,048 | $ (249,470) | $ (9,435) | $ 164,000 | $ (140,020) | $ 415,172 |

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Schedule CSB-5

## RATE BASE ADJUSTMENT NO. 1 - POST-TEST YEAR PLANT

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED (Sch E-5) | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | 2004 Actual Plant | $ 8,370,448 | $ - | $ 8,370,448 |
| 2 | Post Test Year Plant | $ 94,297 | $ (94,297) | $ - |
| 3 | Total | **$ 8,464,745** | **$ (94,297)** | **$ 8,370,448** |

References:
Column [A]: Company Schedule B-2, Pages 1 and 2
Column [B]: Testimony, CSB
Column [C]: Column [A] + Column [B]

## RATE BASE ADJUSTMENT NO. 2 - AFFILIATE COSTS

| LINE NO. | DESCRIPTION | [A] 2001 to 2004 Plant Additions PER COMPANY | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED Col A - Col B |
|---|---|---|---|---|
| 1 | 353 - Land and Land Rights | $ 453,592 | $ 146 | $ 453,446 |
| 2 | 354 - Structures and Improvements | 242,441 | 5,387 | $ 237,054 |
| 3 | 355 - Power Generation Equipment | - | - | $ - |
| 4 | 360 - Collection Services - Force | 12,210 | 205 | $ 12,005 |
| 5 | 361 - Collection Services - Gravity | 797,304 | 1,361 | $ 795,943 |
| 6 | 363 - Services to Customers | 29,161 | 1,584 | $ 27,577 |
| 7 | 364 - Flow Measuring Devices | 9,169 | 49 | $ 9,120 |
| 8 | 365 - Flow Measuring Installations | - | 2,154 | $ (2,154) |
| 9 | 370 - Receiving Wells | 58,584 | 369 | $ 58,215 |
| 10 | 371 - Effluent Pumping Equipment | 181,924 | 360 | $ 181,564 |
| 11 | 381 - Plant Sewers | 198,712 | 1,152 | $ 197,560 |
| 12 | 389 - Other Plant and Miscellaneous Equip | 699,247 | 5,185 | $ 694,062 |
| 13 | 390 - Office Furniture and Equipment | 365,511 | 145,152 | $ 220,359 |
| 14 | 391 - Transportation Equipment | 87,811 | - | $ 87,811 |
| 15 | 394 - Laboratory Equipment | 5,079 | - | $ 5,079 |
| 16 | Total | **$ 3,140,745** | **$ 163,103** | **$ 2,977,642** |

References:
Column [A]: Company Schedule B-2, Pages 3h through 3k
Column [B]: Testimony, CSB; Schedule CSB-6, Pages 2 through 4
Column [C]: Column [A] - Column [B]

## RATE BASE ADJUSTMENT NO. 2 - AFFILIATE COSTS
### Total Affiliate Costs To Be Removed

| LINE NO. | DESCRIPTION | [A] Affiliate Capitalized Profit | [B] Plant Allocated to Affiliates | [C] Total Staff Adjustments (Col A + Col B) |
|---|---|---|---|---|
| 1 | 353 - Land and Land Rights | $ 146 | $ - | $ 146 |
| 2 | 354 - Structures and Improvements | $ 5,387 | - | $ 5,387 |
| 3 | 355 - Power Generation Equipment | $ - | - | $ - |
| 4 | 360 - Collection Services - Force | $ 205 | - | $ 205 |
| 5 | 361 - Collection Services - Gravity | $ 1,361 | - | $ 1,361 |
| 6 | 363 - Services to Customers | $ 1,584 | - | $ 1,584 |
| 7 | 364 - Flow Measuring Devices | $ 49 | - | $ 49 |
| 8 | 365 - Flow Measuring Installations | $ 2,154 | - | $ 2,154 |
| 9 | 370 - Receiving Wells | $ 369 | - | $ 369 |
| 10 | 371 - Effluent Pumping Equipment | $ 360 | - | $ 360 |
| 11 | 381 - Plant Sewers | $ 1,152 | - | $ 1,152 |
| 12 | 389 - Other Plant and Miscellaneous Equip | $ 5,185 | - | $ 5,185 |
| 13 | 390 - Office Furniture and Equipment | $ 2,920 | 142,232 | $ 145,152 |
| 14 | 391 - Transportation Equipment | $ - | - | $ - |
| 15 | 394 - Laboratory Equipment | $ - | - | $ - |
| 16 | Total | $ 20,871 | $ 142,232 | $ 163,103 |

References:
Column [A]: Schedule CSB-6, Page 3
Column [B]: Schedule CSB-6, Page 4; Data Request Response CSB 1.45
Column [C]: Column [A] + Column [B]

## RATE BASE ADJUSTMENT NO. 2 - AFFILIATE COSTS
### Affiliate Capitalized Profit

| LINE NO. | DESCRIPTION | [A] 2001 to 2004 Plant Additions Per Company | [B] Plant Allocated to Affiliate Sch CSB-6, Page 2 | [C] Total (Col A - Col B) | [D] Capitalized Profit 2001 | [E] Capitalized Profit 2002 | [F] Capitalized Profit 2003 | [G] Capitalized Profit 2004 | [H] Total Capitalized Profit (Col D+E+F+G) | [I] Plant Less Capitalized Profit (Col C - Col H) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 353 - Land and Land Rights | $ 453,592 | $ - | $ 453,592 | $ - | $ 146.25 | $ - | $ - | $ 146.25 | $ 453,446 |
| 2 | 354 - Structures and Improvements | 242,441 | - | 242,441 | $ 673.37 | $ 2,975.09 | $ 350.64 | $ 1,388.06 | $ 5,387.16 | $ 237,054 |
| 3 | 355 - Power Generation Equipment | - | - | - | $ - | $ - | $ - | $ - | $ - | $ - |
| 4 | 360 - Collection Services - Force | 12,210 | - | 12,210 | $ - | $ 204.75 | $ - | $ - | $ 204.75 | $ 12,005 |
| 5 | 361 - Collection Services - Gravity | 797,304 | - | 797,304 | $ - | $ 463.52 | $ - | $ 897.03 | $ 1,360.55 | $ 795,943 |
| 6 | 363 - Services to Customers | 29,161 | - | 29,161 | $ 22.44 | $ 1,344.20 | $ 136.08 | $ 80.85 | $ 1,583.57 | $ 27,577 |
| 7 | 364 - Flow Measuring Devices | 9,169 | - | 9,169 | $ - | $ 48.75 | $ - | $ - | $ 48.75 | $ 9,120 |
| 8 | 365 - Flow Measuring Installations | 158,358 | - | 158,358 | $ - | $ 1,467.70 | $ 685.80 | $ - | $ 2,153.50 | $ 156,205 |
| 9 | 370 - Receiving Wells | 58,584 | - | 58,584 | $ - | $ 369.20 | $ - | $ - | $ 369.20 | $ 58,215 |
| 10 | 371 - Effluent Pumping Equipment | 181,924 | - | 181,924 | $ 333.07 | $ 27.30 | $ - | $ - | $ 360.37 | $ 181,564 |
| 11 | 381 - Plant Sewers | 40,354 | - | 40,354 | $ - | $ - | $ 1,152.00 | $ - | $ 1,152.00 | $ 39,202 |
| 12 | 389 - Other Plant and Misc. Equip | 699,247 | - | 699,247 | $ 134.66 | $ 4,348.43 | $ 178.82 | $ 523.22 | $ 5,185.13 | $ 694,062 |
| 13 | 390 - Office Furniture and Equipment | 365,511 | 142,232 | 223,279 | $ 502.74 | $ 1,752.56 | $ 598.22 | $ 66.26 | $ 2,919.78 | $ 220,359 |
| 14 | 391 - Transportation Equipment | 87,811 | - | 87,811 | $ - | $ - | $ - | $ - | $ - | $ 87,811 |
| 15 | 394 - Laboratory Equipment | 5,079 | - | 5,079 | $ - | $ - | $ - | $ - | $ - | $ 5,079 |
| 16 | Total | $ 3,140,745 | $ 142,232 | $ 2,998,513 | $ 1,666.28 | $13,147.75 | $ 3,101.56 | $ 2,955.42 | $ 20,871.01 | $ 2,977,642 |

References:
Column [A]: Company Schedule B-2, Pages 3h through 3k
Column [B]: Schedule CSB-6, Page 4; Data Request Response CSB 1.45
Column [C]: Column [A] - Column [B]
Column [D]: Data Request Response CSB 10.1
Column [E]: Data Request Response CSB 10.1
Column [F]: Data Request Response CSB 10.1
Column [G]: Data Request Response CSB 10.1
Column [H]: Data Request Response CSB 10.1
Column [I]: Column [C] - Column [H]

## RATE BASE ADJUSTMENT NO. 2 - AFFILIATE PLANT COSTS
### Computer and Computer Software

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED (Col A - Col B) |
|---|---|---|---|---|
| 1 | Office Furniture & Equip | $ 162,908 | $ - | $ 162,908 |
| 2 | Allocated Costs for Affiliates | - | 72,505 | (72,505) |
| 3 | Direct Costs for Bella Vista **CSB 2.7** | - | 69,727 | (69,727) |
| 4 | Total | $ 162,908 | **$ 142,232** | $ 20,676 |

**ALLOCATED COSTS FOR AFFILIATED SEWER COMPANIES**

| | [D] Costs to be Allocated (From Col P) | [E] Percentage for Black Mountain (From Col R) | [F] Costs to be Allocated to Black Mtn (Col D x Col E) | [G] Percentage for Affiliates (Cols S+T+U) | [H] **Costs to be Allocated to Affiliates (Col D x Col G)** | [I] Total for Black Mountain & Affiliates (Col F + Col H) |
|---|---|---|---|---|---|---|
| 5 | $ 48,800 | 22.19% | $ 10,828 | 77.81% | $ 37,972 | $ 48,800 |
| 6 | $ 8,017 | 22.19% | $ 1,779 | 77.81% | $ 6,238 | $ 8,017 |
| 7 | $ 11,076 | 22.19% | $ 2,458 | 77.81% | $ 8,618 | $ 11,076 |
| 8 | $ 10,307 | 22.19% | $ 2,287 | 77.81% | $ 8,020 | $ 10,307 |
| 9 | $ 8,459 | 22.19% | $ 1,877 | 77.81% | $ 6,582 | $ 8,459 |
| 10 | $ 6,522 | 22.19% | $ 1,447 | 77.81% | $ 5,075 | $ 6,522 |
| 11 | $ - | 22.19% | $ - | 77.81% | $ - | $ - |
| 12 | $ 93,181 | | $ 20,676 | | **$ 72,505** | $ 93,181 |

**TOTAL COST TO BE ALLOCATED FOR FOUR AFFILIATED SEWER COMPANIES**

| | [J] Year Added | [K] Account Number | [L] Description | [M] **Cost Per CSB 1.45 & CSB 2.7** | [N] Amount Included In Adj. No. 2 Acct. No. 390 | [O] Costs to be Allocated |
|---|---|---|---|---|---|---|
| 13 | 2002 | 212 | Software Upgrades | $ 48,800 | $ - | $ 48,800 |
| 14 | 2003 | 257 | Equipment/Automation | $ 8,017 | $ - | $ 8,017 |
| 15 | 2003 | 261 | Equipment/Automation | $ 11,076 | $ - | $ 11,076 |
| 16 | 2003 | 270 | Equipment/Automation | $ 10,307 | $ - | $ 10,307 |
| 17 | 2003 | 273 | System Migration | $ 8,459 | $ - | $ 8,459 |
| 18 | 2003 | 298 | Professional Services | $ 6,522 | $ - | $ 6,522 |
| 19 | 2003 | 319 | Data Conversion | $ 14,044 | $ (14,044) | $ - |
| 20 | | | Total | $ 107,225 | $ (14,044) | $ 93,181 |

**CALCULATION OF ALLOCATION PERCENTAGES FOR FOUR AFFILIATED SEWER COMPANIES**

| | [Q] | [R] Black Mountain | [S] Gold Canyon | [T] Tall Timbers | [U] Woodmark | [V] Total |
|---|---|---|---|---|---|---|
| 21 | 12/31/2005 Customer Counts[1] | 1,798 | 4,491 | 978 | 836 | 8,103 |
| 22 | Percentage of Total Customers | 22.19% | 55.42% | 12.07% | 10.32% | 100.00% |

23 Note 1: 2005 Customer counts were used as the 2002 and 2003 counts for Tall Timbers and Woodmark
24 were not provided to Staff for the calculation.

References:

Column A: Company Schedule E-5
Column B: Testimony, CSB, Company Data Request Responses CSB 1.45
Column C: Column [A] + Column [B]

## RATE BASE ADJUSTMENT NO. 3 - EXPENSED PLANT

| LINE NO. | Plant Account Number | Description | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED (Col A + Col B) |
|---|---|---|---|---|---|
| 1 | 361 | Collection Sewers, Gravity | $ 3,608,619 | $ 7,286 | $ 3,615,905 |
| 2 | 371 | Effluent Pumping Equipment | $ 451,705 | $ 2,913 | $ 454,618 |
| 3 | 381 | Plant Sewers | $ 121,651 | $ 2,790 | $ 124,441 |
| 4 | 389 | Other Plant & Misc Equip | $ 738,804 | $ 7,059 | $ 745,863 |
| 5 | | Total | $ 4,920,779 | **$ 20,048** | $ 4,940,827 |

**FROM CONTRACTUAL SERVICES , OTHER EXPENSE (CSB 1.37)**

| | Acct. No. | Vendor Name | Description | Amount |
|---|---|---|---|---|
| 6 | 361-Collection Sewers | Jensen System Engineering | Algonquin Indian Basket Alarm | $ 1,499.01 |
| 7 | 361-Collection Sewers | Keller Equipment Company | Pull and Install Motors | $ 1,947.71 |
| 8 | 361-Collection Sewers | Keller Equipment Company | Rebuild Motor/Pump | $ 1,119.65 |
| 9 | 361-Collection Sewers | KSK Electric | Replace Meter Socket | $ 1,315.00 |
| 10 | 361-Collection Sewers | LTC, Inc. | Concrete Pad & Drain for Manhole | $ 1,404.92 |
| 11 | | | Subtotal | $ 7,286.29 |
| 12 | 371-Effluent Pumping Plant | Keller Equipment Company | Change out Pumps | $ 551.62 |
| 13 | 371-Effluent Pumping Plant | Keller Equipment Company | Pull Pump. Set New Pump | $ 1,095.40 |
| 14 | | | Subtotal | $ 1,647.02 |
| 15 | 381-Plant Sewers | Foster Electric Motor Service | Install Outlets in Vault | $ 589.57 |
| 16 | 381-Plant Sewers | KSK Electric | Boulder Facility Lighting Repair Proj. | $ 2,200.00 |
| 17 | | | Subtotal | $ 2,789.57 |
| 18 | | | Total | $ 11,722.88 |

**FROM RENTS EXPENSE (CSB 1.38)**

| | Acct. No. | Vendor Name | Description | Amount |
|---|---|---|---|---|
| 19 | 371-Effluent Pumping Plant | Pump Systems, Inc. | Replace Pump | $ 566.13 |
| 20 | | | Total | $ 566.13 |

References:

Column A: Company Schedule E-5
Column B: Testimony, CSB, Company Data Request Responses CSB 1.37, 1.38,1.40, & 7.13
Column C: Column [A] + Column [B]

## RATE BASE ADJUSTMENT NO. 3 - EXPENSED PLANT CONTINUED

| LINE NO. | FROM MISCELLANEOUS EXPENSE (CSB 1.40) | | | |
|---|---|---|---|---|
| | Maricopa County Environ. Serv. Dept, Approval to Construct Expedited Fees | | | |
| | Acct. No | Project Title | Description | Amount |
| 1 | 389-Other Plant & Misc Equi | Boulders West WWTP Bypass | Reclaimed Water Line | $ 500.00 |
| 2 | 389-Other Plant & Misc Equi | Boulders West Effluent Pump | Addition of pumps | $ 700.00 |
| 3 | 371-Effluent Pumping Plant | Indian Basket Lift Station | Replace Existing Lift Station | $ 700.00 |
| 4 | 389-Other Plant & Misc Equi | Boulders West WWTP Bypass | Add Stucture and Manhole | $ 2,000.00 |
| 5 | | | Subtotal | $ 3,900.00 |
| 6 | 389-Other Plant & Misc Equi | Safety Equipment | *Company Response to CSB 2.13b* | $ 2,184.75 |
| 7 | | | Total | $ 6,084.75 |

| | FROM MATERIALS AND SUPPLIES EXPENSE (CSB 7.13) | | | |
|---|---|---|---|---|
| | Acct. No. | Vendor Name | Description | Amount |
| 8 | 389-Other Plant & Misc Equi | Arizona Pneumatic Systems | Blower | $ 1,674.47 |
| 9 | | | Total | $ 1,674.47 |

## RATE BASE ADJUSTMENT NO. 4 - CIAC & Amortization of CIAC

| LINE NO. | Description | [A] COMPANY AS FILED | [B] ADJUSTMENTS | [C] STAFF AS ADJUSTED Col A - Col B |
|---|---|---|---|---|
| 1 | CIAC | $ 5,346,615 | $ 296,133 | $ 5,642,748 |
| 2 | Less: Amortization of CIAC | $ 3,308,578 | $ 46,663 | $ 3,355,241 |
| 3 | Net CIAC | $ 2,038,037 | $ 249,470 | $ 2,287,507 |

**CIAC Calculation**

| | [D] Year | [E] CIAC Charges Per Company (RUCO 1.8) | [F] Difference | [G] CIAC Balance Staff Col. E - Col. F |
|---|---|---|---|---|
| 4 | | | | |
| 5 | | | | |
| 6 | | | | |
| 7 | 7/01/94 Opening Balance | $ 3,127,264.00 | $ - | $ 3,127,264.00 |
| 8 | 1994 | $ 116,507.00 | $ 101,845.00 | $ 218,352.00 |
| 9 | 1995 | $ 112,578.00 | $ 3,235.00 | $ 115,813.00 |
| 10 | 1996 | $ 182,068.56 | $ (14,172.56) | $ 167,896.00 |
| | 1996 Treatment Capacity | $ - | $ (300,000.00) | $ (300,000.00) |
| 11 | 1997 | $ 172,749.00 | $ - | $ 172,749.00 |
| | 1997 Treatment Capacity | $ - | $ (153,706.00) | $ (153,706.00) |
| 12 | 1998 | $ 571,000.91 | $ - | $ 571,000.91 |
| 13 | 1999 | $ 319,182.03 | $ - | $ 319,182.03 |
| 14 | 2000 | $ 405,077.00 | $ - | $ 405,077.00 |
| 15 | 2001 | $ 489,268.94 | $ - | $ 489,268.94 |
| 16 | 2002 | $ 110,490.00 | $ - | $ 110,490.00 |
| 17 | 2003 | $ 196,061.83 | $ (28,480.00) | $ 167,581.83 |
| 18 | 2004 | $ (1,926.25) | $ 233,705.75 | $ 231,779.50 |
| 19 | | $ 5,800,321.02 | $ (157,572.81) | $ 5,642,748.21 |

References:

Column A: Company Schedule B-2
Column B: Testimony, CSB, Company Data Request Responses RUCO 1.8
Column C: Column [A] + Column [B]

**RATE BASE ADJUSTMENT NO. 4 - CIAC & Amortization of CIAC Continued**

| Amortization of CIAC Calculation | | | | |
|---|---|---|---|---|
| [A] | [B] | [C] | [D] | [E] |
| Year | CIAC Balance Per Staff | Amortization Rate | Amortization of CIAC Col. A - Col. B | Accumulated Amortization of CIAC |
| 7/01/94 CIAC Balance Per Staff | $ 3,127,264.00 | | $ 1,121,838.00 | **$ 1,121,838.00** |
| 994 July to December Amortization | $ 3,127,264.00 | 2.50% | $ 78,181.60 | |
| Additions - Half Year Convention | $ 218,352.00 | 2.50% | $ 5,458.80 | |
| | $ 3,345,616.00 | | $ 83,640.40 | **$ 83,640.40** |
| **1994 Ending Accumulated Amortization of CIAC Balance:** | | | | **$ 1,205,478.40** |
| 1995 Beginning CIAC Balance | $ 3,345,616.00 | 5.00% | $ 167,280.80 | **$ 1,205,478.40** |
| Additions - Half Year Convention | $ 115,813.00 | 2.50% | $ 2,895.33 | |
| | $ 3,461,429.00 | | $ 170,176.13 | **$ 170,176.13** |
| **1995 Ending Accumulated Amortization of CIAC Balance:** | | | | **$ 1,375,654.53** |
| 1996 Beginning CIAC Balance | $ 3,461,429.00 | | | |
| Less: Scottsdale Capacity | $ (300,000.00) | | | |
| | $ 3,161,429.00 | 5.00% | $ 158,071.45 | **$ 1,375,654.53** |
| Additions - Half Year Convention | $ 167,896.00 | 2.50% | $ 4,197.40 | |
| | $ 3,329,325.00 | | $ 162,268.85 | **$ 162,268.85** |
| **1996 Ending Accumulated Amortization of CIAC Balance:** | | | | **$ 1,537,923.38** |
| 1997 Beginning CIAC Balance | $ 3,329,325.00 | | | |
| Less: Scottsdale Capacity | $ (153,706.00) | | | |
| | $ 3,175,619.00 | 5.00% | $ 158,780.95 | **$ 1,537,923.38** |
| Additions - Half Year Convention | $ 172,749.00 | 2.50% | $ 4,318.73 | |
| | $ 3,348,368.00 | | $ 163,099.68 | **$ 163,099.68** |
| **1997 Ending Accumulated Amortization of CIAC Balance:** | | | | **$ 1,701,023.05** |
| 1998 Beginning CIAC Balance | $ 3,348,368.00 | 5.00% | $ 167,418.40 | **$ 1,701,023.05** |
| Additions - Half Year Convention | $ 571,000.91 | 2.50% | $ 14,275.02 | |
| | $ 3,919,368.91 | | $ 181,693.42 | **$ 181,693.42** |
| **1998 Ending Accumulated Amortization of CIAC Balance:** | | | | **1,882,716.47** |
| 1999 Beginning CIAC Balance | $ 3,919,368.91 | 5.00% | $ 195,968.45 | **$ 1,882,716.47** |
| Additions - Half Year Convention | $ 319,182.03 | 2.50% | $ 7,979.55 | |
| | $ 4,238,550.94 | | $ 203,948.00 | **$ 203,948.00** |
| **1999 Ending Accumulated Amortization of CIAC Balance:** | | | | **2,086,664.47** |
| 2000 Beginning CIAC Balance | $ 4,238,550.94 | 5.00% | $ 211,927.55 | **$ 2,086,664.47** |
| Additions - Half Year Convention | $ 405,077.00 | 2.50% | $ 10,126.93 | |
| | $ 4,643,627.94 | | $ 222,054.47 | **$ 222,054.47** |
| **2000 Ending Accumulated Amortization of CIAC Balance:** | | | | **2,308,718.94** |
| 2001 Beginning CIAC Balance | $ 4,643,627.94 | 5.00% | $ 232,181.40 | **$ 2,308,718.94** |
| Additions - Half Year Convention | $ 489,268.94 | 2.50% | $ 12,231.72 | |
| | $ 5,132,896.88 | | $ 244,413.12 | **$ 244,413.12** |
| **2001 Ending Accumulated Amortization of CIAC Balance:** | | | | **2,553,132.06** |
| 2002 Beginning CIAC Balance | $ 5,132,896.88 | 5.00% | $ 256,644.84 | **$ 2,553,132.06** |
| Additions - Half Year Convention | $ 110,490.00 | 2.50% | $ 2,762.25 | |
| | $ 5,243,386.88 | | $ 259,407.09 | **$ 259,407.09** |
| **2002 Ending Accumulated Amortization of CIAC Balance:** | | | | **2,812,539.16** |

**RATE BASE ADJUSTMENT NO. 4 - CIAC & Amortization of CIAC Continued**

| Amortization of CIAC Calculation | | | | |
|---|---|---|---|---|
| [A] | [B] | [C] | [D] | [E] |
| Year | CIAC Balance Per Staff | Amortization Rate | Amortization of CIAC Col. A - Col. B | Total Amortization of CIAC |
| 2003 Beginning CIAC Balance | $ 5,243,386.88 | 5.00% | $ 262,169.34 | **$ 2,812,539.16** |
| Additions - Half Year Convention | $ 167,581.83 | 2.50% | $ 4,189.55 | |
| | $ 5,410,968.71 | | $ 266,358.89 | **$ 266,358.89** |
| **2003 Ending Accumulated Amortization of CIAC Balance:** | | | | **3,078,898.05** |
| 2004 Beginning CIAC Balance | $ 5,410,968.71 | 5.00% | $ 270,548.44 | **$ 3,078,898.05** |
| Additions - Half Year Convention | $ 231,779.50 | 2.50% | $ 5,794.49 | |
| | $ 5,642,748.21 | | $ 276,342.92 | **$ 276,342.92** |
| **2004 Ending Accumulated Amortization of CIAC Balance:** | | | | **3,355,240.97** |

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Schedule CSB-9

## RATE BASE ADJUSTMENT NO. 5 - CUSTOMER DEPOSITS

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Customer Deposits - To Remove Refund | $ (3,000) | $ 3,000 | $ - |
| 2 | Customer Deposits - To Reflect Year-End Balance | - | 6,435 | 6,435 |
| 3 | Total | **$ (3,000)** | **$ 9,435** | **$ 6,435** |

References:

Column A: Company Schedule B-2
Column B: Testimony, CSB, Company Data Request Responses CSB 5.12
Column C: Column [A] + Column [B]

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Schedule CSB-10

## RATE BASE ADJUSTMENT NO. 6 - DEFERRED INCOME TAXES

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Deferred Income Tax Liability | $ - | 524,000 | $ 524,000 |
| 2 | Deferred Income Tax Asset | - | (360,000) | (360,000) |
| | | **$ -** | **$ 164,000** | **$ 164,000** |

References:

Column A: Company Schedule B-2, Page 1

Column B: Testimony, CSB, Company Data Request Responses to RUCO 2.7

Column C: Column [A] + Column [B]

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Schedule CSB-11

## RATE BASE ADJUSTMENT NO. 7 - WORKING CAPITAL

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Prepaid Expenses | $ 9,512 | $ (9,512) | $ - |
| 2 | Cash Working Capital Allowance | $ 130,508 | $ (130,508) | $ - |
| 3 | Total Working Capital | $ 140,020 | $ (140,020) | $ - |

References:

Column [A]: Company Schedule B-2
Column [B]: Testimony, CSB
Column [C]: Column [A] + Column [B]

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Schedule CSB-12

**OPERATING INCOME - TEST YEAR AND STAFF RECOMMENDED**

| LINE NO. | DESCRIPTION | [A] COMPANY TEST YEAR AS FILED | [B] STAFF TEST YEAR ADJUSTMENTS | [C] STAFF TEST YEAR AS ADJUSTED | [D] STAFF PROPOSED CHANGES | [E] STAFF RECOMMENDED |
|---|---|---|---|---|---|---|
| | *REVENUES:* | | | | | |
| 1 | Flat Rate Revenues | $ 1,191,268 | $ (2,288) | $ 1,188,980 | $ 30,495 | $ 1,219,475 |
| 2 | Other Wastewater Revenues | 16,472 | - | 16,472 | - | 16,472 |
| 3 | Total Operating Revenues | $ 1,207,740 | $ (2,288) | $ 1,205,452 | $ 30,495 | $ 1,235,947 |
| | *EXPENSES:* | | | | | |
| 4 | Salaries and Wages | $ - | $ - | $ - | $ - | $ - |
| 5 | Purchased Wastewater Treatment | 162,082 | - | 162,082 | | 162,082 |
| 6 | Sludge Removal Expense | 981 | - | 981 | | 981 |
| 7 | Purchased Power | 47,727 | - | 47,727 | | 47,727 |
| 8 | Fuel for Power Production | - | - | - | | - |
| 9 | Chemicals | 76,612 | - | 76,612 | | 76,612 |
| 10 | Materials and Supplies | 30,420 | (3,624) | 26,796 | | 26,796 |
| 11 | Contractual Services - Professional | 171,683 | (12,433) | 159,250 | | 159,250 |
| 12 | Contractual Services - Testing | 11,000 | - | 11,000 | | 11,000 |
| 13 | Contractual Services - Other | 226,595 | (22,270) | 204,325 | | 204,325 |
| 14 | Rental Expense | 10,825 | (566) | 10,259 | - | 10,259 |
| 15 | Transportation Expense | 4,870 | (2,327) | 2,543 | - | 2,543 |
| 16 | Insurance - General Liability | 16,204 | (596) | 15,608 | - | 15,608 |
| 17 | Regulatory Commission Expense | 30,000 | - | 30,000 | - | 30,000 |
| 18 | Miscellaneous Expense | 77,401 | (17,943) | 59,458 | - | 59,458 |
| 19 | Scottsdale Capacity Operating Lease | 189,622 | (27,801) | 161,821 | - | 161,821 |
| 20 | Depreciation | 126,749 | (53,439) | 73,310 | - | 73,310 |
| 21 | Taxes Other Than Income | - | - | - | - | - |
| 22 | Property Taxes | 45,745 | (1,692) | 44,053 | - | 44,053 |
| 23 | Income Taxes | (6,544) | 103,621 | 97,077 | 13,189 | 110,266 |
| 24 | **Total Operating Expenses** | $ 1,221,972 | $ (39,071) | $ 1,182,901 | $ 13,189 | $ 1,196,090 |
| 25 | **Operating Income (Loss)** | $ (14,232) | $ 36,783 | $ 22,551 | $ 17,305 | $ 39,856 |

References:
Column (A): Company Schedule C-1, Page 2
Column (B): Schedule CSB-8
Column (C): Column (A) + Column (B)
Column (D): Schedules CSB-1 and CSB-2
Column (E): Column (C) + Column (D)

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Schedule CSB-13

**SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR**

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] ADJ #1 Expensed Plant | [C] ADJ #2 Affiliate Expenses | [D] ADJ #3 Bad Debt Expense | [F] ADJ #4 Depreciation Expense | [G] ADJ #5 NonRecurring & Other Exp | [H] ADJ #6 Scottsdale Operating Lease | [I] ADJ #7 Food & Beverages | [J] ADJ #8 Property Taxes | [J] ADJ #9 Income Tax Expense | [L] ADJ #10 ACC Assessment | [M] STAFF ADJUSTED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *REVENUES:* | | | | | | | | | | | | |
| 1 | Flat Rate Revenues | $ 1,191,268 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ (2,288) | $ 1,188,980 |
| 2 | Other Wastewater Revenues | 16,472 | - | - | - | - | - | - | - | - | - | - | 16,472 |
| 3 | **Total Revenues** | $ 1,207,740 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ (2,288) | $ 1,205,452 |
| | *OPERATING EXPENSES:* | | | | | | | | | | | | |
| 4 | Salaries and Wages | $ - | - | - | - | - | - | - | - | - | - | - | $ - |
| 5 | Purchased Wastewater Treatment | 162,082 | - | - | - | - | - | - | - | - | - | - | 162,082 |
| 6 | Sludge Removal Expense | 981 | - | - | - | - | - | - | - | - | - | - | 981 |
| 7 | Purchased Power | 47,727 | - | - | - | - | - | - | - | - | - | - | 47,727 |
| 8 | Fuel for Power Production | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | Chemicals | 76,612 | - | - | - | - | - | - | - | - | - | - | 76,612 |
| 10 | Materials and Supplies | 30,420 | (1,674) | (1,472) | - | - | - | - | (478) | - | - | - | 26,796 |
| 11 | Contractual Services - Professional | 171,683 | - | (9,205) | - | - | (3,228) | - | - | - | - | - | 159,250 |
| 12 | Contractual Services - Testing | 11,000 | - | - | - | - | - | - | - | - | - | - | 11,000 |
| 13 | Contractual Services - Other | 226,595 | (11,723) | (10,361) | - | - | - | - | (186) | - | - | - | 204,325 |
| 14 | Rents Expense | 10,825 | (566) | - | - | - | - | - | - | - | - | - | 10,259 |
| 15 | Transportation Expense | 4,870 | - | (127) | - | - | (2,200) | - | - | - | - | - | 2,543 |
| 16 | Insurance - General Liability | 16,204 | - | (596) | - | - | - | - | - | - | - | - | 15,608 |
| 17 | Regulatory Commission Expense | 30,000 | - | - | - | - | - | - | - | - | - | - | 30,000 |
| 18 | Miscellaneous Expense | 77,401 | (6,085) | (3,644) | (5,926) | - | - | - | - | - | - | (2,288) | 59,458 |
| 19 | Scottsdale Capacity Operating Lease | 189,622 | - | - | - | - | - | (27,801) | - | - | - | - | 161,821 |
| 20 | Depreciation | 126,749 | - | - | - | (53,439) | - | - | - | - | - | - | 73,310 |
| 21 | Taxes Other Than Income | - | - | - | - | - | - | - | - | - | - | - | - |
| 22 | Property Taxes | 45,745 | - | - | - | - | - | - | - | (1,692) | - | - | 44,053 |
| 23 | Income Taxes | (6,544) | - | - | - | - | - | - | - | - | 103,621 | - | 97,077 |
| 24 | **Total Operating Expenses** | $ 1,221,972 | $(20,048) | $(25,406) | $ (5,926) | $ (53,439) | $ (5,428) | $ (27,801) | $ (664) | $(1,692) | $ 103,621 | $ (2,288) | $ 1,182,901 |
| 25 | **Operating Income (Loss)** | $ (14,232) | $ 20,048 | $ 25,406 | $ 5,926 | $ 53,439 | $ 5,428 | $ 27,801 | $ 664 | $ 1,692 | $ (103,621) | $ 0 | $ 22,551 |

| ADJ No. | | References: |
|---|---|---|
| 1 | Expensed Plant | Schedule CSB-14 |
| 2 | Affiliate Expenses | Schedule CSB-15 |
| 3 | Bad Debt Expense | Schedule CSB-16 |
| 4 | Depreciation Expense | Schedule CSB-17 |
| 5 | Normalized Expenses | Schedule CSB-18 |
| 6 | Scottsdale Operating Lease Payments | Schedule CSB-19 |
| 7 | Food and Beverages | Schedule CSB-20 |
| 8 | Property Tax Expense | Schedule CSB-21 |
| 9 | Income Tax Expense | Schedule CSB-22 |
| 10 | ACC Assessment | Schedule CSB-23 |

## OPERATING INCOME ADJUSTMENT NO. 1 - EXPENSED PLANT

| LINE NO. | Description | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Contractual Services, Other | $ 226,595 | $ (11,723) | $ 214,872 |
| 2 | Rents Expense | $ 10,825 | $ (566) | $ 10,259 |
| 3 | Miscellaneous Expense | $ 77,401 | $ (6,085) | $ 71,316 |
| 4 | Material and Supplies Expense | $ 30,420 | $ (1,674) | $ 28,746 |
| 5 | Total | $ 345,241 | $ (20,048) | $ 325,193 |

**PLANT COST REMOVED FROM CONTRACTUAL SERVICES, OTHER EXPENSE (CSB 1.37)**

| | Acct. No. | Vendor Name | Description | Amount |
|---|---|---|---|---|
| 6 | 361-Collection Sewers | Jensen Sys. Engineering | Algonquin Indian Basket Alarm | $ 1,499.01 |
| 7 | 361-Collection Sewers | Keller Equipment Co | Pull and Install Motors | $ 1,947.71 |
| 8 | 361-Collection Sewers | Keller Equipment Co | Rebuild Motor/Pump | $ 1,119.65 |
| 9 | 361-Collection Sewers | KSK Electric | Replace Meter Socket | $ 1,315.00 |
| 10 | 361-Collection Sewers | LTC, Inc. | Concrete Pad & Drain for Manhole | $ 1,404.92 |
| 11 | | | Subtotal | $ 7,286.29 |
| 12 | 371-Effluent Pumping Plant | Keller Equipment Co | Change out Pumps | $ 551.62 |
| 13 | 371-Effluent Pumping Plant | Keller Equipment Co | Pull Pump. Set New Pump | $ 1,095.40 |
| 14 | | | Subtotal | $ 1,647.02 |
| 15 | 381-Plant Sewers | Foster Elec. Motor Servc | Install Outlets in Vault | $ 589.57 |
| 16 | 381-Plant Sewers | KSK Electric | Boulder Facility Lighting Repair Proj. | $ 2,200.00 |
| 17 | | | Subtotal | $ 2,789.57 |
| 18 | | | Total | $ 11,722.88 |

**PLANT COSTS REMOVED FROM RENTS EXPENSE (CSB 1.38)**

| | Acct. No. | Vendor Name | Description | Amount |
|---|---|---|---|---|
| 21 | 371-Effluent Pumping Plant | Pump Systems, Inc. | Replace Pump | $ 566.13 |
| 22 | | | Total | $ 566.13 |

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB, Company Data Request Responses CSB 1.37, 1.38, 1.40 & 7.13
Column C: Column [A] + Column [B]

## OPERATING INCOME ADJUSTMENT NO. 1 - EXPENSED PLANT CONTINUED

| LINE NO. | PLANT COSTS REMOVED FROM MISCELLANEOUS EXPENSE (CSB 1.40) | | | |
|---|---|---|---|---|
| | Maricopa County Environ. Serv. Dept, Approval to Construct Expedited Fees | | | |
| | Acct. No | Project Title | Description | Amount |
| 1 | 389-Other Plant & Misc Equip | Boulders WWTP Bypass | Reclaimed Water Line | $ 500.00 |
| 2 | 389-Other Plant & Misc Equip | Boulders Effluent Pump | Addition of pumps | $ 700.00 |
| 3 | 371-Effluent Pumping Plant | Indian Basket Lift Station | Replace Existing Lift Station | $ 700.00 |
| 4 | 389-Other Plant & Misc Equip | Boulders WWTP Bypass | Add Stucture and Manhole | $ 2,000.00 |
| 5 | | | Subtotal | $ 3,900.00 |
| 6 | 389-Other Plant & Misc Equip | Safety Equipment | Company Response to CSB 2.13b | $ 2,184.75 |
| 7 | | | Total | $ 6,084.75 |

| | PLANT COSTS REMOVED FROM MISC. EXP., MATERIALS & SUPPLIES (CSB 7.13) | | | |
|---|---|---|---|---|
| | Acct. No. | Vendor Name | Description | Amount |
| 8 | 389-Other Plant & Misc Equip | Arizona Pneumatic Sys | Blower | $ 1,674.47 |
| 9 | | | Total | $ 1,674.47 |

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Schedule CSB-15

## OPERATING INCOME ADJUSTMENT NO. 2 - AFFILIATE EXPENSES

| LINE NO. | | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|---|
| 1 | | Materials and Supplies Expense | $ 30,420 | $ (1,472) | $ 28,948 |
| 2 | | Contractual Services - Professional Expense | 171,683 | (9,205) | 162,478 |
| 3 | | Contractual Services - Other Expense | 226,595 | (10,361) | 216,234 |
| 4 | | Transportation Expense | 4,870 | (127) | 4,743 |
| 5 | | Insurance - General Liability Expense | 16,204 | (596) | 15,608 |
| 6 | | Miscellaneous Expense | 30,420 | (3,644) | 26,776 |
| 7 | | Total | **$ 480,192** | **$ (25,406)** | **$ 454,786** |

| | Description | Affiliate Phone Charges Summary | | |
|---|---|---|---|---|
| 8 | Miscellaneous Expense, AT&T Long Distance | $ 2,186 | $ - | $ 2,186 |
| 9 | Misc Exp, Long Distance - Direct Charge to Gold Canyon | 161 | (161) | - |
| 10 | Miscellaneous Exp, AT&T Long Distance - Direct Charged to Texas | | (514) | (514) |
| 11 | Misc Exp, Long Distance - Allocation to 3 Affiliated Companies | - | (1,254) | (1,254) |
| 12 | **Total** | **$ 2,346** | **$ (1,928)** | **$ 418** |

| | Description | Affiliate Paging Charges Summary | | |
|---|---|---|---|---|
| 13 | Miscellaneous Expense, Teletouch Paging | $ 2,651 | $ - | $ 2,651 |
| 14 | Misc Exp, Paging Services - Direct Charge to Texas Affiliates | - | (1,716) | (1,716) |
| 15 | **Total** | **$ 2,651** | **$ (1,716)** | **$ 935** |

| | | Profit Included In Affiliate Billings | | |
|---|---|---|---|---|
| 16 | Materials and Supplies | $ 22,639 | 6.50% | $ 1,472 |
| 17 | Contractual Services - Professional | 141,623 | 6.50% | $ 9,205 |
| 18 | Contractual Services - Other | 159,402 | 6.50% | $ 10,361 |
| 19 | Transportation Expense | 1,952 | 6.50% | $ 127 |
| 20 | Insurance - General Liability | 9,173 | 6.50% | $ 596 |
| 21 | | **$ 334,789** | | **$ 21,761** |

References:

Column A: Company Data Request Response CSB 1.40
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Black Mountain Sewer Company
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Schedule CSB-16

## OPERATING INCOME ADJUSTMENT NO. 3 - BAD DEBT EXPENSE

| | | [A] | [B] | [C] |
|---|---|---|---|---|
| LINE NO. | DESCRIPTION | COMPANY AS FILED | STAFF ADJUSTMENTS | STAFF AS ADJUSTED |
| 1 | Bad Debt Expense | 5,926 | (5,926) | - |

References:

Column A: Company Data Request Response CSB 1.30 & 5.9
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

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Schedule CSB-17

## OPERATING INCOME ADJUSTMENT NO. 4 - DEPRECIATION EXPENSE ON TEST YEAR PLANT

| LINE NO. | DESCRIPTION | [A] PLANT In SERVICE Per Staff | [B] NonDepreciable or Fully Depreciated PLANT | [C] DEPRECIABLE PLANT (Col A - Col B) | [D] DEPRECIATION RATE | [E] DEPRECIATION EXPENSE (Col C x Col D) |
|---|---|---|---|---|---|---|
| 1 | 351 - Organization | $ - | $ - | $ - | 0.00% | $ - |
| 2 | 352 - Franchises | $ - | $ - | $ - | 0.00% | $ - |
| 3 | 353 - Land and Land Rights | $ 461,300 | $ 461,300 | $ - | 0.00% | $ - |
| 4 | 354 - Structures and Improvements | $ 1,239,905 | $ - | $ 1,239,905 | 3.33% | $ 41,289 |
| 5 | 355 - Power Generation Equipment | $ - | $ - | $ - | 5.00% | $ - |
| 6 | 360 - Collection Services - Force | $ 228,580 | $ - | $ 228,580 | 2.00% | $ 4,572 |
| 7 | 361 - Collection Services - Gravity | $ 3,614,545 | $ - | $ 3,614,545 | 2.00% | $ 72,291 |
| 8 | 362 - Special Collecting Structures | $ - | $ - | $ - | 2.00% | $ - |
| 9 | 363 - Services to Customers | $ 157,218 | $ - | $ 157,218 | 2.00% | $ 3,144 |
| 10 | 364 - Flow Measuring Devices | $ 39,829 | $ - | $ 39,829 | 10.00% | $ 3,983 |
| 11 | 365 - Flow Measuring Installations | $ 156,205 | $ - | $ 156,205 | 10.00% | $ 15,620 |
| 12 | 370 - Receiving Wells | $ 696,137 | $ - | $ 696,137 | 3.33% | $ 23,181 |
| 13 | 371 - Effluent Pumping Equipment | $ 454,258 | $ - | $ 454,258 | 12.50% | $ 56,782 |
| 14 | 380 - Treatment and Disposal Equipment | $ - | $ - | $ - | 5.00% | $ - |
| 15 | 381 - Plant Sewers | $ 123,289 | $ - | $ 123,289 | 5.00% | $ 6,164 |
| 16 | 382 - Outfall Sewer Lines | $ - | $ - | $ - | 3.33% | $ - |
| 17 | 389 - Other Plant and Miscellaneous Equip | $ 740,678 | $ - | $ 740,678 | 6.67% | $ 49,403 |
| 18 | 390 - Office Furniture and Equipment | $ 220,360 | $ - | $ 220,360 | 6.67% | $ 14,698 |
| 19 | 391 - Transportation Equipment | $ 87,811 | $ - | $ 87,811 | 20.00% | $ 17,562 |
| 20 | 393 - Tools, Shop and Garage Equipment | $ - | $ - | $ - | 5.00% | $ - |
| 21 | 394 - Laboratory Equipment | $ - | $ - | $ - | 10.00% | $ - |
| 22 | 395 - Power Operated Equipment | $ - | $ - | $ - | 5.00% | $ - |
| 23 | 398 - Other Tangible Equipment | $ 7,279 | $ - | $ 7,279 | 10.00% | $ 728 |
| 24 | Total Plant | $ 8,227,393 | $ 461,300 | $ 7,766,094 | | $ 268,130 |

| | | |
|---|---|---|
| 25 | Composite Depreciation Rate (Depr Exp / Depreciable Plant): | 3.45% |
| 26 | CIAC: | $ 5,642,748 |
| 27 | Amortization of CIAC (Line 25 x Line 26): | $ 194,820 |
| 28 | Depreciation Expense Before Amortization of CIAC: | $ 268,130 |
| 29 | Less Amortization of CIAC: | $ 194,820 |
| 30 | Test Year Depreciation Expense - Staff: | $ 73,310 |
| 31 | Depreciation Expense - Company: | $ 126,749 |
| 32 | **Staff's Total Adjustment:** | **$ (53,439)** |

References:
Column [A]: Schedule CSB-4
Column [B]: Staff Workpapers
Column [C]: Column [A] - Column [B]
Column [D]: Engineering Staff Report
Column [E]: Column [C] x Column [D]

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Schedule CSB-18

## OPERATING INCOME ADJUSTMENT NO. 5 - NONRECURRING & OTHER

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Transportation Expense | $ 4,870 | $ (2,200) | $ 2,670 |
| 2 | Contractual Services, Professional | $ 171,683 | $ (3,228) | $ 168,455 |
| | | $ 176,553 | $ (5,428) | $ 171,125 |

References:

Column A: Company Data Request Response CSB 5.8 and 9.2
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Schedule CSB-19

## OPERATING INCOME ADJUSTMENT NO. 6 - OPERATING LEASE

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | **Treatment Capacity Costs Per Dec. 59944** | $ 1,260,000 | $ - | $ 1,260,000 |
| 2 | Less Amount Funded by CIAC | $ (300,000) | $ - | $ (300,000) |
| 3 | Net Amount Funded by Debt | $ 960,000 | $ - | $ 960,000 |
| 4 | 2006 Principle | $ 38,448 | $ - | $ 38,448 |
| 5 | Income Tax Factor | 1.4805 | (0.4805) | 1.0000 |
| 6 | 2006 Principle Plus Taxes | $ 56,922 | $ (18,474) | $ 38,448 |
| 7 | Add: 2006 Interest | $ 67,952 | $ - | $ 67,952 |
| 8 | **Annual "Lease" Expense** | **$ 124,874** | **$ (18,474)** | **$ 106,400** |
| 9 | **Treatment Capacity Costs Per Dec. 60240** | $ 653,706 | $ - | $ 653,706 |
| 10 | Less Amount Funded by CIAC | $ (153,706) | $ - | $ (153,706) |
| 11 | Net Amount Funded by Debt | $ 500,000 | $ - | $ 500,000 |
| 12 | 2006 Principle | $ 19,411 | $ - | $ 19,411 |
| 13 | Income Tax Factor | 1.4805 | (0.4805) | 1.0000 |
| 14 | 2006 Principle Plus Taxes | $ 28,738 | $ (9,327) | $ 19,411 |
| 15 | Add: 2006 Interest | $ 36,010 | $ - | $ 36,010 |
| 16 | **Annual "Lease" Expense** | **$ 64,748** | **$ (9,327)** | **$ 55,421** |
| 17 | **Total Annual "Lease" Expense** | **$ 189,622** | **$ (27,801)** | **$ 161,821** |

References:

Column A: Company Schedule C-2, Page 4
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Schedule CSB-20

## OPERATING INCOME ADJUSTMENT NO. 7 - FOOD AND BEVERAGES

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Contractual Services, Other | $ 226,595 | $ (478) | $ 226,117 |
| 2 | Material and Supplies Expense | 77,401 | (186) | 77,215 |
| 3 | | **$ 303,996** | **$ (664)** | **$ 303,332** |

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB, Company Data Request Responses CSB 1.43 and 7.15
Column C: Column [A] + Column [B]

1

References:

Column A: Company Data Request Response CSB 1-3 and 2-9
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Schedule CSB-21

## OPERATING INCOME ADJUSTMENT NO. 8 - PROPERTY TAX EXPENSE

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENT | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | 2004 Staff Adjusted Test Year Revenues | | | $ 1,205,452 |
| 2 | Weight Factor | | | $ 2 |
| 3 | Subtotal (Line 1 x Line 2) | | | $ 2,410,904 |
| 4 | Staff Recommended Revenue | | | $ 1,235,947 |
| 5 | Subtotal (Line 4 + Line 5) | | | $ 3,646,851 |
| 6 | Number of Years | | | $ 3 |
| 7 | Three Year Average (Line 5 / Line 6) | | | $ 1,215,617 |
| 8 | Department of Revenue Multiplier | | | 2 |
| 9 | Revenue Base Value (Line 7 x Line 8) | | | $ 2,431,234 |
| 10 | Plus: 10% of 2004 CWIP | | | $ - |
| 11 | Less: Net Book Value of Licensed Vehicles | | | $ 7,279 |
| 12 | Full Cash Value (Line 9 + Line 10 - Line 11) | | | $ 2,423,955 |
| 13 | Assessment Ratio | | | 0.24 |
| 14 | Assessed Value (Line 12 x Line 13) | | | $ 581,749 |
| 15 | Composite Property Tax Rate | | | 0.07573 |
| 16 | **Staff Proposed Property Tax Expense (Line 14 x Line 15)** | **$ 45,745** | **$ (1,692)** | **$ 44,053** |

References:
Column A: Company Schedule C-1, Page 2
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Schedule CSB-22

**OPERATING INCOME ADJUSTMENT NO. 9 - TEST YEAR INCOME TAXES**

| LINE NO. | DESCRIPTION | (A) | (B) |
|---|---|---|---|
| | *Calculation of Income Tax:* | Test Year | |
| 1 | Revenue (Schedule CSB-9, Line 9) | $ 1,205,452 | |
| 2 | Less: Operating Expenses - Excluding Income Taxes & Lease Expense | $ 924,003 | |
| 3 | Less: Synchronized Interest (L17) | $ 18,268 | |
| 4 | Arizona Taxable Income (L1- L2 - L3) | $ 263,181 | |
| 5 | Arizona State Income Tax Rate | 6.968% | |
| 6 | Arizona Income Tax (L4 x L5) | | $ 18,338 |
| 7 | Federal Taxable Income (L4 - L6) | $ 244,843 | |
| 8 | Federal Tax on First Income Bracket ($1 - $50,000) @ 15% | $ 7,500 | |
| 9 | Federal Tax on Second Income Bracket ($51,001 - $75,000) @ 25% | $ 6,250 | |
| 10 | Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34% | $ 8,500 | |
| 11 | Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39% | $ 56,489 | |
| 12 | Federal Tax on Fifth Income Bracket ($335,001 - $10,000,000) @ 34% | $ - | |
| 13 | Total Federal Income Tax | | $ 78,739 |
| 14 | Combined Federal and State Income Tax (L6 + L13) | | $ 97,077 |
| | *Calculation of Interest Synchronization:* | | |
| 15 | Rate Base (Schedule CSB-13, Col. (C), Line 16) | $ 415,172 | |
| 16 | Weighted Average Cost of Debt | 4.40% | |
| 17 | Synchronized Interest (L16 x L17) | $ 18,268 | |
| 18 | Income Tax - Per Staff | $ 97,077 | |
| 19 | Income Tax - Per Company | $ (6,544) | |
| 20 | **Staff Adjustment** | **$ 103,621** | |

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Schedule CSB-23

## OPERATING INCOME ADJUSTMENT NO. 10 - ACC ASSESSMENT

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | ACC Assessment | $ 2,288 | $ (2,288) | $ - |

References:

Column A: Company Data Request Response CSB 1.30
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Schedule CSB-24

## RATE DESIGN

| | Present Rates | Company Proposed | Staff Recommended |
|---|---|---|---|
| **Residential Service-Per Month** | $38.00 | $ 43.19 | $38.98 |
| **Commercial, Regular (c)** | $ 0.15236 | $ 0.01732 | $ 0.15631 |

| **Commercial - Special Rate** | Present Rates | | | Company Proposed | | | Staff Recommended | | |
|---|---|---|---|---|---|---|---|---|---|
| Name of Business | Gallons Per Day | Rate Per Gallon | Monthly Charge | Gallons Per Day | Rate Per Gallon | Monthly Charge | Gallons Per Day | Rate Per Gallon | Monthly Charge |
| BH Enterprises-West | 2,525 | $0.11685 | $295.05 | 2,525 | $0.13280 | $335.32 | 2,525 | $0.11988 | $302.69 |
| BH Enterprises-East | 1,400 | $0.11685 | $163.59 | 1,400 | $0.13280 | $185.92 | 1,400 | $0.11988 | $167.83 |
| Barb's Pet Grooming | 250 | $0.11685 | $29.21 | 250 | $0.13280 | $33.20 | 250 | $0.11988 | $29.97 |
| Boulder's Resort | 29,345 | $0.11843 | $3,475.33 | 29,345 | $0.13459 | $3,949.54 | 29,345 | $0.12150 | $3,565.34 |
| Carefree Dental | 1,625 | $0.11685 | $189.88 | 1,625 | $0.13280 | $215.80 | 1,625 | $0.11988 | $194.80 |
| Ridgecrest Realty | 450 | $0.11818 | $53.18 | 450 | $0.13431 | $60.44 | 450 | $0.12124 | $54.56 |
| Desert Forest | 7,000 | $0.13609 | $952.63 | 7,000 | $0.15467 | $1,082.69 | 7,000 | $0.13961 | $977.30 |
| Desert Hills Pharmacy | 800 | $0.14206 | $113.65 | 800 | $0.16145 | $129.16 | 800 | $0.14574 | $116.59 |
| El Pedregal | 15,787 | $0.11685 | $1,844.71 | 15,787 | $0.13280 | $2,096.51 | 15,787 | $0.11988 | $1,892.49 |
| Lemon Tree | 300 | $0.11400 | $43.20 | 300 | $0.12956 | $43.20 | 300 | $0.11695 | $43.20 |
| Body Shop | 1,000 | $0.14544 | $145.44 | 1,000 | $0.16529 | $165.29 | 1,000 | $0.14921 | $149.21 |
| Spanish Village | 4,985 | $0.11685 | $582.50 | 4,985 | $0.13280 | $662.01 | 4,985 | $0.11988 | $597.58 |
| Boulder's Club | 1,200 | $0.11685 | $140.22 | 1,200 | $0.13280 | $159.36 | 1,200 | $0.11988 | $143.85 |
| Anthony Vuitaggio | 300 | $0.12987 | $38.96 | 300 | $0.14760 | $44.28 | 300 | $0.13323 | $39.97 |

**Effluent Sales**
Per thousand gallons $0.374400

| **Service Charges:** | Present Rates | Company Proposed | Staff Recommended |
|---|---|---|---|
| Establishment | $ 25.00 | $ 25.00 | $ 25.00 |
| Re-establishment | $ 25.00 | $ 25.00 | $ 25.00 |
| Re-connection | No Charge | No Charge | No Charge |
| Minimum Deposit (Residential) | (a) | (a) | (a) |
| Minimum Deposit (Non-Residential) | (a) | (a) | (a) |
| Deposit Interest | N/A | N/A | (a) |
| NSF Check Charge | $ 10.00 | $ 10.00 | $ 10.00 |
| Deferred Paymnt Finance Charge | 1.50% | 1.50% | 1.50% |
| Late Charge | 1.50% | 1.50% | 1.50% |
| Main Extension Tariff **(b)** | Cost | Cost | Cost |
| Hook-Up Fee for New Service **(c)** | $ 6.47 | $ 6.47 | Discontinue |

**(a)** Per A.A.C. R14-2-603B: Residential - two times average bill, Non-residential - two and one-half times average bill
**(b)** Per A.A.C. R14-2-406B
**(c)** Per Gallon per Day. Wastewater flows are based on Engineering Bulletin 12, Table 1.
N/A Not included in current or proposed tariff.

**BEFORE THE ARIZONA CORPORATION COMMISSION**

JEFF HATCH-MILLER
Chairman
WILLIAM A. MUNDELL
Commissioner
MARC SPITZER
Commissioner
MIKE GLEASON
Commissioner
KRISTIN K. MAYES
Commissioner

| | | |
|---|---|---|
| IN THE MATTER OF THE APPLICATION OF BLACK MOUNTAIN SEWER CORPORATION, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON. | ) | DOCKET NO. SW-02361A-05-0657 |

SURREBUTTAL

TESTIMONY

OF

CRYSTAL S. BROWN

PUBLIC UTILITIES ANALYST V

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

MAY 5, 2006

ALL-STATE LEGAL®
EXHIBIT
S-10
admitted

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**EXECUTIVE SUMMARY**
**BLACK MOUNTAIN SEWER CORPORATION**
**DOCKET NO. SW-02361A-05-0657**

Staff recommends total annual revenues of $1,422,444 resulting in $168,299 or 9.6 percent rate of return on a $1,753,118 rate base. Staff recommends that the rates not go into effect until the first day of the month after (1) the Company refunds the CIAC in accordance to a signed Commission order and (2) provides documentation to Staff that the total refund has been made.

Staff's surrebuttal testimony responds to Black Mountain Water Company's rebuttal on the following issues:

1. Rate Base
    a. Post-Test Year Plant
    b. Capitalized Affiliate Profit
    c. Expensed Plant
    d. Accumulated Depreciation
    e. Contributions in Aid of Construction
    f. Customer Deposits

2. Operating Income
    a. Nonrecurring Expenses
    b. Scottsdale Capacity Operating Lease Expense
    c. Bad Debt Expense
    d. Expensed Plant
    e. Affiliate Profit
    f. Rate Case Expense

3. Contributions In Aid of Construction Refund

## INTRODUCTION

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

A. My name is Crystal S. Brown. I am a Public Utilities Analyst V employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

**Q. Are you the same Crystal S. Brown who filed direct testimony in this case?**

A. Yes.

## PURPOSE OF SURREBUTTAL TESTIMONY

**Q. What is the purpose of your surrebuttal testimony in this proceeding?**

A. The purpose of my surrebuttal testimony in this proceeding is to respond, on behalf of Staff to the rebuttal testimonies of Mr. Thomas J. Bourassa and Mr. Michael D. Webber, who represent Black Mountain Sewer Company, Inc. ("Black Mountain" or "Company").

**Q. Did you attempt to address every issue raised by the Company in its rebuttal testimony?**

A. No. I limited my discussion to certain issues as outlined below. My silence on any particular issue raised in the Company's rebuttal testimony does not indicate that I agree with the Company's stated rebuttal position on the issue.

**Q. What issues will you address?**

A. I will address the issues listed below that are discussed in the rebuttal testimonies of Black Mountain witnesses Mr. Thomas J. Bourassa and Mr. Michael D. Webber.

1. Rate Base
    a. Post-Test Year Plant

b. Capitalized Affiliate Profit

c. Expensed Plant

d. Accumulated Depreciation

e. Contributions in Aid of Construction

f. Customer Deposits

2. Operating Income

a. Nonrecurring Expenses

b. Scottsdale Capacity Operating Lease Expense

c. Bad Debt Expense

d. Expensed Plant

e. Affiliate Profit

f. Rate Case Expense

3. Contributions In Aid of Construction Refund

**Q. What is Staff recommended revenue?**

A. Staff recommends total annual revenues of $1,422,444 resulting in $168,299 or 9.6 percent rate of return on a $1,753,118 rate base.

**RATE BASE**

**Post-Test Year ("PTY") Plant**

**Q. Briefly describe the PTY plant that the Company has requested to recover.**

A. The Company has requested to recover a liquid chlorinator that was not in service during the Test Year.

**Q. Does Staff agree that the liquid chlorinator should be included in rate base?**

A. Yes.

**Capitalized Affiliate Profit**

**Q. Please summarize Staff's recommendation concerning capitalized affiliate profit.**

A. Staff recommends removing the affiliate profit because it inflates rates allowing the shareholders to effectively increase the return of equity invested in Black Mountain by increasing the profit included in billings to Black Mountain from affiliates.

**Q. What are the Company's reasons for continuing to request recovery of its unregulated affiliate's profit through rates?**

A. The Company reasons can be summarized into two arguments as follows:

a. Reasonableness: Staff should look at the reasonableness of the cost irrespective of the source. Staff did not provide any evidence of inflated costs. Staff did not perform any independent analysis. Staff would not have removed the profit if the Company had engaged a non-affiliate.

b. Claimed Savings: Affiliate companies save Black Mountain approximately $222,000 annually. Operating expenses would have to increase because Black Mountain would have to hire personnel to perform the duties that affiliates are now performing.

**Q. Does Staff agree with any of the Company's arguments?**

A. No, Staff does not. Staff will first discuss the implications of the Company's related party business arrangement with its affiliates, then address each of the Company's arguments separately.

**Implications of the Related-Party Business Arrangement**

**Q. Please explain what constitutes a related party transaction?**

A. In general, a related party transaction refers to a company and any other party with which the company may deal where one party has the ability to influence the other to the extent that one party of the transaction may not pursue its own separate best interest. It is not an arm's-length bargaining of parties of opposing interests.

**Q. Are related party transactions required to be disclosed under Generally Accepted Accounting Principles ("GAAP")?**

A. Yes. Related party transactions are required to be disclosed under GAAP. One reason for this disclosure requirement is that related party transactions not involving arm's-length bargaining between buyer and seller, have sometimes been recorded at inflated amounts.

**Q. Did Black Mountain enter into a related party transaction with its unregulated affiliate?**

A. Yes. Algonquin Water Resources of America owns both Algonquin Water Services and Black Mountain. Black Mountain has no employees. The shareholders of Black Mountain have turned the day to day operations and management of Black Mountain, something most stand-alone utilities routinely perform, over to an unregulated affiliate. The owners then charge the customers of Black Mountain a profit via the affiliate for performing those services.

**Q. How much influence does Black Mountain have in negotiating the operations and management cost with its affiliate?**

A. None. Black Mountain has no employees. The shareholders of Black Mountain and its affiliate have created a self-serving business arrangement whereby the shareholders set the profit that is guaranteed to be paid by Black Mountain's captive customers.

**Q. Does Black Mountain have a strong incentive to prefer its affiliate over a non-affiliated company?**

A. Yes. If Black Mountain selects any company other than one of its affiliates to perform the services, the parent company would not be able to keep approximately $40,000[1] in profit because it would have had to pay it to an independent third party. Consequently, the owners would have $40,000 less in their bank accounts.

**Q. What is a fundamental element of a monopoly?**

A. One fundamental element of a monopoly is a barrier to entry.

**Q. Have the shareholders of Black Mountain set up barriers for other non-affiliated companies to enter the market of providing services for Black Mountain?**

A. Yes. The shareholders of Black Mountain discriminate against non-affiliates by maintaining that only Black Mountain's affiliates can provide the range of services that Black Mountain needs. It further indicates that it cannot obtain competitive bids because it knows of no other individuals or companies from whom to request a bid. Moreover, the shareholders claim that they will have to increase expenses if they cannot charge Black Mountain's captive customers a profit for affiliate provided services.

[1] Combined plant and expense profit Staff was able to identify.

**Q. What is the effect of the barriers to entry established by Black Mountain's affiliate?**

A. Black Mountain's affiliate is, in substance, an unregulated monopoly. The shareholders have set up barriers to entry; the shareholders discriminate in favor of its affiliate; the shareholders fix the price and the profit that Black Mountain's captive customers must pay.

**Q. How much did the shareholders through Black Mountain's affiliate increase monthly management fees during the Test Year?**

A. The shareholders through the affiliate increased management fees by $5,562 per month (or 74%) over a one year period from $7,500 per month in 2003 to $13,062 per month in 2004.

**Reasonableness**

**Q. Is "reasonableness" the only criteria staff should consider in evaluating whether or not an expense should be recovered through rates?**

A. No. Other important factors such as: (1) whether or not the cost was needed for the provision of service; (2) the used and usefulness; and (3) the prudence of the expense; and (4) whether the affiliate had to forgo other profitable opportunities in order to provide service to the utility should be considered in determining whether an expense should be allowed for ratemaking purposes. Only in certain circumstances when the affiliate has to forgo other profitable opportunities and the utility does not have a better alternative for the services provided should an affiliate profit be allowed in the cost of service.

**Q. Is the affiliate profit needed for the provision of service?**

A. No. As long as Black Mountain's affiliate is reimbursed for the actual cost it incurs to provide services to Black Mountain it will be made financially whole and can continue to provide the services to Black Mountain in the same manner.

**Q. How does the affiliate profit benefit the shareholders?**

A. For Black Mountain's captive customers, the affiliate profit is a created cost that is not needed for the provision of service and inflates the cost of service. Since the owners can provide the same service in the same manner without charging a profit (i.e., because it can recover, dollar for dollar, the actual cost of providing the service from the ratepayers), the profit would only serve to increase the return on equity. As Staff stated earlier, if Black Mountain were to select any vendor other than one of its affiliates to perform the services, the owners would not be able to keep the profit because they would have had to pay it to an independent third party.

**Q. What is the definition of "prudently invested"?**

A. Arizona Administrative Code R14-2-103A.3.l defines "prudently invested" as follows: "Prudently Invested" – Investments which under ordinary circumstances would be deemed reasonable and not dishonest or obviously wasteful (emphasis added) . . ."

Companies remove affiliate profit from the cost of service because they recognize it is not needed in the provision of service and that inclusion of the profit wastes customers' valuable financial resources.

**Q. What utilities remove affiliate profit from the cost of service?**

A. Sierra Southwest, the unregulated affiliate of AEPCO and Southwest Transmission provides employees for the two companies at actual cost (i.e., includes no profit). Also, it is Staff's understanding that the affiliates of Arizona-American provide service at cost (without profit). Additionally, Phelps Dodge Corporation, the parent company and unregulated affiliate of Ajo Water and Sewer Company, removes profit from the cost of service for ratemaking purposes.

**Q. How does Staff respond to Mr. Webber's rebuttal testimony that the 4.5% is reasonable and is hardly an attempt to manipulate the bottom line?**

A. First, if Mr. Webber's comment about not manipulating the bottom line is the genuine position of the Company, then it should have no objection to forgoing recovery. Second, Staff has not audited Black Mountain's affiliates and has not verified the amount of the profit claimed. Based on Staff's experience auditing Black Mountain's records, it is reasonable to assume that Staff would also find adjustments to the affiliate's records.

**Q. Is there any information that leads Staff to believe that there may be more affiliate profit in the operating expenses than that Staff was able to identify and remove?**

A. Yes. For example, the billing rate charged to Black Mountain by its affiliate was $150 an hour for a general manager. This equates to $312,000 per year to perform routine management functions of a sewer company.

**Claimed Savings**

**Q. Did the Company provide source documentation to support the claimed $222,000 savings that Staff could audit and verify?**

A. No. The claimed savings are unsupported management assertions.

**Q. Even if the Company's claimed savings were verified, would the savings justify the affiliate's profit?**

A. No.

**Q. Why wouldn't actual savings justify the affiliate profit?**

A. The savings would not justify the affiliate profit because the affiliate can provide the same services in the same manner without charging a profit. It is only reasonable for the affiliate to recover 100 percent of its actual cost from Black Mountain's customers.

**Q. What ultimate purpose does Black Mountain's business arrangement with its affiliates serve for the shareholders of Black Mountain?**

A. Given that an investor-owned company's primary objective is to maximize profit, it will choose a business form that it believes will best achieve that objective. Accordingly, the parent company of Black Mountain has chosen a business arrangement that it believes will result in maximized profit.

Apparently, for the ultimate shareholders of Black Mountain, it is more profitable to turn over the duties to operate Black Mountain to its unregulated monopolistic affiliate than (1) to employ workers directly because employing workers directly would eliminate an opportunity to charge a profit or (2) to hire a non-affiliated third party because the shareholders would have to pay the profit to that third party rather than keep the profit for themselves.

**Q. Does Staff have a concern regarding the implication that Black Mountain and its affiliates would choose to operate less efficiently resulting in increased cost of service if affiliates can no longer pass through a profit?**

A. Yes. Mike Webber indicated in his rebuttal testimony that operating expenses will have to increase because Black Mountain will have to hire personnel to perform the duties the affiliates are now performing if affiliate profits are not recoverable from Black Mountain ratepayers. A decision by Black Mountain and its affiliates to operate in a less efficient

manner that results in increased costs because affiliate profits cannot be recovered would be subject to a review for prudence where the incremental costs could be challenged. In circumstances where 100 percent of the actual cost to provide service is recoverable, any choice to operate less efficiently would bring into question the incremental cost.

**Q. Please summarize Staff's position concerning capitalized affiliate profit.**

A. Staff has not changed from its original position. Reasonableness alone is not sufficient to determine whether an expense should be allowed in the cost of service. Other important factors such as: (1) whether or not the cost was needed for the provision of service; (2) the used and usefulness; and (3) the prudence of the expense; and (4) whether the affiliate had to forgo other profitable opportunities in order to provide service to the utility should be considered in determining whether an expense should be allowed for ratemaking purposes. Only when the affiliate has to forgo other profitable opportunities and the utility does not have a better alternative for the services provided should an affiliate profit be allowed in the cost of service.

The shareholders have created an unregulated affiliate monopoly that allows the shareholders the power to set the price and profit that is guaranteed to be paid by Black Mountain's captive customers. Other utilities remove the profit from their affiliates from the cost of service. The profit is a created cost that is not needed to provide service, and accordingly, is imprudent. The profit saves neither the Company nor ratepayers any money because the affiliate can provide the same services to Black Mountain in the same manner without charging a profit. The profit wastes customers' valuable financial resources.

**Expensed Plant – Rate Base**

**Q. Is Staff's surrebuttal position for its Rate Base Adjustment No. 3 - Expensed Plant different from its direct testimony position?**

A. Yes.

**Q. Please explain the Staff's modified position?**

A. The Company in the rebuttal testimony of Thomas Bourassa states that $2,700 in costs that Staff removed from operating expenses and capitalized had already been capitalized by the Company.. Since, the amount had already been capitalized, Staff's capitalization of this amount resulted in a double count. Therefore, the capitalization portion of Staff's adjustment should be reversed.

**Q. What adjustment is Staff's recommending?**

A. Staff's surrebuttal recommendation is shown in Surrebuttal Schedule CSB-7

**Contributions In Aid of Construction ("CIAC") Balance**

**Q. Has Staff reviewed the Company's rebuttal testimony concerning the CIAC balance?**

A. Yes.

**Q. Does Staff agree with the Company's proposal to increase plant in service by $339,833 for unrecorded plant financed with CIAC?**

A. No, the Company has not provided source documentation to support its assertion that the plant was financed with CIAC.

**Q. Does Staff accept the Company's assertion that the cost of the land was $452,467?**

A. Yes.

**Q. What other adjustment does Staff recommend concerning the land that was purchased with CIAC?**

A. Staff recommends that the $452,467 cost for the land purchased be recorded in the land account in accordance with the Commission mandated NARUC Uniform System of Accounts.

**Q. What is Staff's surrebuttal position for CIAC recommended changes to its direct testimony?**

A. Staff's surrebuttal recommendation is shown in Surrebuttal Schedule CSB-8.

**Customer Deposits**

**Q. Has Staff reviewed the Company's rebuttal testimony concerning the Customer Deposits balance?**

A. Yes.

**Q. Does Staff agree with the Company that the balance should be zero?**

A. Yes.

**Q. Does the Company's rebuttal testimony show a zero balance for Customer Deposits?**

A. No.

**Q. What Customer Deposits balance is shown in the Company's Rebuttal Testimony?**

A. The Company's rebuttal testimony shows a negative $6,000 balance.

**Q. What effect does the negative $6,000 balance have on rate base?**

A. It has the effect of increasing rate base by $6,000 because the Company rate base formula subtracts the negative number from rate base (i.e., subtracting a negative number has the same effect as adding a positive number).

**Q. What is Staff's surrebuttal position for Customer Deposits?**

A. Staff surrebuttal position for Customer Deposits is shown on Surrebuttal Schedule CSB-9. Staff further suggests that the Company correct its rate base schedule to show a Customer Deposits balance of $0 in order to be consistent with its rebuttal testimony.

**OPERATING INCOME**

**Expensed Plant**

**Q. Has Staff reviewed the Company's rebuttal testimony concerning Expense Plant in operating expenses?**

A. Yes.

**Q. Does Staff agree with the Company's adjustments?**

A. Yes.

**Q. What is Staff's surrebuttal position for Expensed Plant?**

A. Staff's surrebuttal recommendation for Expensed Plant is shown in Surrebuttal Schedule CSB-14

**Affiliate Profit Included In Operating Expenses**

**Q. Has Staff reviewed the Company's rebuttal testimony concerning affiliate profit included in operating expenses?**

A. Yes.

**Q. Has Staff changed from its original position to remove affiliate profit from operating expenses?**

A. No. Staff continues to recommend that the affiliate profit included in operating expense be excluded from cost of service for the reasons set forth previously to remove capitalized affiliate profit from rate base.

**Nonrecurring Expense**

**Q. Has Staff reviewed the Company's rebuttal testimony related to legal expenses for the Town of Carefree Operating Agreement?**

A. Yes.

**Q. Has Staff changed from its original recommendation that the Company defer the costs and amortize them over the life of the contract?**

A. No, however, Staff would like to make a clarification. Staff's intention was to recommend that the costs be deferred until the Town of Carefree Operating Agreement is fully executed. Once the contract is fully executed and in use, the legal expenses should be capitalized and amortized over the useful life of the contract in accordance to the matching principle.

**Scottsdale Operating Lease**

**Q. Has Staff reviewed the Company's rebuttal testimony related to legal expenses for the Scottsdale Operating Lease?**

A. Yes.

**Q. Has Staff changed from its original recommendation of not deducting the loan payments to determine the taxable income for rate-making purposes?**

A. No. Staff's calculation of the Company's federal and state tax is consistent with actual federal and state income tax formulas. This results in a more realistic income tax expense. The ratemaking treatment of the debt payments as an expense in the income statement does not alter the statutory tax treatment of the interest expense nor preclude an alternate ratemaking treatment for calculating income taxes for inclusion in cost of service.

**Bad Debt Expense**

**Q. Has Staff reviewed the Company's rebuttal testimony concerning the Bad Debt Expense?**

A. Yes.

**Q. Does Staff agree with the Company's adjustments and resulting balance?**

A. Yes.

**Q. What is Staff's surrebuttal recommendation for Bad Debt Expense?**

A. Staff's surrebuttal recommendation for Bad Debt Expense is shown in Surrebuttal Schedule CSB-16.

**Rate Case Expense**

**Q. Has Staff reviewed the Company's rebuttal testimony that proposes to increase rate case expense by $30,000 from $120,000 to $150,000?**

A. Yes.

**Q. What reasons did the Company give for the $30,000 increase?**

A. The Company stated that an additional intervenor and numerous data requests have caused the need for a $30,000 increase.

**Q. Did the Company provide any detailed calculations to support its estimate for the $30,000 increase?**

A. No. Additionally, Staff requested that the Company provide a detailed budget showing the individual components for its original $120,000 rate case expense estimate. The Company refused to provide the information agreeing only to provide invoices instead.

**Q. Did the Company argue that one reason that its original rate case expense of $120,000 was appropriate was because the Company anticipated that shareholders would bear some of the cost?**

A. Yes.

**Q. Did the Company also indicate that if the Company does something improper that it should "shoulder the burden of such actions"?**

A. Yes. Mr. Bourassa made this statement on page 12 beginning at line 14. He states, "I would also agree that if the utility does something improper, or advances positions in bad faith, it should shoulder the burden of such costs."

**Q. Does Staff agree with the Company that shareholders should share in the cost of rate case expense and that the Company should "shoulder the burden" of improper actions?**

A. Yes, Staff agrees.

**Q. Did the Company do anything that reduces efficiency of the rate case process?**

A. Yes. The procedural order set a data response time of ten days. The Company took approximately 12 weeks[2] to respond to Staff's data request CSB 1.52 (which pertained to affiliate profit) and only provided the response after Staff advised the Company it would seek the information through a procedural conference with the judge.

During the 12 week period, Staff sent additional data requests attempting to obtain the information that the Company was refusing to provide. Some of the Company's responses provided conflicting information that, in turn, resulted in more data requests. The Company's untimely response time also impeded Staff's ability to conduct certain audit procedures in a timely manner. Staff is also aware that the Company was reluctant to provide RUCO with certain of its data requests pertaining to the parent company's capital structure.

**Q. What amount of rate case expense increase is reasonable and appropriate?**

A. An increase of $4,800 in rate case expense is reasonable and appropriate.

**Q. How did Staff calculate the $4,800 increase to rate case expense?**

A. Staff used a $400 hourly rate to represent the combined rate consultant, legal, and other costs. Staff allotted 24 additional hours for the intervenor (for activities such as, but not

[2] Staff requested the information on November 21, 2005 and did not receive the response until February 14. 2006.

limited to, reading intervenor testimony, answering data requests cross examining the intervenor, and addressing intervenor issues in the brief). Staff allocated no additional hours for answering the data requests as the Company's responses for many of the data requests required minimal effort such as answering in the negative, or objecting to the question. Additionally, $120,000 original rate case expense estimate was sufficient to cover the cost. Staff then removed 50 percent of the total to reflect only the amount that the customers should pay. This resulted in an increase of $4,800 ($400 x 24 x 0.5).

**Q. What is Staff's surrebuttal recommendation for Rate Case Expense?**

A. Staff's surrebuttal recommendation for Rate Case Expense is shown in Surrebuttal Schedule CSB-24.

**CIAC REFUND**

**Q. Has Staff reviewed the Company's rebuttal testimony that adopts Staff's recommendation to refund the $833,367 in CIAC?**

A. Yes.

**Q. Does Staff agree with the Company's proposal?**

A. Yes, with the exception of how the individual refunds are to be calculated. The hook-up fees vary by customer. Therefore, the refunds should be calculated based upon the amount contributed by each customer class. Staff recommends that the Company propose an equitable way to calculate the CIAC refunds in its rejoinder testimony.

**Q. Does Staff have any other recommendations?**

A. Yes. Staff recommends that the rates not go into effect until the first day of the month after (1) the Company refunds the CIAC in accordance to a signed Commission order and (2) provides documentation to Staff that the total refund has been made.

**Q. Does this conclude your surrebuttal testimony?**

A. Yes, it does.

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Surrebuttal Schedule CSB-1

**REVENUE REQUIREMENT**

| LINE NO. | DESCRIPTION | [A] COMPANY ORIGINAL COST | [B] STAFF ORIGINAL COST |
|---|---|---|---|
| 1 | Adjusted Rate Base | $ 887,449 | $ 1,753,118 |
| 2 | Adjusted Operating Income (Loss) | $ (14,232) | $ 42,834 |
| 3 | Current Rate of Return (L2 / L1) | -1.60% | 2.44% |
| 4 | Required Rate of Return | 10.00% | 9.60% |
| 5 | Required Operating Income (L4 * L1) | $ 88,745 | $ 168,299 |
| 6 | Operating Income Deficiency (L5 - L2) | $ 102,977 | $ 125,465 |
| 7 | Gross Revenue Conversion Factor | 1.73080 | 1.72948 |
| 8 | Increase In Gross Revenue (L7 * L6) | $ 178,232 | $ 216,990 |
| 9 | Adjusted Test Year Revenue | $ 1,207,740 | $ 1,205,452 |
| 10 | Proposed Annual Revenue (L8 + L9) | $ 1,385,972 | $ 1,422,442 |
| 11 | Required Increase in Revenue (%) (L8/L9) | 14.76% | 18.00% |

References:
Column [A]: Company Schedules A-1, C-1, C-3, & D-1
Column [B]: Staff Schedules CSB-2, CSB-3, & CSB-7

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Surrebuttal Schedule CSB-2

**GROSS REVENUE CONVERSION FACTOR**

| LINE NO. | DESCRIPTION | (A) | (B) | (C) | (D) |
|---|---|---|---|---|---|
| | *Calculation of Gross Revenue Conversion Factor:* | | | | |
| 1 | Billings | 1.000000 | | | |
| 2 | Uncollectible Factor | 0.000000 | | | |
| 3 | Revenues | 1.000000 | | | |
| 4 | Less: Combined Federal and State Tax Rate (Line 12) | 0.421792 | | | |
| 5 | Subtotal (L3 - L4) | 0.5782 | | | |
| 6 | **Revenue Conversion Factor (L1 / L5)** | **1.72948** | | | |
| | *Calculation of Effective Tax Rate:* | | | | |
| 7 | Operating Income Before Taxes (Arizona Taxable Income) | 100.0000% | | | |
| 8 | Arizona State Income Tax Rate | 6.9680% | | | |
| 9 | Federal Taxable Income (L7 - L8) | 93.0320% | | | |
| 10 | Applicable Federal Income Tax Rate (Line 34) | 37.8485% | | | |
| 11 | Effective Federal Income Tax Rate (L9 x L10) | 35.2112% | | | |
| 12 | Combined Federal and State Income Tax Rate (L8 +L11) | 42.1792% | | | |

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Surrebuttal Schedule CSB-3

## RATE BASE - ORIGINAL COST

| LINE NO. | | (A) COMPANY AS FILED | (B) STAFF ADJUSTMENTS | (C) STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Plant in Service | $ 8,464,745 | $ 212,415 | $ 8,677,160 |
| 2 | Less: Accumulated Depreciation | 4,366,379 | - | 4,366,379 |
| 3 | Net Plant in Service | $ 4,098,366 | $ 212,415 | $ 4,310,781 |
| | *LESS:* | | | |
| 4 | Advances in Aid of Construction (AIAC) | $ 1,315,900 | $ - | $ 1,315,900 |
| 5 | Service Line and Meter Advances | $ - | $ - | $ - |
| 6 | Contributions in Aid of Construction (CIAC) | $ 5,346,615 | $ (639,079) | $ 4,707,536 |
| 7 | Less: Accumulated Amortization | 3,308,578 | (6,806) | 3,301,772 |
| 8 | Net CIAC | $ 2,038,037 | (632,273) | $ 1,405,764 |
| 9 | Total Advances and Contributions | $ 3,353,937 | $ (632,273) | $ 2,721,664 |
| 10 | Customer Deposits | $ (3,000) | $ 3,000 | $ - |
| 11 | Accumulated Deferred Income Taxes | $ - | $ 164,000 | $ 164,000 |
| | *ADD:* | | | |
| 12 | Prepayments | $ 9,512 | $ (9,512) | $ - |
| 13 | Working Capital | $ 130,508 | $ (130,508) | $ - |
| 14 | **Total Rate Base** | $ 887,449 | $ 865,669 | $ 1,753,118 |

References:
Column [A], Company Schedule B-1, Page 1
Column [B]: Schedule CSB-4
Column [C]: Column [A] + Column [B]

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Surrebuttal Schedule CSB-4

**SUMMARY OF RATE BASE ADJUSTMENTS**

| LINE NO. | PLANT IN SERVICE<br>Acct. No. - Plant Description | [A]<br>COMPANY AS FILED | [B]<br>Adj No.1<br>Post Test Year Plant<br>Ref: Sch CSB-5 | [C]<br>ADJ No. 2<br>Affliate Costs & Capitalized Profits<br>Ref: Sch CSB-6 | [D]<br>ADJ No. 3<br>Expensed Plant<br>Ref: Sch CSB-7 | [E]<br>ADJ No. 4<br>CIAC & Amort of CIAC<br>Ref: Sch CSB-8 | [F]<br>ADJ No. 5<br>Customer Deposits<br>Ref: Sch CSB-9 | [G]<br>ADJ No. 6<br>Deferred Income Taxes<br>Ref: Sch CSB-10 | [H]<br>ADJ No. 7<br>Working Capital<br>Ref: Sch CSB-11 | [I]<br>STAFF AS ADJUSTED |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | | | | | | | |
| 2 | 353 - Land and Land Rights | $ 461,446 | $ - | $ (146) | $ - | $ 452,467 | $ - | $ - | $ - | $ 913,767 |
| 3 | 354 - Structures and Improvements | 1,245,292 | - | (5,387) | - | - | - | - | - | 1,239,905 |
| 4 | 360 - Collection Services - Force | 228,785 | - | (205) | - | - | - | - | - | 228,580 |
| 5 | 361 - Collection Services - Gravity | 3,608,619 | - | (1,361) | 7,286 | - | - | - | - | 3,614,545 |
| 6 | 363 - Services to Customers | 158,802 | - | (1,584) | - | - | - | - | - | 157,218 |
| 7 | 364 - Flow Measuring Devices | 39,878 | - | (49) | - | - | - | - | - | 39,829 |
| 8 | 365 - Flow Measuring Installations | 158,358 | - | (2,154) | - | - | - | - | - | 156,205 |
| 9 | 370 - Receiving Wells | 696,506 | - | (369) | - | - | - | - | - | 696,137 |
| 10 | 371 - Effluent Pumping Equipment | 451,705 | - | (360) | 2,213 | - | - | - | - | 453,558 |
| 11 | 381 - Plant Sewers | 121,651 | - | (1,152) | 2,790 | - | - | - | - | 123,289 |
| 12 | 389 - Other Plant and Miscellaneous Equip | 738,804 | - | (5,185) | 5,059 | - | - | - | - | 738,678 |
| 13 | 390 - Office Furniture and Equipment | 365,512 | - | (145,152) | - | - | - | - | - | 220,360 |
| 14 | 391 - Transportation Equipment | 87,811 | - | - | - | - | - | - | - | 87,811 |
| 15 | 394 - Laboratory Equipment | 7,279 | - | - | - | - | - | - | - | 7,279 |
| 16 | Total Plant in Service - Actual | $ 8,370,448 | $ - | $ (163,103) | $ 17,348 | $ 452,467 | $ - | $ - | $ - | $ 8,677,160 |
| 17 | Pro-forma Adjustment | 94,297 | (94,297) | - | - | - | - | - | - | - |
| 18 | Total Plant in Service | $ 8,464,745 | $ (94,297) | $ (163,103) | $ 17,348 | $ 452,467 | $ - | $ - | $ - | $ 8,677,160 |
| 19 | Less: Accumulated Depreciation - Actual | $ 4,441,760 | - | - | - | - | - | - | - | $ 4,441,760 |
| 20 | Less: Accumulated Depreciation - Pro Forma | 75,381 | - | - | - | - | - | - | - | 75,381 |
| 21 | Total Accumulated Depreciation - Adjusted | $ 4,366,379 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ 4,366,379 |
| 22 | Net Plant in Service | $ 4,098,366 | $ (94,297) | $ (163,103) | $ 17,348 | $ 452,467 | $ - | $ - | $ - | $ 4,310,781 |
| 23 | *LESS:* | | | | | | | | | |
| 24 | Advances in Aid of Construction (AIAC) | $ 1,315,900 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ 1,315,900 |
| 25 | Service Line and Meter Advances | $ - | - | - | - | - | - | - | - | $ - |
| 26 | Contributions in Aid of Construction (CIAC) | $ 5,800,321 | - | - | - | (639,079) | - | - | - | $ 5,161,242 |
| 27 | Less: CIAC - Pro Forma | 453,706 | - | - | - | - | - | - | - | 453,706 |
| 28 | Total CIAC - Adjusted | $ 5,346,615 | $ - | $ - | $ - | $ (639,079) | $ - | $ - | $ - | $ 4,707,536 |
| 29 | Less: Accumulated Amortization | $ 3,486,218 | - | - | - | (6,806) | - | - | - | $ 3,479,412 |
| 30 | Less: Accumulated Amort - Pro Forma | 177,640 | - | - | - | - | - | - | - | 177,640 |
| | | $ 3,308,578 | $ - | $ - | $ - | $ (6,806) | $ - | $ - | $ - | $ 3,301,772 |
| 31 | Net CIAC | $ 2,038,037 | - | - | - | (632,273) | - | - | - | $ 1,405,764 |
| 32 | Total Advances and Net Contributions | $ 3,353,937 | - | - | - | (632,273) | - | - | - | $ 2,721,664 |
| 33 | Customer Deposits | $ (3,000) | - | - | - | - | 3,000 | - | - | $ - |
| 34 | Accumulated Deferred Income Taxes | - | - | - | - | - | - | 164,000 | - | 164,000 |
| 35 | *ADD:* | | | | | | | | | |
| 36 | Prepaid Expenses | $ 9,512 | - | - | - | - | - | - | (9,512) | $ - |
| 37 | Working Capital Allowance | 130,508 | - | - | - | - | - | - | (130,508) | - |
| 38 | **Total Rate Base** | $ 887,449 | $ (94,297) | $ (163,103) | $ 17,348 | $ 1,084,740 | $ (3,000) | $ 164,000 | $ (140,020) | $ 1,753,118 |

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Schedule CSB-5

## RATE BASE ADJUSTMENT NO. 1 - POST-TEST YEAR PLANT

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED (Sch E-5) | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | 2004 Actual Plant | $ 8,370,448 | $ - | $ 8,370,448 |
| 2 | Post Test Year Plant | $ 94,297 | $ (94,297) | $ - |
| 3 | Total | **$ 8,464,745** | **$ (94,297)** | **$ 8,370,448** |

References:
Column [A]: Company Schedule B-2, Pages 1 and 2
Column [B]: Testimony, CSB
Column [C]: Column [A] + Column [B]

## RATE BASE ADJUSTMENT NO. 2 - AFFILIATE COSTS

| LINE NO. | DESCRIPTION | [A] 2001 to 2004 Plant Additions PER COMPANY | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED Col A - Col B |
|---|---|---|---|---|
| 1 | 353 - Land and Land Rights | $ 453,592 | $ 146 | $ 453,446 |
| 2 | 354 - Structures and Improvements | 242,441 | 5,387 | $ 237,054 |
| 3 | 355 - Power Generation Equipment | - | - | $ - |
| 4 | 360 - Collection Services - Force | 12,210 | 205 | $ 12,005 |
| 5 | 361 - Collection Services - Gravity | 797,304 | 1,361 | $ 795,943 |
| 6 | 363 - Services to Customers | 29,161 | 1,584 | $ 27,577 |
| 7 | 364 - Flow Measuring Devices | 9,169 | 49 | $ 9,120 |
| 8 | 365 - Flow Measuring Installations | - | 2,154 | $ (2,154) |
| 9 | 370 - Receiving Wells | 58,584 | 369 | $ 58,215 |
| 10 | 371 - Effluent Pumping Equipment | 181,924 | 360 | $ 181,564 |
| 11 | 381 - Plant Sewers | 198,712 | 1,152 | $ 197,560 |
| 12 | 389 - Other Plant and Miscellaneous Equip | 699,247 | 5,185 | $ 694,062 |
| 13 | 390 - Office Furniture and Equipment | 365,511 | 145,152 | $ 220,359 |
| 14 | 391 - Transportation Equipment | 87,811 | - | $ 87,811 |
| 15 | 394 - Laboratory Equipment | 5,079 | - | $ 5,079 |
| 16 | Total | **$ 3,140,745** | **$ 163,103** | **$ 2,977,642** |

References:
Column [A]: Company Schedule B-2, Pages 3h through 3k
Column [B]: Testimony, CSB; Schedule CSB-6, Pages 2 through 4
Column [C]: Column [A] - Column [B]

## RATE BASE ADJUSTMENT NO. 2 - AFFILIATE COSTS
### Total Affiliate Costs To Be Removed

| LINE NO. | DESCRIPTION | [A] Affiliate Capitalized Profit | [B] Plant Allocated to Affiliates | [C] Total Staff Adjustments (Col A + Col B) |
|---|---|---|---|---|
| 1 | 353 - Land and Land Rights | $ 146 | $ - | $ 146 |
| 2 | 354 - Structures and Improvements | $ 5,387 | - | $ 5,387 |
| 3 | 355 - Power Generation Equipment | $ - | - | $ - |
| 4 | 360 - Collection Services - Force | $ 205 | - | $ 205 |
| 5 | 361 - Collection Services - Gravity | $ 1,361 | - | $ 1,361 |
| 6 | 363 - Services to Customers | $ 1,584 | - | $ 1,584 |
| 7 | 364 - Flow Measuring Devices | $ 49 | - | $ 49 |
| 8 | 365 - Flow Measuring Installations | $ 2,154 | - | $ 2,154 |
| 9 | 370 - Receiving Wells | $ 369 | - | $ 369 |
| 10 | 371 - Effluent Pumping Equipment | $ 360 | - | $ 360 |
| 11 | 381 - Plant Sewers | $ 1,152 | - | $ 1,152 |
| 12 | 389 - Other Plant and Miscellaneous Equip | $ 5,185 | - | $ 5,185 |
| 13 | 390 - Office Furniture and Equipment | $ 2,920 | 142,232 | $ 145,152 |
| 14 | 391 - Transportation Equipment | $ - | - | $ - |
| 15 | 394 - Laboratory Equipment | $ - | - | $ - |
| 16 | Total | $ 20,871 | $ 142,232 | $ 163,103 |

References:
Column [A]: Schedule CSB-6, Page 3
Column [B]: Schedule CSB-6, Page 4; Data Request Response CSB 1.45
Column [C]: Column [A] + Column [B]

**RATE BASE ADJUSTMENT NO. 2 - AFFILIATE COSTS**
**Affiliate Capitalized Profit**

| LINE NO. | DESCRIPTION | [A] 2001 to 2004 Plant Additions Per Company | [B] Plant Allocated to Affiliate Sch CSB-6, Page 2 | [C] Total (Col A - Col B) | [D] Capitalized Profit 2001 | [E] Capitalized Profit 2002 | [F] Capitalized Profit 2003 | [G] Capitalized Profit 2004 | [H] Total Capitalized Profit (Col D+E+F+G) | [I] Plant Less Capitalized Profit (Col C - Col H) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 353 - Land and Land Rights | $ 453,592 | $ - | $ 453,592 | $ - | $ 146.25 | $ - | $ - | $ 146.25 | $ 453,446 |
| 2 | 354 - Structures and Improvements | 242,441 | - | 242,441 | $ 673.37 | $ 2,975.09 | $ 350.64 | $ 1,388.06 | $ 5,387.16 | $ 237,054 |
| 3 | 355 - Power Generation Equipment | - | - | - | $ - | $ - | $ - | $ - | $ - | $ - |
| 4 | 360 - Collection Services - Force | 12,210 | - | 12,210 | $ - | $ 204.75 | $ - | $ - | $ 204.75 | $ 12,005 |
| 5 | 361 - Collection Services - Gravity | 797,304 | - | 797,304 | $ - | $ 463.52 | $ - | $ 897.03 | $ 1,360.55 | $ 795,943 |
| 6 | 363 - Services to Customers | 29,161 | - | 29,161 | $ 22.44 | $ 1,344.20 | $ 136.08 | $ 80.85 | $ 1,583.57 | $ 27,577 |
| 7 | 364 - Flow Measuring Devices | 9,169 | - | 9,169 | $ - | $ 48.75 | $ - | $ - | $ 48.75 | $ 9,120 |
| 8 | 365 - Flow Measuring Installations | 158,358 | - | 158,358 | $ - | $ 1,467.70 | $ 685.80 | $ - | $ 2,153.50 | $ 156,205 |
| 9 | 370 - Receiving Wells | 58,584 | - | 58,584 | $ - | $ 369.20 | $ - | $ - | $ 369.20 | $ 58,215 |
| 10 | 371 - Effluent Pumping Equipment | 181,924 | - | 181,924 | $ 333.07 | $ 27.30 | $ - | $ - | $ 360.37 | $ 181,564 |
| 11 | 381 - Plant Sewers | 40,354 | - | 40,354 | $ - | $ - | $ 1,152.00 | $ - | $ 1,152.00 | $ 39,202 |
| 12 | 389 - Other Plant and Misc. Equip | 699,247 | - | 699,247 | $ 134.66 | $ 4,348.43 | $ 178.82 | $ 523.22 | $ 5,185.13 | $ 694,062 |
| 13 | 390 - Office Furniture and Equipment | 365,511 | 142,232 | 223,279 | $ 502.74 | $ 1,752.56 | $ 598.22 | $ 66.26 | $ 2,919.78 | $ 220,359 |
| 14 | 391 - Transportation Equipment | 87,811 | - | 87,811 | $ - | $ - | $ - | $ - | $ - | $ 87,811 |
| 15 | 394 - Laboratory Equipment | 5,079 | - | 5,079 | $ - | $ - | $ - | $ - | $ - | $ 5,079 |
| 16 | Total | $ 3,140,745 | $ 142,232 | $ 2,998,513 | $ 1,666.28 | $13,147.75 | $ 3,101.56 | $ 2,955.42 | $ 20,871.01 | $ 2,977,642 |

References:
Column [A]: Company Schedule B-2, Pages 3h through 3k
Column [B]: Schedule CSB-6, Page 4; Data Request Response CSB 1.45
Column [C]: Column [A] - Column [B]
Column [D]: Data Request Response CSB 10.1
Column [E]: Data Request Response CSB 10.1
Column [F]: Data Request Response CSB 10.1
Column [G]: Data Request Response CSB 10.1
Column [H]: Data Request Response CSB 10.1
Column [I]: Column [C] - Column [H]

## RATE BASE ADJUSTMENT NO. 2 - AFFILIATE PLANT COSTS
### Computer and Computer Software

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED (Col A - Col B) |
|---|---|---|---|---|
| 1 | Office Furniture & Equip | $ 162,908 | $ - | $ 162,908 |
| 2 | Allocated Costs for Affiliates | - | 72,505 | (72,505) |
| 3 | Direct Costs for Bella Vista CSB 2.7 | - | 69,727 | (69,727) |
| 4 | Total | $ 162,908 | **$ 142,232** | $ 20,676 |

| | [D] | [E] | [F] | [G] | [H] | [I] |
|---|---|---|---|---|---|---|
| | ALLOCATED COSTS FOR AFFILIATED SEWER COMPANIES | | | | | |
| | Costs to be Allocated (From Col P) | Percentage for Black Mountain (From Col R) | Costs to be Allocated to Black Mtn (Col D x Col E) | Percentage for Affiliates (Cols S+T+U) | **Costs to be Allocated to Affiliates (Col D x Col G)** | Total for Black Mountain & Affiliates (Col F + Col H) |
| 5 | $ 48,800 | 22.19% | $ 10,828 | 77.81% | $ 37,972 | $ 48,800 |
| 6 | $ 8,017 | 22.19% | $ 1,779 | 77.81% | $ 6,238 | $ 8,017 |
| 7 | $ 11,076 | 22.19% | $ 2,458 | 77.81% | $ 8,618 | $ 11,076 |
| 8 | $ 10,307 | 22.19% | $ 2,287 | 77.81% | $ 8,020 | $ 10,307 |
| 9 | $ 8,459 | 22.19% | $ 1,877 | 77.81% | $ 6,582 | $ 8,459 |
| 10 | $ 6,522 | 22.19% | $ 1,447 | 77.81% | $ 5,075 | $ 6,522 |
| 11 | $ - | 22.19% | $ - | 77.81% | $ - | $ - |
| 12 | $ 93,181 | | $ 20,676 | | **$ 72,505** | $ 93,181 |

| | [J] | [K] | [L] | [M] | [N] | [O] | [P] |
|---|---|---|---|---|---|---|---|
| | TOTAL COST TO BE ALLOCATED FOR FOUR AFFILIATED SEWER COMPANIES | | | | | | |
| | Year Added | Account Number | Description | **Cost Per CSB 1.45 & CSB 2.7** | Amount Included In Adj. No. 2 Acct. No. 390 | Costs to be Allocated | |
| 13 | 2002 | 212 | Software Upgrades | $ 48,800 | $ - | $ 48,800 | |
| 14 | 2003 | 257 | Equipment/Automation | $ 8,017 | $ - | $ 8,017 | |
| 15 | 2003 | 261 | Equipment/Automation | $ 11,076 | $ - | $ 11,076 | |
| 16 | 2003 | 270 | Equipment/Automation | $ 10,307 | $ - | $ 10,307 | |
| 17 | 2003 | 273 | System Migration | $ 8,459 | $ - | $ 8,459 | |
| 18 | 2003 | 298 | Professional Services | $ 6,522 | $ - | $ 6,522 | |
| 19 | 2003 | 319 | Data Conversion | $ 14,044 | $ (14,044) | $ - | |
| 20 | | | Total | $ 107,225 | $ (14,044) | $ 93,181 | |

| | [Q] | [R] | [S] | [T] | [U] | [V] |
|---|---|---|---|---|---|---|
| | CALCULATION OF ALLOCATION PERCENTAGES FOR FOUR AFFILIATED SEWER COMPANIES | | | | | |
| | | Black Mountain | Gold Canyon | Tall Timbers | Woodmark | Total |
| 21 | 12/31/2005 Customer Counts[1] | 1,798 | 4,491 | 978 | 836 | 8,103 |
| 22 | Percentage of Total Customers | 22.19% | 55.42% | 12.07% | 10.32% | 100.00% |

23 Note 1: 2005 Customer counts were used as the 2002 and 2003 counts for Tall Timbers and Woodmark
24 were not provided to Staff for the calculation.

References:

Column A: Company Schedule E-5
Column B: Testimony, CSB, Company Data Request Responses CSB 1.45
Column C: Column [A] + Column [B]

## RATE BASE ADJUSTMENT NO. 3 - EXPENSED PLANT

| LINE NO. | Plant Account Number | Description | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED (Col A + Col B) |
|---|---|---|---|---|---|
| 1 | 361 | Collection Sewers, Gravity | $ 3,608,619 | $ 7,286 | $ 3,615,905 |
| 2 | 371 | Effluent Pumping Equipment | $ 451,705 | $ 2,213 | $ 453,918 |
| 3 | 381 | Plant Sewers | $ 121,651 | $ 2,790 | $ 124,441 |
| 4 | 389 | Other Plant & Misc Equip | $ 738,804 | $ 5,059 | $ 743,863 |
| 5 | | Total | $ 4,920,779 | **$ 17,348** | $ 4,938,127 |

| | FROM CONTRACTUAL SERVICES , OTHER EXPENSE (CSB 1.37) | | | |
|---|---|---|---|---|
| | Acct. No. | Vendor Name | Description | Amount |
| 6 | 361-Collection Sewers | Jensen System Engineering | Algonquin Indian Basket Alarm | $ 1,499.01 |
| 7 | 361-Collection Sewers | Keller Equipment Company | Pull and Install Motors | $ 1,947.71 |
| 8 | 361-Collection Sewers | Keller Equipment Company | Rebuild Motor/Pump | $ 1,119.65 |
| 9 | 361-Collection Sewers | KSK Electric | Replace Meter Socket | $ 1,315.00 |
| 10 | 361-Collection Sewers | LTC, Inc. | Concrete Pad & Drain for Manhole | $ 1,404.92 |
| 11 | | | Subtotal | $ 7,286.29 |
| 12 | 371-Effluent Pumping Plant | Keller Equipment Company | Change out Pumps | $ 551.62 |
| 13 | 371-Effluent Pumping Plant | Keller Equipment Company | Pull Pump. Set New Pump | $ 1,095.40 |
| 14 | | | Subtotal | $ 1,647.02 |
| 15 | 381-Plant Sewers | Foster Electric Motor Service | Install Outlets in Vault | $ 589.57 |
| 16 | 381-Plant Sewers | KSK Electric | Boulder Facility Lighting Repair Proj. | $ 2,200.00 |
| 17 | | | Subtotal | $ 2,789.57 |
| 18 | | | Total | $ 11,722.88 |

| | FROM RENTS EXPENSE (CSB 1.38) | | | |
|---|---|---|---|---|
| | Acct. No. | Vendor Name | Description | Amount |
| 19 | 371-Effluent Pumping Plant | Pump Systems, Inc. | Replace Pump | $ 566.13 |
| 20 | | | Total | $ 566.13 |

References:

Column A: Company Schedule E-5
Column B: Testimony, CSB, Company Data Request Responses CSB 1.37, 1.38,1.40, & 7.13
Column C: Column [A] + Column [B]

## RATE BASE ADJUSTMENT NO. 3 - EXPENSED PLANT CONTINUED

| LINE NO. | FROM MISCELLANEOUS EXPENSE (CSB 1.40) | | | |
|---|---|---|---|---|
| | Maricopa County Environ. Serv. Dept, Approval to Construct Expedited Fees | | | |
| | Acct. No | Project Title | Description | Amount |
| 1 | 389-Other Plant & Misc Equi | Boulders West WWTP Bypass | Reclaimed Water Line | $ 500.00 |
| 2 | 389-Other Plant & Misc Equi | Boulders West Effluent Pump | Addition of pumps | $ 700.00 |
| 3 | 371-Effluent Pumping Plant | Indian Basket Lift Station | Replace Existing Lift Station | $ - |
| 4 | 389-Other Plant & Misc Equi | Boulders West WWTP Bypass | Add Stucture and Manhole | $ - |
| 5 | | | Subtotal | $ 1,200.00 |
| 6 | 389-Other Plant & Misc Equi | Safety Equipment | Company Response to CSB 2.13b | $ 2,184.75 |
| 7 | | | Total | $ 3,384.75 |

| | FROM MATERIALS AND SUPPLIES EXPENSE (CSB 7.13) | | | |
|---|---|---|---|---|
| | Acct. No. | Vendor Name | Description | Amount |
| 8 | 389-Other Plant & Misc Equi | Arizona Pneumatic Systems | Blower | $ 1,674.47 |
| 9 | | | Total | $ 1,674.47 |

**RATE BASE ADJUSTMENT NO. 4 - CIAC & Amortization of CIAC**

| LINE NO. | Description | [A] COMPANY AS FILED | [B] ADJUSTMENTS | [C] STAFF AS ADJUSTED Col A - Col B |
|---|---|---|---|---|
| 1 | CIAC with $101,845 removed | $ 5,346,615 | $ 194,288 | $ 5,540,903 |
| 2 | Less: Amortization of CIAC | $ 3,308,578 | $ (6,806) | $ 3,301,772 |
| 3 | Net CIAC | $ 2,038,037 | $ 201,094 | $ 2,239,131 |
| | | | | |
| | CIAC with $101,845 removed | $ 5,346,615 | $ 194,288 | $ 5,540,903 |
| | CIAC to be Refunded | $ - | $ (833,367) | $ (833,367) |
| | | $ 5,346,615 | $ (639,079) | $ 4,707,536 |

**CIAC Calculation**

| | | [D] Year | [E] CIAC Charges Per Company (RUCO 1.8) | [F] Difference | [G] CIAC Balance Staff Col. E - Col. F | |
|---|---|---|---|---|---|---|
| 4 | | | | | | |
| 5 | | | | | | |
| 6 | | | | | | |
| 7 | | 7/01/94 Opening Balance | $ 3,127,264.00 | $ - | $ 3,127,264.00 | |
| 8 | | 1994 | $ 116,507.00 | $ - | $ 116,507.00 | Removed $101,84 |
| 9 | | 1995 | $ 112,578.00 | $ 3,235.00 | $ 115,813.00 | |
| 10 | | 1996 | $ 182,068.56 | $ (14,172.56) | $ 167,896.00 | |
| | | 1996 Treatment Capacity | $ - | $ (300,000.00) | $ (300,000.00) | |
| 11 | | 1997 | $ 172,749.00 | $ - | $ 172,749.00 | |
| | | 1997 Treatment Capacity | $ - | $ (153,706.00) | $ (153,706.00) | |
| 12 | | 1998 | $ 571,000.91 | $ - | $ 571,000.91 | |
| 13 | | 1999 | $ 319,182.03 | $ - | $ 319,182.03 | |
| 14 | | 2000 | $ 405,077.00 | $ - | $ 405,077.00 | |
| 15 | | 2001 | $ 489,268.94 | $ - | $ 489,268.94 | |
| 16 | | 2002 | $ 110,490.00 | $ - | $ 110,490.00 | |
| 17 | | 2003 | $ 196,061.83 | $ (28,480.00) | $ 167,581.83 | |
| 18 | | 2004 | $ (1,926.25) | $ 233,705.75 | $ 231,779.50 | |
| 19 | | | $ 5,800,321.02 | $ (259,417.81) | $ 5,540,903.21 | |

References:

Column A: Company Schedule B-2
Column B: Testimony, CSB, Company Data Request Responses RUCO 1.8
Column C: Column [A] + Column [B]

**RATE BASE ADJUSTMENT NO. 4 - CIAC & Amortization of CIAC Continued**

| Amortization of CIAC Calculation | | | | |
|---|---|---|---|---|
| [A] | [B] | [C] | [D] | [E] |
| Year | CIAC Balance Per Staff | Amortization Rate | Amortization of CIAC Col. A - Col. B | Accumulated Amortization of CIAC |
| 7/01/94 CIAC Balance Per Staff | $ 3,127,264.00 | | $ 1,121,838.00 | **$ 1,121,838.00** |
| 994 July to December Amortization | $ 3,127,264.00 | 2.50% | $ 78,181.60 | |
| Additions - Half Year Convention | $ 116,507.00 | 2.50% | $ 2,912.68 | |
| | $ 3,243,771.00 | | $ 81,094.28 | **$ 81,094.28** |
| **1994 Ending Accumulated Amortization of CIAC Balance:** | | | | **$ 1,202,932.28** |
| 1995 Beginning CIAC Balance | $ 3,243,771.00 | 5.00% | $ 162,188.55 | **$ 1,202,932.28** |
| Additions - Half Year Convention | $ 115,813.00 | 2.50% | $ 2,895.33 | |
| | $ 3,359,584.00 | | $ 165,083.88 | **$ 165,083.88** |
| **1995 Ending Accumulated Amortization of CIAC Balance:** | | | | **$ 1,368,016.15** |
| 1996 Beginning CIAC Balance | $ 3,359,584.00 | | | |
| Less: Scottsdale Capacity | $ (300,000.00) | | | |
| | $ 3,059,584.00 | 5.00% | $ 152,979.20 | **$ 1,368,016.15** |
| Additions - Half Year Convention | $ 167,896.00 | 2.50% | $ 4,197.40 | |
| | $ 3,227,480.00 | | $ 157,176.60 | **$ 157,176.60** |
| **1996 Ending Accumulated Amortization of CIAC Balance:** | | | | **$ 1,525,192.75** |
| 1997 Beginning CIAC Balance | $ 3,227,480.00 | | | |
| Less: Scottsdale Capacity | $ (153,706.00) | | | |
| | $ 3,073,774.00 | 5.00% | $ 153,688.70 | **$ 1,525,192.75** |
| Additions - Half Year Convention | $ 172,749.00 | 2.50% | $ 4,318.73 | |
| | $ 3,246,523.00 | | $ 158,007.43 | **$ 158,007.43** |
| **1997 Ending Accumulated Amortization of CIAC Balance:** | | | | **$ 1,683,200.18** |
| 1998 Beginning CIAC Balance | $ 3,246,523.00 | 5.00% | $ 162,326.15 | **$ 1,683,200.18** |
| Additions - Half Year Convention | $ 571,000.91 | 2.50% | $ 14,275.02 | |
| | $ 3,817,523.91 | | $ 176,601.17 | **$ 176,601.17** |
| **1998 Ending Accumulated Amortization of CIAC Balance:** | | | | **1,859,801.35** |
| 1999 Beginning CIAC Balance | $ 3,817,523.91 | 5.00% | $ 190,876.20 | **$ 1,859,801.35** |
| Additions - Half Year Convention | $ 319,182.03 | 2.50% | $ 7,979.55 | |
| | $ 4,136,705.94 | | $ 198,855.75 | **$ 198,855.75** |
| **1999 Ending Accumulated Amortization of CIAC Balance:** | | | | **2,058,657.09** |
| 2000 Beginning CIAC Balance | $ 4,136,705.94 | 5.00% | $ 206,835.30 | **$ 2,058,657.09** |
| Additions - Half Year Convention | $ 405,077.00 | 2.50% | $ 10,126.93 | |
| | $ 4,541,782.94 | | $ 216,962.22 | **$ 216,962.22** |
| **2000 Ending Accumulated Amortization of CIAC Balance:** | | | | **2,275,619.32** |
| 2001 Beginning CIAC Balance | $ 4,541,782.94 | 5.00% | $ 227,089.15 | **$ 2,275,619.32** |
| Additions - Half Year Convention | $ 489,268.94 | 2.50% | $ 12,231.72 | |
| | $ 5,031,051.88 | | $ 239,320.87 | **$ 239,320.87** |
| **2001 Ending Accumulated Amortization of CIAC Balance:** | | | | **2,514,940.19** |
| 2002 Beginning CIAC Balance | $ 5,031,051.88 | 5.00% | $ 251,552.59 | **$ 2,514,940.19** |
| Additions - Half Year Convention | $ 110,490.00 | 2.50% | $ 2,762.25 | |
| | $ 5,141,541.88 | | $ 254,314.84 | **$ 254,314.84** |
| **2002 Ending Accumulated Amortization of CIAC Balance:** | | | | **2,769,255.03** |

**RATE BASE ADJUSTMENT NO. 4 - CIAC & Amortization of CIAC Continued**

| Amortization of CIAC Calculation | | | | |
|---|---|---|---|---|
| [A] | [B] | [C] | [D] | [E] |
| Year | CIAC Balance Per Staff | Amortization Rate | Amortization of CIAC Col. A - Col. B | Total Amortization of CIAC |
| 2003 Beginning CIAC Balance | $ 5,141,541.88 | 5.00% | $ 257,077.09 | **$ 2,769,255.03** |
| Additions - Half Year Convention | $ 167,581.83 | 2.50% | $ 4,189.55 | |
| | $ 5,309,123.71 | | $ 261,266.64 | **$ 261,266.64** |
| **2003 Ending Accumulated Amortization of CIAC Balance:** | | | | **3,030,521.67** |
| 2004 Beginning CIAC Balance | $ 5,309,123.71 | 5.00% | $ 265,456.19 | **$ 3,030,521.67** |
| Additions - Half Year Convention | $ 231,779.50 | 2.50% | $ 5,794.49 | |
| | $ 5,540,903.21 | | $ 271,250.67 | **$ 271,250.67** |
| **2004 Ending Accumulated Amortization of CIAC Balance:** | | | | **3,301,772.34** |

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Surrebuttal Schedule CSB-9

## RATE BASE ADJUSTMENT NO. 5 - CUSTOMER DEPOSITS

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Customer Deposits - To Remove Refund | $ (3,000) | $ 3,000 | $ - |
| 2 | Customer Deposits - To Reflect Year-End Balance | - | - | - |
| 3 | Total | **$ (3,000)** | **$ 3,000** | **$ -** |

References:

Column A: Company Schedule B-2
Column B: Testimony, CSB, Company Data Request Responses CSB 5.12
Column C: Column [A] + Column [B]

Black Mountain Sewer Company
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Schedule CSB-10

## RATE BASE ADJUSTMENT NO. 6 - DEFERRED INCOME TAXES

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Deferred Income Tax Liability | $ - | 524,000 | $ 524,000 |
| 2 | Deferred Income Tax Asset | - | (360,000) | (360,000) |
| | | **$ -** | **$ 164,000** | **$ 164,000** |

References:

Column A: Company Schedule B-2, Page 1

Column B: Testimony, CSB, Company Data Request Responses to RUCO 2.7

Column C: Column [A] + Column [B]

Black Mountain Sewer Company
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Schedule CSB-11

## RATE BASE ADJUSTMENT NO. 7 - WORKING CAPITAL

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Prepaid Expenses | $ 9,512 | $ (9,512) | $ - |
| 2 | Cash Working Capital Allowance | $ 130,508 | $ (130,508) | $ - |
| 3 | Total Working Capital | $ 140,020 | $ (140,020) | $ - |

References:

Column [A]: Company Schedule B-2
Column [B]: Testimony, CSB
Column [C]: Column [A] + Column [B]

Black Mountain Sewer Company
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Surrebuttal Schedule CSB-12

**OPERATING INCOME - TEST YEAR AND STAFF RECOMMENDED**

| LINE NO. | DESCRIPTION | [A] COMPANY TEST YEAR AS FILED | [B] STAFF TEST YEAR ADJUSTMENTS | [C] STAFF TEST YEAR AS ADJUSTED | [D] STAFF PROPOSED CHANGES | [E] STAFF RECOMMENDED |
|---|---|---|---|---|---|---|
| | *REVENUES:* | | | | | |
| 1 | Flat Rate Revenues | $ 1,191,268 | $ (2,288) | $ 1,188,980 | $ 216,990 | $ 1,405,970 |
| 2 | Other Wastewater Revenues | 16,472 | - | 16,472 | - | 16,472 |
| 3 | *Total Operating Revenues* | $ 1,207,740 | $ (2,288) | $ 1,205,452 | $ 216,990 | $ 1,422,442 |
| | *EXPENSES:* | | | | | |
| 4 | Salaries and Wages | $ - | $ - | $ - | $ - | $ - |
| 5 | Purchased Wastewater Treatment | 162,082 | - | 162,082 | | 162,082 |
| 6 | Sludge Removal Expense | 981 | - | 981 | | 981 |
| 7 | Purchased Power | 47,727 | - | 47,727 | | 47,727 |
| 8 | Fuel for Power Production | - | - | - | | - |
| 9 | Chemicals | 76,612 | - | 76,612 | | 76,612 |
| 10 | Materials and Supplies | 30,420 | (3,624) | 26,796 | | 26,796 |
| 11 | Contractual Services - Professional | 171,683 | (12,433) | 159,250 | | 159,250 |
| 12 | Contractual Services - Testing | 11,000 | - | 11,000 | | 11,000 |
| 13 | Contractual Services - Other | 226,595 | (22,270) | 204,325 | | 204,325 |
| 14 | Rental Expense | 10,825 | (566) | 10,259 | - | 10,259 |
| 15 | Transportation Expense | 4,870 | (2,327) | 2,543 | - | 2,543 |
| 16 | Insurance - General Liability | 16,204 | (596) | 15,608 | - | 15,608 |
| 17 | Regulatory Commission Expense | 30,000 | - | 30,000 | - | 30,000 |
| 18 | Miscellaneous Expense | 77,401 | (13,550) | 63,851 | - | 63,851 |
| 19 | Scottsdale Capacity Operating Lease | 189,622 | (27,801) | 161,821 | - | 161,821 |
| 20 | Depreciation | 126,749 | (50,053) | 76,696 | - | 76,696 |
| 21 | Taxes Other Than Income | - | - | - | - | - |
| 22 | Property Taxes | 45,745 | 568 | 46,313 | - | 46,313 |
| 23 | Income Taxes | (6,544) | 73,299 | 66,755 | 91,525 | 158,280 |
| 24 | **Total Operating Expenses** | $ 1,221,972 | $ (59,354) | $ 1,162,618 | $ 91,525 | $ 1,254,143 |
| 25 | **Operating Income (Loss)** | $ (14,232) | $ 57,066 | $ 42,834 | $ 125,465 | $ 168,299 |

References:
Column (A): Company Schedule C-1, Page 2
Column (B): Schedule CSB-8
Column (C): Column (A) + Column (B)
Column (D): Schedules CSB-1 and CSB-2
Column (E): Column (C) + Column (D)

Black Mountain Sewer Company
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Surrebuttal Schedule CSB-13

SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] ADJ #1 Expensed Plant | [C] ADJ #2 Affiliate Expenses | [D] ADJ #3 Bad Debt Expense | [F] ADJ #4 Depreciation Expense | [G] ADJ #5 NonRecurring & Other Exp | [H] ADJ #6 Scottsdale Opera Lease | [I] ADJ #7 Food & Beverages | [J] ADJ #8 Property Taxes | [J] ADJ #9 Income Tax Expense | [L] ADJ #10 ACC Assessment | [M] ADJ #11 Rate Case Expense | [N] STAFF ADJUSTED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *REVENUES:* | | | | | | | | | | | | | |
| 1 | Flat Rate Revenues | $ 1,191,268 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ (2,288) | $ - | $ 1,188,980 |
| 2 | Other Wastewater Revenues | 16,472 | - | - | - | - | - | - | - | - | - | - | - | 16,472 |
| 3 | **Total Revenues** | $ 1,207,740 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ (2,288) | $ - | $ 1,205,452 |
| | *OPERATING EXPENSES:* | | | | | | | | | | | | | |
| 4 | Salaries and Wages | $ - | - | - | - | - | - | - | - | - | - | - | - | $ - |
| 5 | Purchased Wastewater Treatment | 162,082 | - | - | - | - | - | - | - | - | - | - | - | 162,082 |
| 6 | Sludge Removal Expense | 981 | - | - | - | - | - | - | - | - | - | - | - | 981 |
| 7 | Purchased Power | 47,727 | - | - | - | - | - | - | - | - | - | - | - | 47,727 |
| 8 | Fuel for Power Production | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | Chemicals | 76,612 | - | - | - | - | - | - | - | - | - | - | - | 76,612 |
| 10 | Materials and Supplies | 30,420 | (1,674) | (1,472) | - | - | - | - | (478) | - | - | - | - | 26,796 |
| 11 | Contractual Services - Professional | 171,683 | - | (9,205) | - | - | (3,228) | - | - | - | - | - | - | 159,250 |
| 12 | Contractual Services - Testing | 11,000 | - | - | - | - | - | - | - | - | - | - | - | 11,000 |
| 13 | Contractual Services - Other | 226,595 | (11,723) | (10,361) | - | - | - | - | (186) | - | - | - | - | 204,325 |
| 14 | Rents Expense | 10,825 | (566) | - | - | - | - | - | - | - | - | - | - | 10,259 |
| 15 | Transportation Expense | 4,870 | - | (127) | - | - | (2,200) | - | - | - | - | - | - | 2,543 |
| 16 | Insurance - General Liability | 16,204 | - | (596) | - | - | - | - | - | - | - | - | - | 15,608 |
| 17 | Regulatory Commission Expense | 30,000 | - | - | - | - | - | - | - | - | - | - | 1,200 | 31,200 |
| 18 | Miscellaneous Expense | 77,401 | (3,385) | (3,644) | (4,233) | - | - | - | - | - | - | (2,288) | - | 63,851 |
| 19 | Scottsdale Capacity Operating Lease | 189,622 | - | - | - | - | - | (27,801) | - | - | - | - | - | 161,821 |
| 20 | Depreciation | 126,749 | - | - | - | (50,053) | - | - | - | - | - | - | - | 76,696 |
| 21 | Taxes Other Than Income | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 22 | Property Taxes | 45,745 | - | - | - | - | - | - | - | 568 | - | - | - | 46,313 |
| 23 | Income Taxes | (6,544) | - | - | - | - | - | - | - | - | 73,299 | - | - | 66,755 |
| 24 | **Total Operating Expenses** | $ 1,221,972 | $ (17,348) | $ (25,406) | $ (4,233) | $ (50,053) | $ (5,428) | $ (27,801) | $ (664) | $ 568 | $ 73,299 | $ (2,288) | $ 1,200 | $ 1,163,818 |
| 25 | **Operating Income (Loss)** | $ (14,232) | $ 17,348 | $ 25,406 | $ 4,233 | $ 50,053 | $ 5,428 | $ 27,801 | $ 664 | $ (568) | $ (73,299) | $ 0 | $ (1,200) | $ 41,634 |

| ADJ No. | | References: |
|---|---|---|
| 1 | Expensed Plant | Schedule CSB-14 |
| 2 | Affiliate Expenses | Schedule CSB-15 |
| 3 | Bad Debt Expense | Schedule CSB-16 |
| 4 | Depreciation Expense | Schedule CSB-17 |
| 5 | Normalized Expenses | Schedule CSB-18 |
| 6 | Scottsdale Operating Lease Payments | Schedule CSB-19 |
| 7 | Food and Beverages | Schedule CSB-20 |
| 8 | Property Tax Expense | Schedule CSB-21 |
| 9 | Income Tax Expense | Schedule CSB-22 |
| 10 | ACC Assessment | Schedule CSB-23 |

## OPERATING INCOME ADJUSTMENT NO. 1 - EXPENSED PLANT

| LINE NO. | Description | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Contractual Services, Other | $ 226,595 | $ (11,723) | $ 214,872 |
| 2 | Rents Expense | $ 10,825 | $ (566) | $ 10,259 |
| 3 | Miscellaneous Expense | $ 77,401 | $ (3,385) | $ 74,016 |
| 4 | Material and Supplies Expense | $ 30,420 | $ (1,674) | $ 28,746 |
| 5 | Total | $ 345,241 | $ (17,348) | $ 327,893 |

**PLANT COST REMOVED FROM CONTRACTUAL SERVICES, OTHER EXPENSE (CSB 1.37)**

| | Acct. No. | Vendor Name | Description | Amount |
|---|---|---|---|---|
| 6 | 361-Collection Sewers | Jensen Sys. Engineerin | Algonquin Indian Basket Alarm | $ 1,499.01 |
| 7 | 361-Collection Sewers | Keller Equipment Co | Pull and Install Motors | $ 1,947.71 |
| 8 | 361-Collection Sewers | Keller Equipment Co | Rebuild Motor/Pump | $ 1,119.65 |
| 9 | 361-Collection Sewers | KSK Electric | Replace Meter Socket | $ 1,315.00 |
| 10 | 361-Collection Sewers | LTC, Inc. | Concrete Pad & Drain for Manhole | $ 1,404.92 |
| 11 | | | Subtotal | $ 7,286.29 |
| 12 | 371-Effluent Pumping Pla | Keller Equipment Co | Change out Pumps | $ 551.62 |
| 13 | 371-Effluent Pumping Pla | Keller Equipment Co | Pull Pump. Set New Pump | $ 1,095.40 |
| 14 | | | Subtotal | $ 1,647.02 |
| 15 | 381-Plant Sewers | Foster Elec. Motor Serv | Install Outlets in Vault | $ 589.57 |
| 16 | 381-Plant Sewers | KSK Electric | Boulder Facility Lighting Repair Proj. | $ 2,200.00 |
| 17 | | | Subtotal | $ 2,789.57 |
| 18 | | | Total | $ 11,722.88 |

**PLANT COSTS REMOVED FROM RENTS EXPENSE (CSB 1.38)**

| | Acct. No. | Vendor Name | Description | Amount |
|---|---|---|---|---|
| 21 | 371-Effluent Pumping Pla | Pump Systems, Inc. | Replace Pump | $ 566.13 |
| 22 | | | Total | $ 566.13 |

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB, Company Data Request Responses CSB 1.37, 1.38, 1.40 & 7.13
Column C: Column [A] + Column [B]

## OPERATING INCOME ADJUSTMENT NO. 1 - EXPENSED PLANT CONTINUED

| LINE NO. | PLANT COSTS REMOVED FROM MISCELLANEOUS EXPENSE (CSB 1.40) | | | | |
|---|---|---|---|---|---|
| | Maricopa County Environ. Serv. Dept, Approval to Construct Expedited Fees | | | | |
| | Acct. No | Project Title | Description | Amount | |
| 1 | 389-Other Plant & Misc E | Boulders WWTP Bypass | Reclaimed Water Line | $ 500.00 | |
| 2 | 389-Other Plant & Misc E | Boulders Effluent Pump | Addition of pumps | $ - | Removed $700 |
| 3 | 371-Effluent Pumping Pla | Indian Basket Lift Station | Replace Existing Lift Station | $ 700.00 | |
| 4 | 389-Other Plant & Misc E | Boulders WWTP Bypass | Add Stucture and Manhole | $ - | Removed $1,200 |
| 5 | | | Subtotal | $ 1,200.00 | |
| 6 | 389-Other Plant & Misc E | Safety Equipment | Company Response to CSB 2.13b | $ 2,184.75 | |
| 7 | | | Total | $ 3,384.75 | |

| | PLANT COSTS REMOVED FROM MISC. EXP., MATERIALS & SUPPLIES (CSB 7.13) | | | |
|---|---|---|---|---|
| | Acct. No. | Vendor Name | Description | Amount |
| 8 | 389-Other Plant & Misc E | Arizona Pneumatic Sys | Blower | $ 1,674.47 |
| 9 | | | Total | $ 1,674.47 |

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Schedule CSB-15

## OPERATING INCOME ADJUSTMENT NO. 2 - AFFILIATE EXPENSES

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Materials and Supplies Expense | $ 30,420 | $ (1,472) | $ 28,948 |
| 2 | Contractual Services - Professional Expense | 171,683 | (9,205) | 162,478 |
| 3 | Contractual Services - Other Expense | 226,595 | (10,361) | 216,234 |
| 4 | Transportation Expense | 4,870 | (127) | 4,743 |
| 5 | Insurance - General Liability Expense | 16,204 | (596) | 15,608 |
| 6 | Miscellaneous Expense | 30,420 | (3,644) | 26,776 |
| 7 | Total | **$ 480,192** | **$ (25,406)** | **$ 454,786** |

| | Description | Affiliate Phone Charges Summary | | |
|---|---|---|---|---|
| 8 | Miscellaneous Expense, AT&T Long Distance | $ 2,186 | $ - | $ 2,186 |
| 9 | Misc Exp, Long Distance - Direct Charge to Gold Canyon | 161 | (161) | - |
| 10 | Miscellaneous Exp, AT&T Long Distance - Direct Charged to Texas | | (514) | (514) |
| 11 | Misc Exp, Long Distance - Allocation to 3 Affiliated Companies | - | (1,254) | (1,254) |
| 12 | **Total** | **$ 2,346** | **$ (1,928)** | **$ 418** |

| | Description | Affiliate Paging Charges Summary | | |
|---|---|---|---|---|
| 13 | Miscellaneous Expense, Teletouch Paging | $ 2,651 | $ - | $ 2,651 |
| 14 | Misc Exp, Paging Services - Direct Charge to Texas Affiliates | - | (1,716) | (1,716) |
| 15 | **Total** | **$ 2,651** | **$ (1,716)** | **$ 935** |

| | | Profit Included In Affiliate Billings | | |
|---|---|---|---|---|
| 16 | Materials and Supplies | $ 22,639 | 6.50% | $ 1,472 |
| 17 | Contractual Services - Professional | 141,623 | 6.50% | $ 9,205 |
| 18 | Contractual Services - Other | 159,402 | 6.50% | $ 10,361 |
| 19 | Transportation Expense | 1,952 | 6.50% | $ 127 |
| 20 | Insurance - General Liability | 9,173 | 6.50% | $ 596 |
| 21 | | **$ 334,789** | | **$ 21,761** |

References:

Column A: Company Data Request Response CSB 1.40
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

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Surrebuttal Schedule CSB-16

## OPERATING INCOME ADJUSTMENT NO. 3 - BAD DEBT EXPENSE

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Bad Debt Expense - Direct Testimony | $ 5,926 | $ (5,926) | $ - |
| 2 | To Accept Company's Rebuttal Adjustment | | 1,693 | 1,693 |
| 3 | Bad Debt Expense - Surrebuttal Testimony | $ 5,926 | $ (4,233) | $ 1,693 |

References:

Column A: Company Data Request Response CSB 1.30 & 5.9
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Black Mountain Sewer Company
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Test Year Ended December 31, 2002

Surrebuttal Schedule CSB-17

**OPERATING INCOME ADJUSTMENT NO. 4 - DEPRECIATION EXPENSE ON TEST YEAR PLANT**

| LINE NO. | DESCRIPTION | [A] PLANT In SERVICE Per Staff | [B] NonDepreciable or Fully Depreciated PLANT | [C] DEPRECIABLE PLANT (Col A - Col B) | [D] DEPRECIATION RATE | [E] DEPRECIATION EXPENSE (Col C x Col D) |
|---|---|---|---|---|---|---|
| 1 | 351 - Organization | $ - | $ - | $ - | 0.00% | $ - |
| 2 | 352 - Franchises | $ - | $ - | $ - | 0.00% | $ - |
| 3 | 353 - Land and Land Rights | $ 913,767 | $ 913,767 | $ (0) | 0.00% | $ - |
| 4 | 354 - Structures and Improvements | $ 1,239,905 | $ - | $ 1,239,905 | 3.33% | $ 41,289 |
| 5 | 355 - Power Generation Equipment | $ - | $ - | $ - | 5.00% | $ - |
| 6 | 360 - Collection Services - Force | $ 228,580 | $ - | $ 228,580 | 2.00% | $ 4,572 |
| 7 | 361 - Collection Services - Gravity | $ 3,614,545 | $ - | $ 3,614,545 | 2.00% | $ 72,291 |
| 8 | 362 - Special Collecting Structures | $ - | $ - | $ - | 2.00% | $ - |
| 9 | 363 - Services to Customers | $ 157,218 | $ - | $ 157,218 | 2.00% | $ 3,144 |
| 10 | 364 - Flow Measuring Devices | $ 39,829 | $ - | $ 39,829 | 10.00% | $ 3,983 |
| 11 | 365 - Flow Measuring Installations | $ 156,205 | $ - | $ 156,205 | 10.00% | $ 15,620 |
| 12 | 370 - Receiving Wells | $ 696,137 | $ - | $ 696,137 | 3.33% | $ 23,181 |
| 13 | 371 - Effluent Pumping Equipment | $ 453,558 | $ - | $ 453,558 | 12.50% | $ 56,695 |
| 14 | 380 - Treatment and Disposal Equipment | $ - | $ - | $ - | 5.00% | $ - |
| 15 | 381 - Plant Sewers | $ 123,289 | $ - | $ 123,289 | 5.00% | $ 6,164 |
| 16 | 382 - Outfall Sewer Lines | $ - | $ - | $ - | 3.33% | $ - |
| 17 | 389 - Other Plant and Miscellaneous Equip | $ 738,678 | $ - | $ 738,678 | 6.67% | $ 49,270 |
| 18 | 390 - Office Furniture and Equipment | $ 220,360 | $ - | $ 220,360 | 6.67% | $ 14,698 |
| 19 | 391 - Transportation Equipment | $ 87,811 | $ - | $ 87,811 | 20.00% | $ 17,562 |
| 20 | 393 - Tools, Shop and Garage Equipment | $ - | $ - | $ - | 5.00% | $ - |
| 21 | 394 - Laboratory Equipment | $ - | $ - | $ - | 10.00% | $ - |
| 22 | 395 - Power Operated Equipment | $ - | $ - | $ - | 5.00% | $ - |
| 23 | 398 - Other Tangible Equipment | $ 7,279 | $ - | $ 7,279 | 10.00% | $ 728 |
| 24 | Total Plant | $ 8,677,160 | $ 913,767 | $ 7,763,393 | | $ 267,909 |

| | | |
|---|---|---|
| 25 | Composite Depreciation Rate (Depr Exp / Depreciable Plant): | 3.45% |
| 26 | CIAC: | $ 5,540,903 |
| 27 | Amortization of CIAC (Line 25 x Line 26): | $ 191,212 |
| 28 | Depreciation Expense Before Amortization of CIAC: | $ 267,909 |
| 29 | Less Amortization of CIAC: | $ 191,212 |
| 30 | Test Year Depreciation Expense - Staff: | $ 76,696 |
| 31 | Depreciation Expense - Company: | $ 126,749 |
| 32 | ***Staff's Total Adjustment:*** | ***$ (50,053)*** |

References:
Column [A]: Schedule CSB-4
Column [B]: Staff Workpapers
Column [C]: Column [A] - Column [B]
Column [D]: Engineering Staff Report
Column [E]: Column [C] x Column [D]

Black Mountain Sewer Company
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Schedule CSB-18

## OPERATING INCOME ADJUSTMENT NO. 5 - NONRECURRING & OTHER

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Transportation Expense | $ 4,870 | $ (2,200) | $ 2,670 |
| 2 | Contractual Services, Professional | $ 171,683 | $ (3,228) | $ 168,455 |
| | | $ 176,553 | $ (5,428) | $ 171,125 |

References:

Column A: Company Data Request Response CSB 5.8 and 9.2
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
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Schedule CSB-19

## OPERATING INCOME ADJUSTMENT NO. 6 - OPERATING LEASE

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | **Treatment Capacity Costs Per Dec. 59944** | $ 1,260,000 | $ - | $ 1,260,000 |
| 2 | Less Amount Funded by CIAC | $ (300,000) | $ - | $ (300,000) |
| 3 | Net Amount Funded by Debt | $ 960,000 | $ - | $ 960,000 |
| 4 | 2006 Principle | $ 38,448 | $ - | $ 38,448 |
| 5 | Income Tax Factor | 1.4805 | (0.4805) | 1.0000 |
| 6 | 2006 Principle Plus Taxes | $ 56,922 | $ (18,474) | $ 38,448 |
| 7 | Add: 2006 Interest | $ 67,952 | $ - | $ 67,952 |
| 8 | **Annual "Lease" Expense** | **$ 124,874** | **$ (18,474)** | **$ 106,400** |
| 9 | **Treatment Capacity Costs Per Dec. 60240** | $ 653,706 | $ - | $ 653,706 |
| 10 | Less Amount Funded by CIAC | $ (153,706) | $ - | $ (153,706) |
| 11 | Net Amount Funded by Debt | $ 500,000 | $ - | $ 500,000 |
| 12 | 2006 Principle | $ 19,411 | $ - | $ 19,411 |
| 13 | Income Tax Factor | 1.4805 | (0.4805) | 1.0000 |
| 14 | 2006 Principle Plus Taxes | $ 28,738 | $ (9,327) | $ 19,411 |
| 15 | Add: 2006 Interest | $ 36,010 | $ - | $ 36,010 |
| 16 | **Annual "Lease" Expense** | **$ 64,748** | **$ (9,327)** | **$ 55,421** |
| 17 | **Total Annual "Lease" Expense** | **$ 189,622** | **$ (27,801)** | **$ 161,821** |

References:

Column A: Company Schedule C-2, Page 4
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Black Mountain Sewer Company
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Schedule CSB-20

## OPERATING INCOME ADJUSTMENT NO. 7 - FOOD AND BEVERAGES

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Contractual Services, Other | $ 226,595 | $ (478) | $ 226,117 |
| 2 | Material and Supplies Expense | 77,401 | (186) | 77,215 |
| 3 | | **$ 303,996** | **$ (664)** | **$ 303,332** |

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB, Company Data Request Responses CSB 1.43 and 7.15
Column C: Column [A] + Column [B]

1

References:

Column A: Company Data Request Response CSB 1-3 and 2-9
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

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Surrebuttal Schedule CSB-21

## OPERATING INCOME ADJUSTMENT NO. 8 - PROPERTY TAX EXPENSE

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENT | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | 2004 Staff Adjusted Test Year Revenues | | | $ 1,205,452 |
| 2 | Weight Factor | | | $ 2 |
| 3 | Subtotal (Line 1 x Line 2) | | | $ 2,410,904 |
| 4 | Staff Recommended Revenue | | | $ 1,422,442 |
| 5 | Subtotal (Line 4 + Line 5) | | | $ 3,833,346 |
| 6 | Number of Years | | | $ 3 |
| 7 | Three Year Average (Line 5 / Line 6) | | | $ 1,277,782 |
| 8 | Department of Revenue Multiplier | | | 2 |
| 9 | Revenue Base Value (Line 7 x Line 8) | | | $ 2,555,564 |
| 10 | Plus: 10% of 2004 CWIP | | | $ - |
| 11 | Less: Net Book Value of Licensed Vehicles | | | $ 7,279 |
| 12 | Full Cash Value (Line 9 + Line 10 - Line 11) | | | $ 2,548,285 |
| 13 | Assessment Ratio | | | 0.24 |
| 14 | Assessed Value (Line 12 x Line 13) | | | $ 611,588 |
| 15 | Composite Property Tax Rate | | | 0.07573 |
| 16 | **Staff Proposed Property Tax Expense (Line 14 x Line 15)** | **$ 45,745** | **$ 568** | **$ 46,313** |

References:
Column A: Company Schedule C-1, Page 2
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

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Schedule CSB-22

**OPERATING INCOME ADJUSTMENT NO. 9 - TEST YEAR INCOME TAXES**

| LINE NO. | DESCRIPTION | (A) | (B) |
|---|---|---|---|
| | *Calculation of Income Tax:* | Test Year | |
| 1 | Revenue (Schedule CSB-9, Line 9) | $ 1,205,452 | |
| 2 | Less: Operating Expenses - Excluding Income Taxes & Lease Expense | $ 935,242 | |
| 3 | Less: Synchronized Interest (L17) | $ 77,137 | |
| 4 | Arizona Taxable Income (L1- L2 - L3) | $ 193,073 | |
| 5 | Arizona State Income Tax Rate | 6.968% | |
| 6 | Arizona Income Tax (L4 x L5) | | $ 13,453 |
| 7 | Federal Taxable Income (L4 - L6) | $ 179,619 | |
| 8 | Federal Tax on First Income Bracket ($1 - $50,000) @ 15% | $ 7,500 | |
| 9 | Federal Tax on Second Income Bracket ($51,001 - $75,000) @ 25% | $ 6,250 | |
| 10 | Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34% | $ 8,500 | |
| 11 | Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39% | $ 31,052 | |
| 12 | Federal Tax on Fifth Income Bracket ($335,001 - $10,000,000) @ 34% | $ - | |
| 13 | Total Federal Income Tax | | $ 53,302 |
| 14 | Combined Federal and State Income Tax (L6 + L13) | | $ 66,755 |
| | *Calculation of Interest Synchronization:* | | |
| 15 | Rate Base (Schedule CSB-13, Col. (C), Line 16) | $ 1,753,118 | |
| 16 | Weighted Average Cost of Debt | 4.40% | |
| 17 | Synchronized Interest (L16 x L17) | $ 77,137 | |
| 18 | Income Tax - Per Staff | $ 66,755 | |
| 19 | Income Tax - Per Company | $ (6,544) | |
| 20 | **Staff Adjustment** | **$ 73,299** | |

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Surrebuttal Schedule CSB-23

## OPERATING INCOME ADJUSTMENT NO. 10 - ACC ASSESSMENT

| | | [A] | [B] | [C] |
|---|---|---|---|---|
| LINE NO. | DESCRIPTION | COMPANY AS FILED | STAFF ADJUSTMENTS | STAFF AS ADJUSTED |
| 1 | ACC Assessment | $ 2,288 | $ (2,288) | $ - |

References:

Column A: Company Data Request Response CSB 1.30
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

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Schedule CSB-24

## OPERATING INCOME ADJUSTMENT NO. 11 - RATE CASE EXPENSE

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Additional Rate Case Expense | $ 30,000 | $ (25,200) | $ 4,800 |
| 2 | Number of Years Amortized | 4 | 4 | 4 |
| 3 | Additional Annual Rate Case Expense (L1 / L4) | $ 7,500 | $ (6,300) | $ 1,200 |

References:

Column A: Company Data Request Rebuttal Testimony
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Black Mountain Sewer Company
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## RATE DESIGN

| | Direct Present Rates | Direct Company Proposed | Surrebuttal Staff Recommended |
|---|---|---|---|
| **Residential Service-Per Month** | $38.00 | $ 43.19 | $46.53 |
| **Commercial, Regular (c)** | $ 0.15236 | $ 0.01732 | $ 0.18658 |

| **Commercial - Special Rate** | Present Rates | | | Company Proposed | | | Staff Recom | |
|---|---|---|---|---|---|---|---|---|
| Name of Business | Gallons Per Day | Rate Per Gallon | Monthly Charge | Gallons Per Day | Rate Per Gallon | Monthly Charge | Gallons Per Day | Rate Pe Gallon |
| BH Enterprises-West | 2,525 | $0.11685 | $295.05 | 2,525 | $0.13280 | $335.32 | 2,525 | $0.1430 |
| BH Enterprises-East | 1,400 | $0.11685 | $163.59 | 1,400 | $0.13280 | $185.92 | 1,400 | $0.1430 |
| Barb's Pet Grooming | 250 | $0.11685 | $29.21 | 250 | $0.13280 | $33.20 | 250 | $0.1430 |
| Boulder's Resort | 29,345 | $0.11843 | $3,475.33 | 29,345 | $0.13459 | $3,949.54 | 29,345 | $0.1450 |
| Carefree Dental | 1,625 | $0.11685 | $189.88 | 1,625 | $0.13280 | $215.80 | 1,625 | $0.1430 |
| Ridgecrest Realty | 450 | $0.11818 | $53.18 | 450 | $0.13431 | $60.44 | 450 | $0.1447 |
| Desert Forest | 7,000 | $0.13609 | $952.63 | 7,000 | $0.15467 | $1,082.69 | 7,000 | $0.1666 |
| Desert Hills Pharmacy | 800 | $0.14206 | $113.65 | 800 | $0.16145 | $129.16 | 800 | $0.1739 |
| El Pedregal | 15,787 | $0.11685 | $1,844.71 | 15,787 | $0.13280 | $2,096.51 | 15,787 | $0.1430 |
| Lemon Tree | 300 | $0.11400 | $43.20 | 300 | $0.12956 | $43.20 | 300 | $0.1396 |
| Body Shop | 1,000 | $0.14544 | $145.44 | 1,000 | $0.16529 | $165.29 | 1,000 | $0.1781 |
| Spanish Village | 4,985 | $0.11685 | $582.50 | 4,985 | $0.13280 | $662.01 | 4,985 | $0.1430 |
| Boulder's Club | 1,200 | $0.11685 | $140.22 | 1,200 | $0.13280 | $159.36 | 1,200 | $0.1430 |
| Anthony Vuitaggio | 300 | $0.12987 | $38.96 | 300 | $0.14760 | $44.28 | 300 | $0.1590 |

**Effluent Sales**
Per thousand gallons $0.374400

| **Service Charges:** | Present Rates | Company Proposed | Staff Recommended |
|---|---|---|---|
| Establishment | $ 25.00 | $ 25.00 | $ 25.00 |
| Re-establishment | $ 25.00 | $ 25.00 | $ 25.00 |
| Re-connection | No Charge | No Charge | No Charge |
| Minimum Deposit (Residential) | (a) | (a) | (a) |
| Minimum Deposit (Non-Residential) | (a) | (a) | (a) |
| Deposit Interest | N/A | N/A | (a) |
| NSF Check Charge | $ 10.00 | $ 10.00 | $ 10.00 |
| Deferred Paymnt Finance Charge | 1.50% | 1.50% | 1.50% |
| Late Charge | 1.50% | 1.50% | 1.50% |
| Main Extension Tariff **(b)** | Cost | Cost | Cost |
| Hook-Up Fee for New Service **(c)** | $ 6.47 | $ 6.47 | Discontinue |

**(a)** Per A.A.C. R14-2-603B: Residential - two times average bill, Non-residential - two and one-half times average bill
**(b)** Per A.A.C. R14-2-406B
**(c)** Per Gallon per Day. Wastewater flows are based on Engineering Bulletin 12, Table 1.
N/A Not included in current or proposed tariff.

**ARIZONA CORPORATION COMMISSION STAFF'S RESPONSES TO BLACK MOUNTAIN SEWER COMPANY'S THIRD SET OF DATA REQUESTS DOCKET NO. SW-02361A-05-0657 MARCH 30, 2006**

3.1 **Company's follow-up question to Staff's Response to Data Request 1.1:** Please identify all the other "utilities' affiliates" that do not charge a profit which Staff considered in its analysis. In addition, what "impact" did Staff identify the inclusion of "affiliate profit" had on owners and customers?

**Answer:**

In Docket No. WS-01025A-03-0350, Ajo Improvement Company removed the "10% Phelps Dodge Adder" (Company provided work paper No. 000015) in the calculation of the cost of treated and untreated water. Sierra Southwest, the unregulated affiliate of AEPCO and Southwest Transmission does not charge a profit to AEPCO nor to Southwest Transmission. Staff is not aware of any regulated cooperative that is charged a profit from its affiliates.

The impact of including "affiliate profit" in the cost of service would have the effect of enriching shareholders at the expense of ratepayers via rates in excess of cost.

3.2 **Company's follow-up question to Staff's Response to Data Request 1.8:** Staff admits that benefits are realized by customers from "some" services provide by affiliated companies. Please identify which services provide benefits to ratepayers.

**Answer:**

Staff has not tracked individual services provided by affiliates to determine whether ratepayers received benefits from those services. However, unless Staff removed costs for those services, the implication is that ratepayers did receive a benefit.

3.3 **Company's follow-up question to Staff's response to Data Request 2.13:** Staff is denying this statement by not admitting to it and the instructions provided, as well as established discovery practice require Staff to explain the basis for denying any request for admission. Please have your client explain the basis for its denial of DR 2.13.

**Answer:**

It does not necessarily follow that rate base recognition of plant in an amount that is not considered substantial has an associated revenue requirement that is not substantial. In an effort to further accommodate the Company's request for additional information, Staff made the following reasonable order of magnitude calculation of the revenue impact of

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recognizing $94,297 of PTY plant is over $21,000 as follows: ($94,297 x 9.60% ROR x 1.76213 GRCF) + ($24,760 x 2% depreciation rate) + ($69,590 x 6.67 depreciation rate) = $21,087.85. To put this in perspective, $21,087.85 is about 1.55% of Staff's recommended revenue requirement.

3.4 **Company's follow-up question to Staff's response to Data Request 2.21:** Staff has simply refused to answer 2.21--the response provided is entirely non-responsive.

**Answer:**

The Company withdrew its follow-up data request to 2.21 in an email dated March 28, 2006.

**ARIZONA ELECTRIC POWER COOPERATIVE, INC.**
**RESPONSE TO THIRD SET OF DATA REQUESTS OF**
**ARIZONA CORPORATION COMMISSION STAFF**
**Docket No. E-01773A-04-0528**
**October 1, 2004**

CSB 3-26 Affiliates, Profit - Please state the return or "profit" component included in the billings of each affiliate. Please explain how such profit factors were determined, how the amounts are accounted for and the actual profits included in test year billings.

Respondent: Gary E. Pierson, Manager of Financial Services

Response: See the clarification of the term "affiliates" in the response to CSB 3-20. In general, all services provided among AEPCO, SWTC and Sierra Southwest have no return or "profit" component included in the billings and are based upon a straight recovery of cost. For example, staffing services provided by Sierra Southwest to AEPCO and SWTC are provided with no return or "profit" component and are based upon a straight recovery of costs. However, AEPCO's purchase of transmission service from SWTC is pursuant to the OATT at rates specified for the service which does include a TIER/DSC allowance. Similarly, AEPCO's provision of generation-related ancillary services to SWTC will be on pricing terms as specified in the OATT.

AJO IMPROVEMENT COMPANY
TEST YEAR ENDED 12-31-02

Exhibit SLH-3
Page 1 of 2

WATER DEPARTMENT
COST OF TREATED
AND UNTREATED WATER

| DESCRIPTION | TOTAL | TREATED | UNTREAT. |
|---|---|---|---|
| Water Sales: | | | |
| Gallons Sold | 206,024,846 | 162,358,586 | 43,666,260 |
| Percent | 100.00% | 78.81% | 21.19% |
| Purchased Water Cost: | | | |
| Raw Water @ $1.08 | $232,392 | $183,137 | $49,255 |
| PD Adder - 10% | A 23,239 | 18,314 | 4,925 |
| Total Cost - Raw Water | $255,631 | $201,451 | $54,180 |
| Treatment Costs | 266,682 | 266,682 | |
| PD Adder - 10% | B 26,669 | 26,669 | |
| Total Treatment Costs | $293,351 | $293,351 | $0 |
| Total Purchased Water Costs | $548,982 | $494,802 | $54,180 |
| Pro Forma Adjustments: | | | |
| Raw Water | ($21,136) | ($16,656) | ($4,480) |
| PD Adder - 10% | A+B (49,908) | (44,983) | (4,925) |
| Total Pro Forma Adjusments | ($71,044) | ($61,639) | ($9,405) |
| Adjusted Purchased Water Cost | $477,938 | $433,163 | $44,775 |
| Cost Per 1,000Gallons Sold | $2.32 | $2.67 | $1.03 |

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AJO IM. JVEMENT COMPANY
TEST YEAR ENDED 12-31-02

WATER DEPARTMENT

PURCHASED WATER
WATER TREATMENT CHGS.

| DESCRIPTION | TOTAL 2002 | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | DEC |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Salaries/Expempt - Operating | $94,484 | $9,055 | $6,936 | $8,146 | $8,552 | $9,648 | $5,842 | $4,867 | $5,673 | $6,534 | $8,105 | $11,974 | $9,152 |
| Insurance/Flex - Hourly | 666 | | | | | | | | | | | 666 | |
| Reagents - Acid | 218 | | | | | 112 | | | | 106 | | | |
| Water Treatment Chemicals | 38,101 | 1,264 | 1,309 | 9,038 | 17,487 | 905 | 1,047 | 1,448 | 1,221 | 678 | 1,221 | 1,827 | 656 |
| Freight Allocation - Acid Sales | 950 | | | | | 473 | | | | | 477 | | |
| Other Operating Supplies | 5,267 | 249 | 203 | 388 | 14 | | | 162 | 627 | 695 | 1,342 | 377 | 1,210 |
| Maintenance & Repair Parts | 1,247 | | | | | | | | | 1,247 | | | |
| Outside Services - Other (1) | 82,220 | 11,473 | 4,222 | 4,895 | 5,301 | 6,389 | 5,855 | 12,288 | 5,767 | 8,455 | 5,503 | 4,660 | 7,412 |
| Employee Travel | 100 | | | | | | | | 100 | | | | |
| Employee Meals | 12 | | | | | | | | 12 | | | | |
| Allocation of Power | 14,865 | 1,173 | 763 | 1,395 | 1,079 | 1,070 | 1,243 | 1,188 | 956 | 1,098 | 761 | 1,049 | 3,090 |
| Allocation of Steam (2) | 44,182 | 16,052 | 12,770 | 15,360 | | | | | | | | | |
| Allocation of Benefits | 28,549 | 2,749 | 2,110 | 2,473 | 2,594 | 2,923 | 1,608 | 1,460 | 1,702 | 1,960 | 2,432 | 3,792 | 2,746 |
| Adjust. For Expense Elements | (7,322) | | | (7,322) | | | | | | | | | |
| | (44,182) | | | (44,182) | | | | | | | | | |
| | 7,332 | | | 7,332 | | | | | | | | | |
| | 44,182 | | | 44,182 | | | | | | | | | |
| Allocation to Water Treat. (2) | 188,210 | | | | 21,311 | 23,207 | 22,999 | 30,192 | 23,996 | 22,015 | 18,151 | 13,214 | 13,125 |
| Transfer to BS - CIP Project (3) | 11,203 | 4,202 | 2,831 | 4,170 | | | | | | | | | |
| Adjust. For Expense Elements | (11,203) | | | (11,203) | | | | | | | | | |
| | 11,203 | | | 11,203 | | | | | | | | | |
| Transfer to BS - Accts. Rec.(3) | 38,705 | | | | 5,634 | 4,473 | 3,859 | 5,161 | 4,005 | 4,279 | 3,799 | 3,756 | 3,70[illegible] |
| Total | $548,989 | $46,217 | $31,144 | $45,875 | $61,972 | $49,200 | $42,453 | $56,766 | $44,059 | $47,067 | $41,791 | $41,315 | $41,130 |

NOTES:
(1) Charges From Maintenance Contracting Firm
(2) Purchased Raw Water from PD @ $1.08 per thousand gallons
(3) PD Add-On (10%) to Direct Charges

Exhibit SLH-3
Page 2 of 2

000016

**BLACK MOUNTAIN SEWER COMPANY**
**2005 GENERAL RATE CASE**
**DOCKET NO. SW-02361A-05-0657**
**RESPONSE TO STAFF'S FIRST SET OF DATA REQUESTS**

Response provided by: Gerald Tremblay

Title: Controller, Algonquin Power

Company Name: Black Mountain Sewer Company
Address: 111 W. Wigwam Blvd, Suite B
Litchfield Park, AZ 85340

Company Response Number: CSB 1.45

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Q. Shared Facilities – Describe in detail any operating or administrative facilities which the Company shares with other entities, affiliated or not, and the basis for quantification and allocation of the related operation and capital costs.

A. See attached detail.

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Shared Facilities
CSB 1.45

New Billing Package: Cogsdale

| Date | Invoice # | Explanation | Amount Paid from BM Capacity Account | Amount that should have been allocated | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Black Mountain | Gold Canyon (AZ) | Tall Timbers (Texas) | Woodmark (Texas) | Total |
| Customer Counts as at December 31, 2005 | | | | 1798 | 4491 | 978 | 836 | 8103 |
| Total Costs for the four Sewer Companies | | | | | | | | |
| 11/30/2002 | 212 | Software Upgrades | 48,800.00 | | | | | |
| 3/30/2003 | 257 | Equipment/Automation | 8,017.00 | | | | | |
| 3/31/2003 | 261 | Equipment/Automation | 11,076.00 | | | | | |
| 3/31/2003 | 270 | Equipment/Automation | 10,307.00 | | | | | |
| 4/15/2003 | 273 | System Migration | 8,459.00 | | | | | |
| 5/31/2003 | 298 | Professional Services | 6,522.00 | | | | | |
| 7/31/2003 | 319 | Data Conversion | 14,044.00 | | | | | |
| Total Sewer Company Costs | | | 107,225.00 | 23,792.49 | 59,428.30 | 12,941.63 | 11,062.58 | 107,225.00 |
| Bella Vista Costs | | | | | | | | |
| | | | AZ | | | | | |
| 8/31/2003 | 334 | Bella Vista Data Conversion | 6,066.00 | | | | | |
| 9/22/2003 | 346 | Mailroom Toolkit Enterprise | 2,710.00 | | | | | |
| 9/30/2003 | 351 | Bella Vista/LPSCO Program Man | 1,950.00 | | | | | |
| 10/15/2003 | 362 | Additional 10,000 users | 20,000.00 | | | | | |
| 10/31/2003 | 364 | Implementation | 27,655.00 | | | | | |
| 11/25/2003 | 379 | Implementation | 11,346.00 | | | | | |
| Total Bella Vista Costs | | | 69,727.00 | | | | | |
| Total Amount Paid out of Capacity Account for Cogsdale Costs | | | 176,952.00 | | | | | |

**BLACK MOUNTAIN SEWER COMPANY**
**2005 GENERAL RATE CASE**
**DOCKET NO. SW-02361A-05-0657**
**RESPONSE TO STAFF'S FIRST SET OF DATA REQUESTS**

Response provided by: Michael D. Weber

Title: Vice President and General Manager

Company Name: Black Mountain Sewer Company
Address: 111 W. Wigwam Blvd, Suite B
Litchfield Park, AZ 85340

Company Response Number: CSB 1.47

---

Q. Affiliates, Organization Chart – Please describe completely all relationships between the Cooperative and affiliated companies, and furnish an organizational chart which shows the relationships.

A. The attached documents are responsive, however, the Company reserves its right to challenge any and all assertions that any entity is an "affiliate" as such term is defined in the Commission rules or regulations.

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# ALGONQUIN POWER INCOME FUND
# ORGANIZATION CHART
## As of August 31, 2005

**LEGEND**

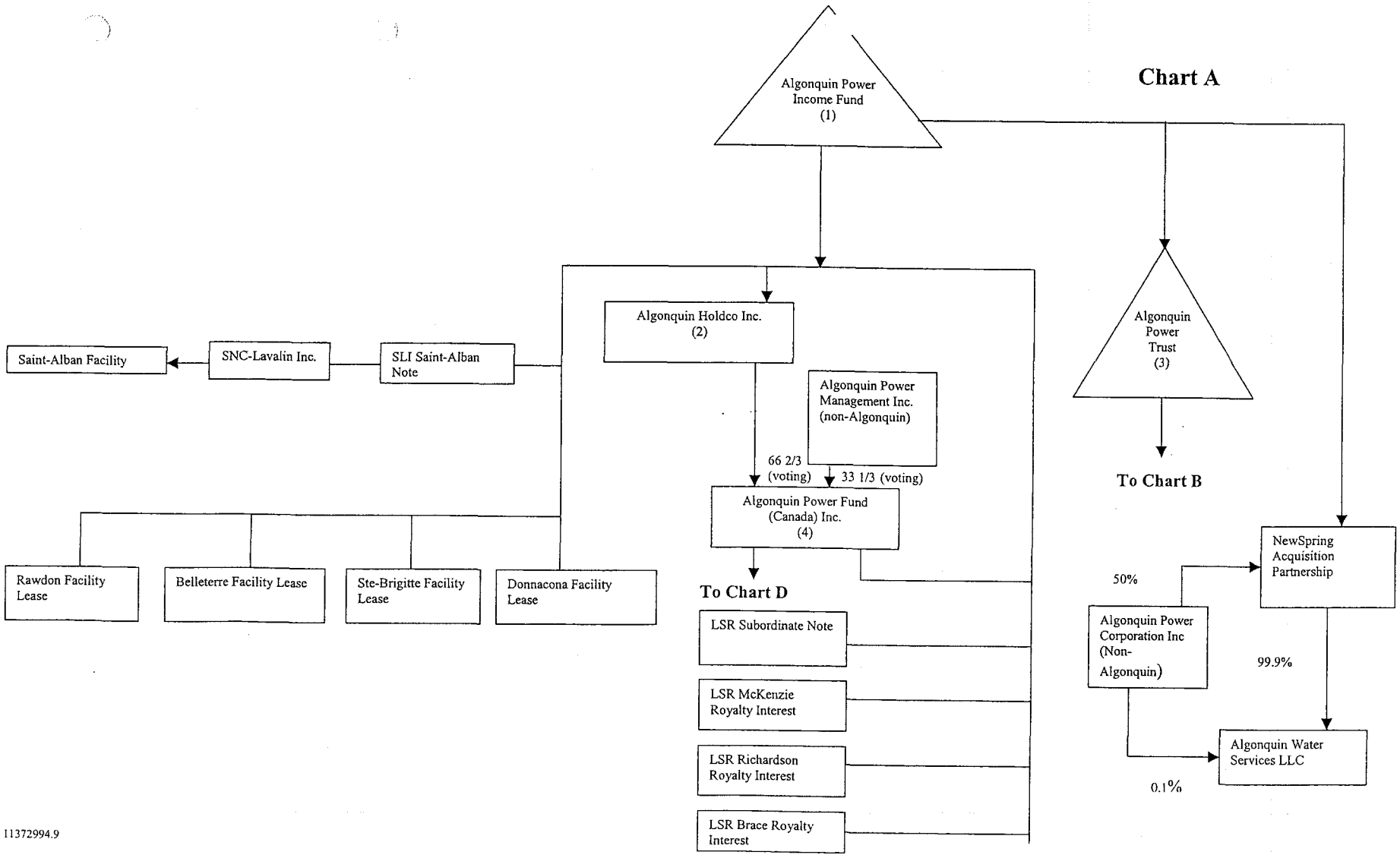
——▶ = ownership/leasehold interest

_____ = payment stream

**NOTES**

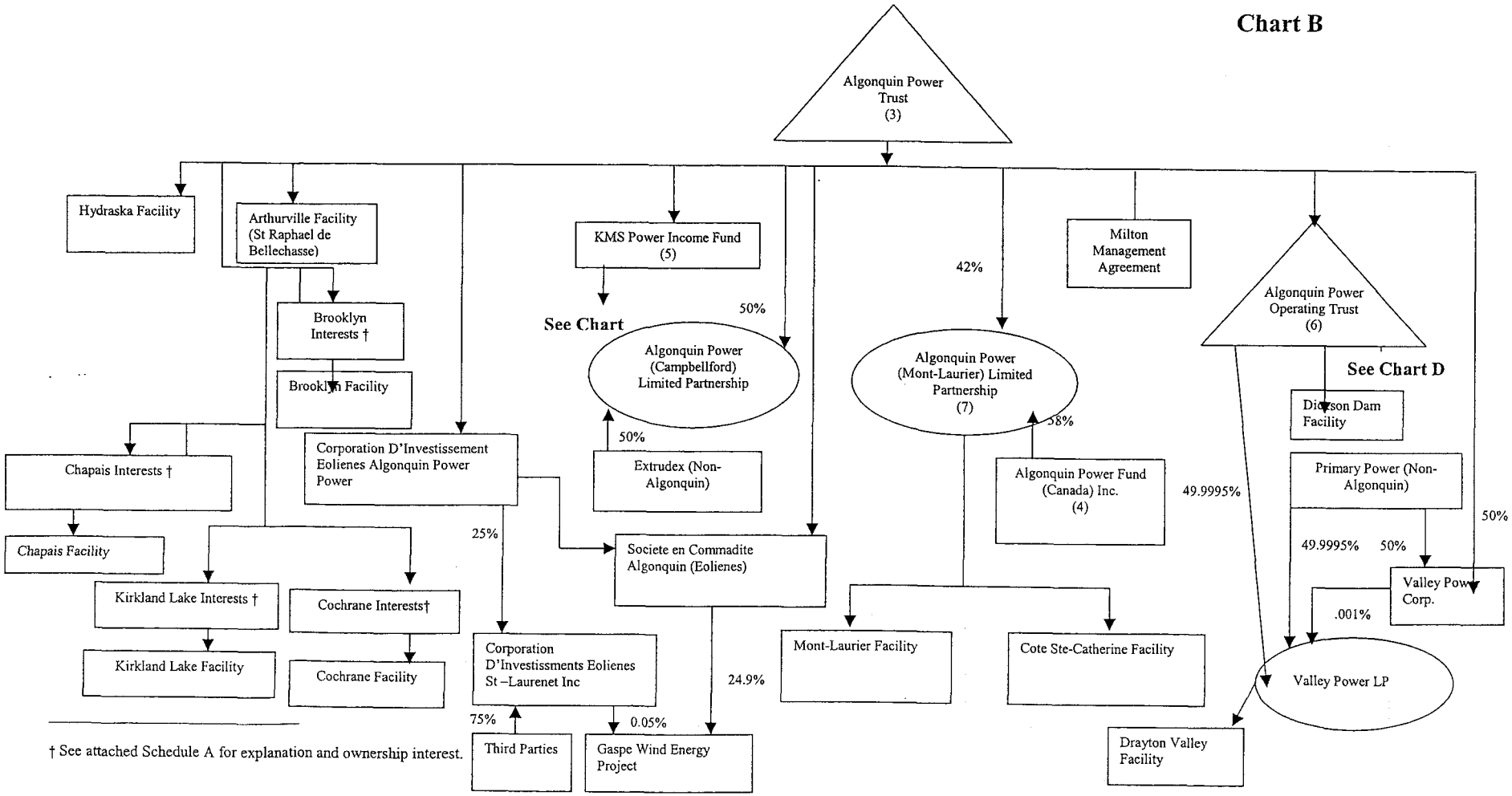
1. The assets and net income for Algonquin entities are listed on Appendix "A".
2. Unless otherwise indicated, the ownership of all entities is 100%.
3. Defined terms have the meaning ascribed to them in Algonquin Power Income Fund's annual information form dated March 31, 2005.
4. "Non-Algonquin" means that the entity in question would not satisfy the definition of an "Algonquin Entity" in Algonquin's credit agreement.

# Chart A




11372994.9

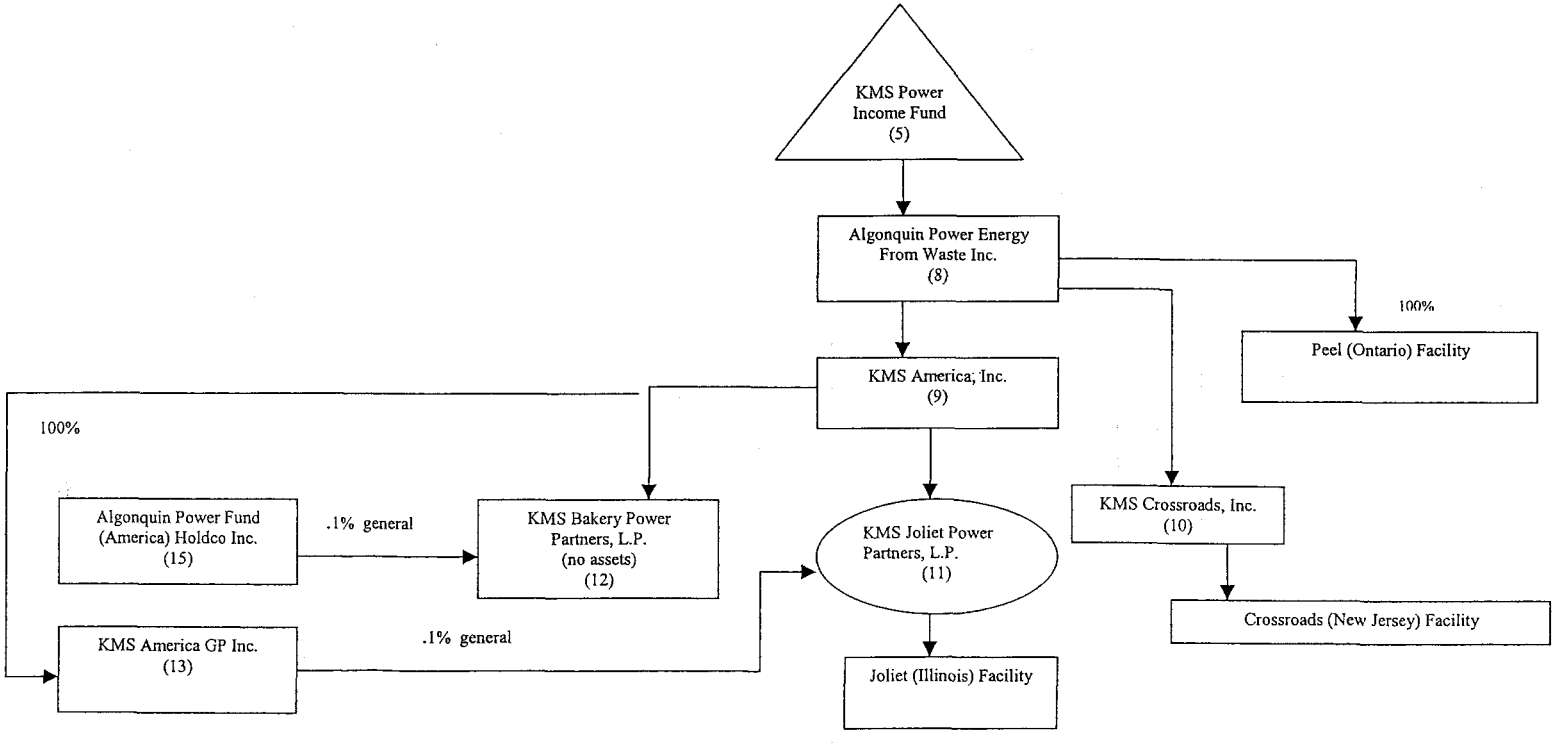
# Chart B



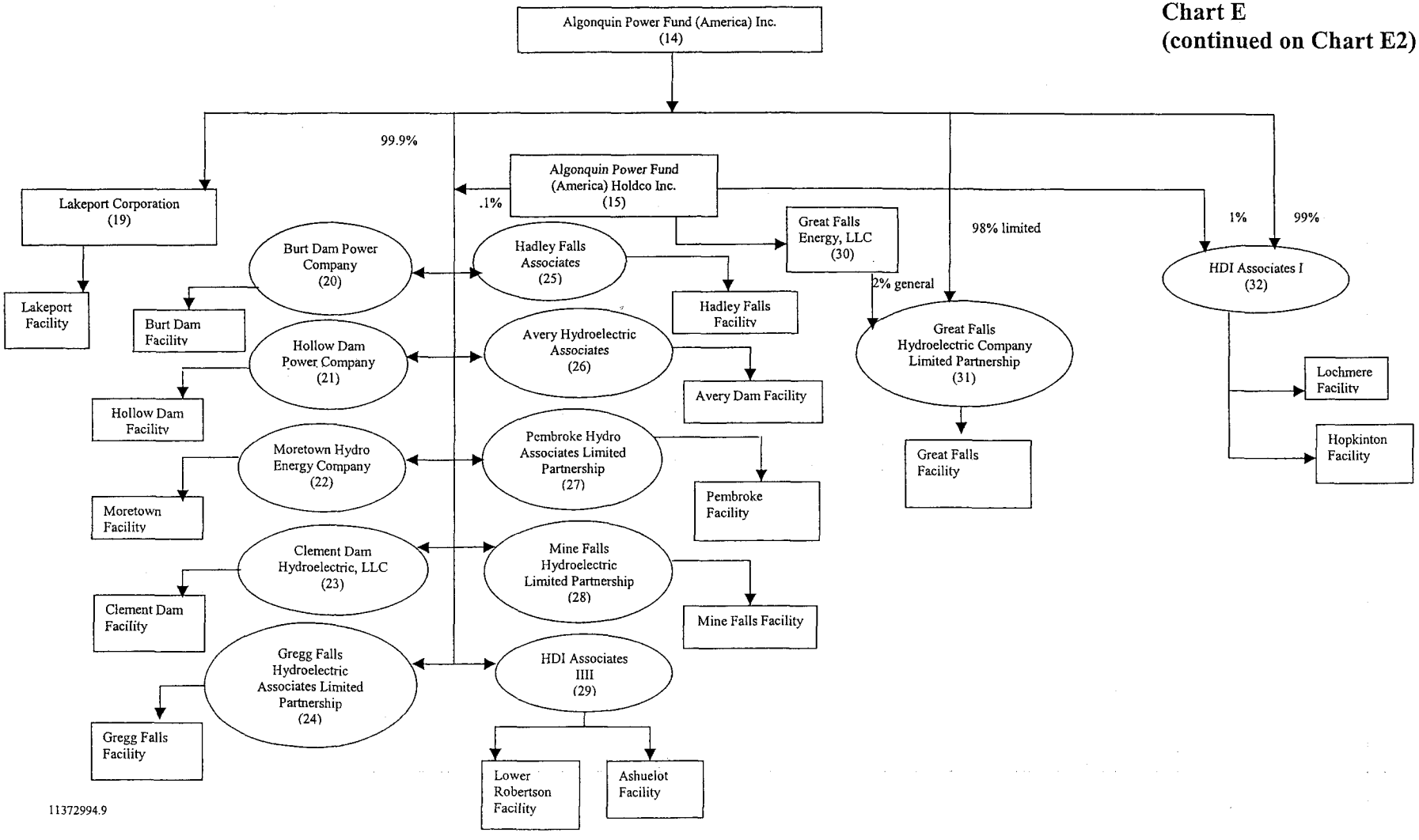

† See attached Schedule A for explanation and ownership interest.

11372994.9

# Chart C


KMS Power Income Fund (5)
Algonquin Power Energy From Waste Inc. (8)
100%
Peel (Ontario) Facility
KMS America, Inc. (9)
100%
Algonquin Power Fund (America) Holdco Inc. (15)
.1% general
KMS Bakery Power Partners, L.P. (no assets) (12)
KMS Joliet Power Partners, L.P. (11)
KMS Crossroads, Inc. (10)
Crossroads (New Jersey) Facility
KMS America GP Inc. (13)
.1% general
Joliet (Illinois) Facility

# Chart E
(continued on Chart E2)

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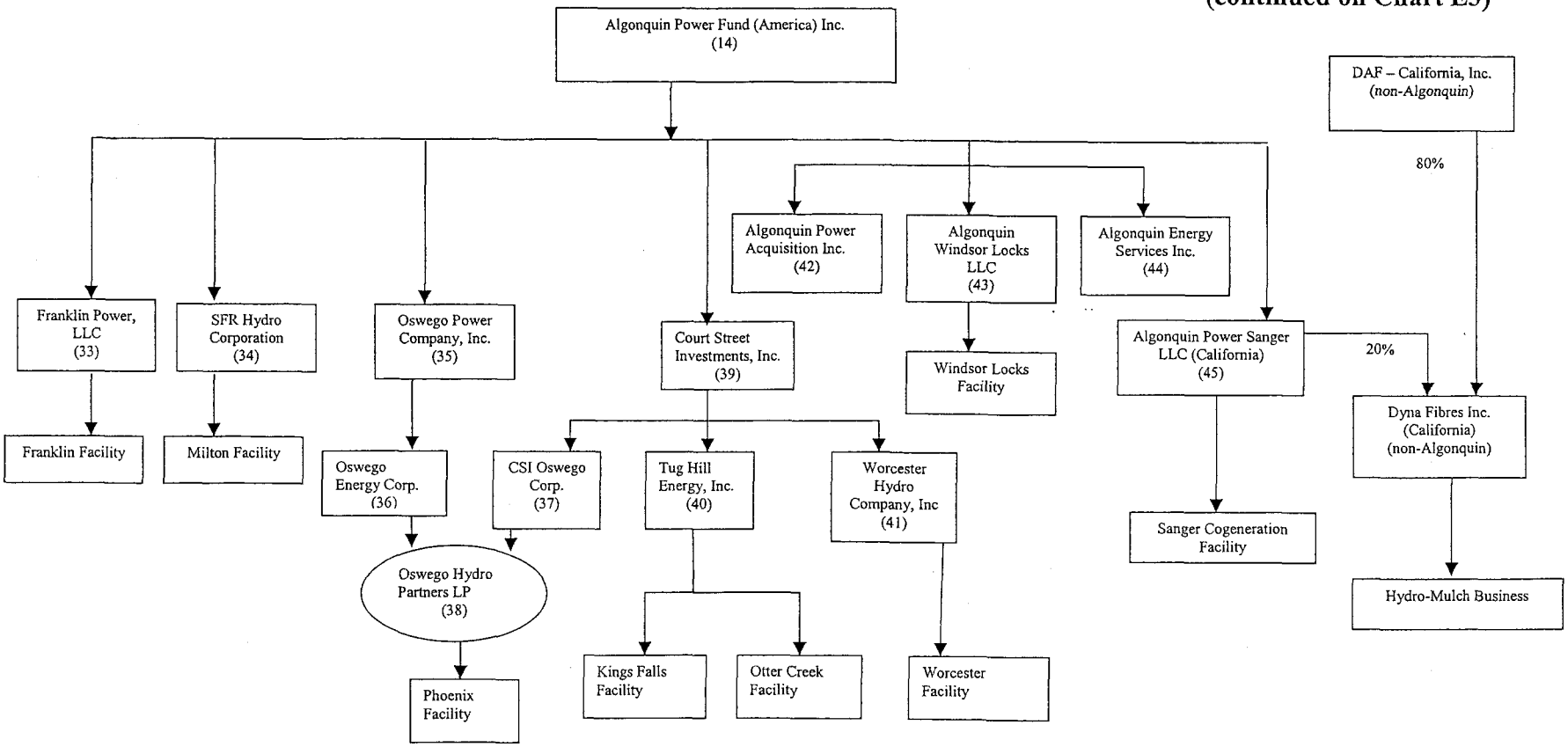
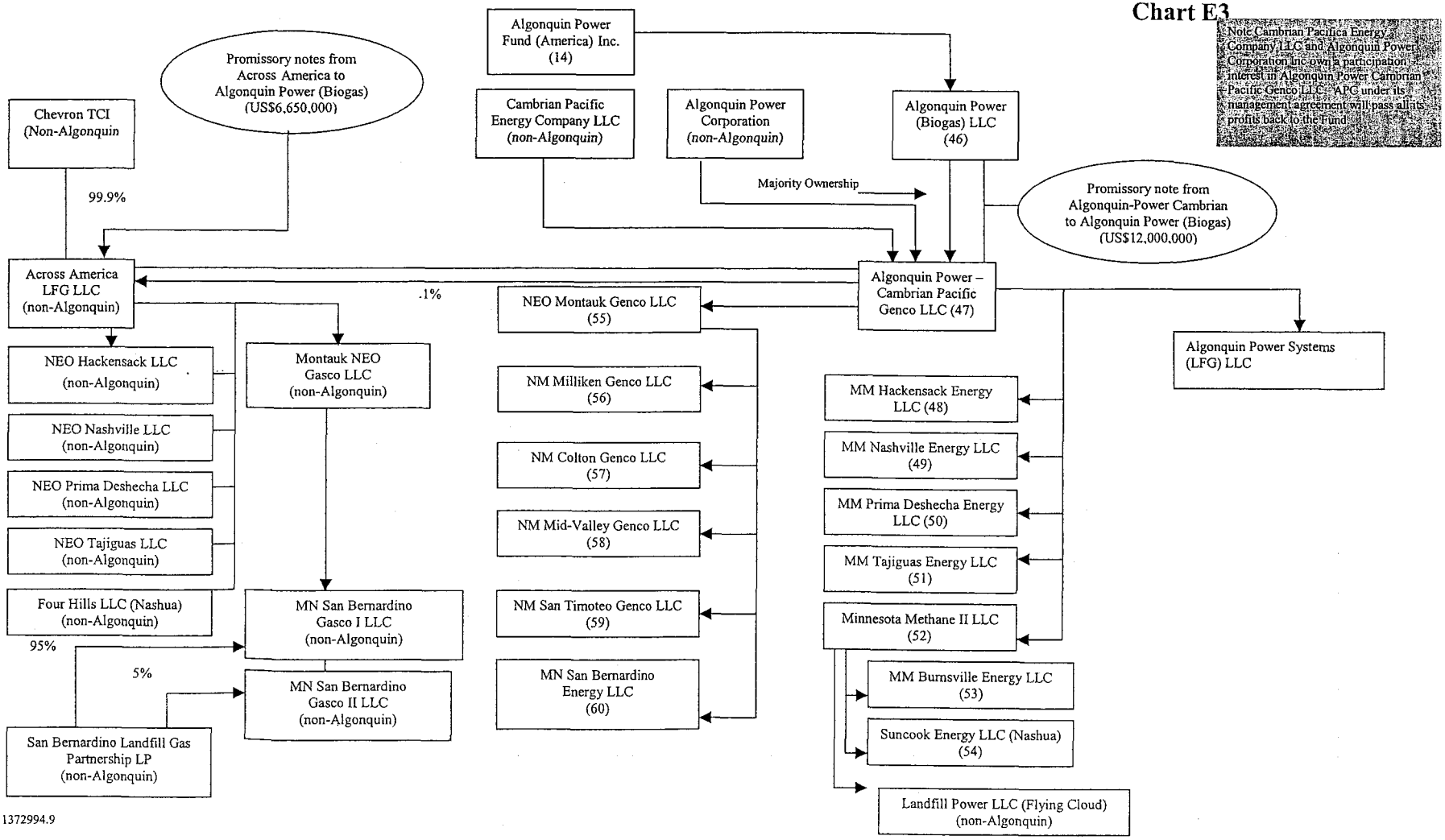
## Chart E2
## (continued on Chart E3)

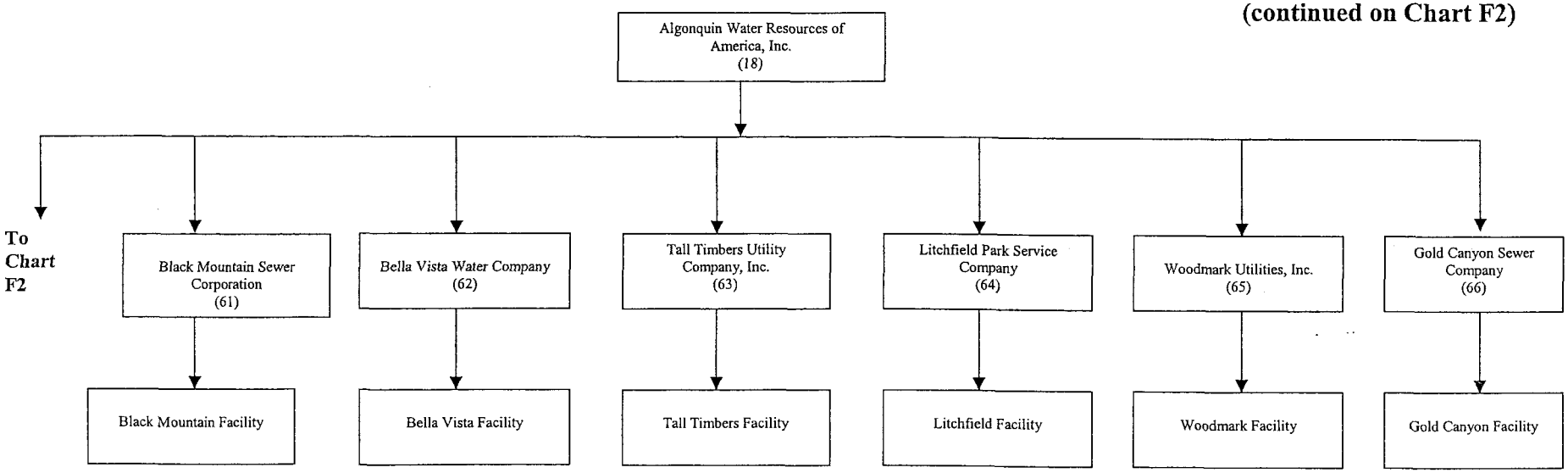


# Chart E3

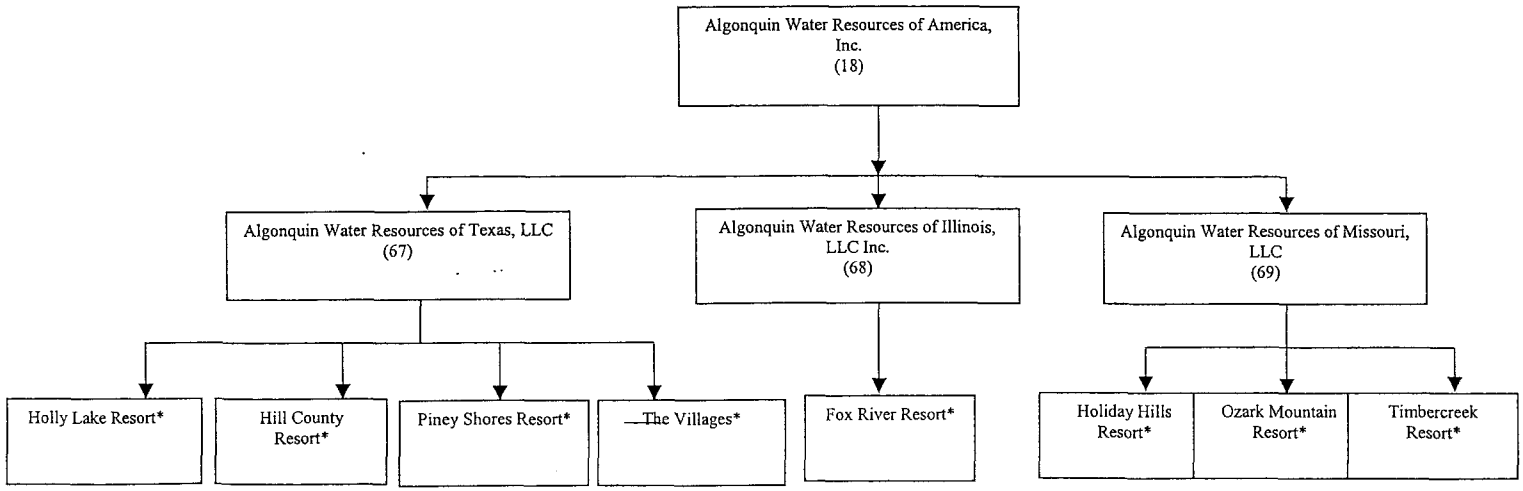



11372994.9

**Chart F**
**(continued on Chart F2)**

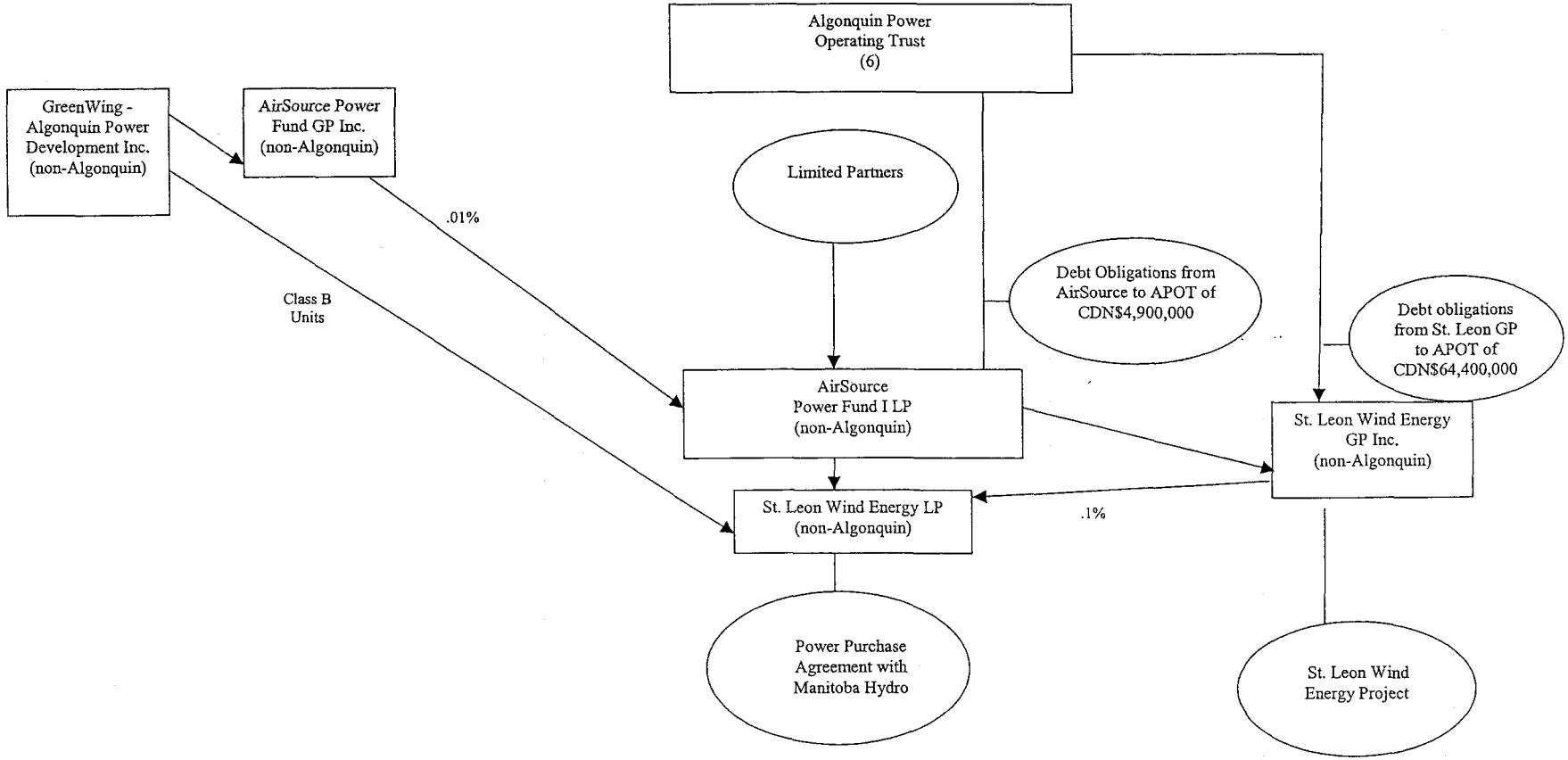


## Chart F2




* Algonquin owns water treatment plants, water wells, lines, wastewater collection systems, rest line wastewater treatment plants and certain other assets located at these resorts.

## Chart G


Algonquin Power Operating Trust (6)
GreenWing - Algonquin Power Development Inc. (non-Algonquin)
AirSource Power Fund GP Inc. (non-Algonquin)
.01%
Class B Units
Limited Partners
Debt Obligations from AirSource to APOT of CDN$4,900,000
Debt obligations from St. Leon GP to APOT of CDN$64,400,000
AirSource Power Fund I LP (non-Algonquin)
St. Leon Wind Energy GP Inc. (non-Algonquin)
St. Leon Wind Energy LP (non-Algonquin)
.1%
Power Purchase Agreement with Manitoba Hydro
St. Leon Wind Energy Project

**SCHEDULE "A"**

**"Brooklyn Interests"** means a 13.6% participation in the loan made by Confederation Life Insurance Company, in Liquidation (the "Vendor") and other lenders to Brooklyn Power Corporation ("Brooklyn"), 136,332 Common shares of Brooklyn and the interests and obligations of the Vendor in certain agreements related to the Brooklyn power project.

**"Chapais Interests"** means an a 12.1% interest in the $47.5 million Tranche A 10.789% Notes and the $15.3 million in the Tranche B 4.91% Notes. In addition, the Fund owns 33.9 % of the Class B non-voting preferred shares.

**"Cochrane Interests"** means 11,500,000 Class B Shares of Cochrane Power Corporation and the interests and obligations of the Vendor related to the Cochrane power project.

**"Kirkland Lake Interests"** means 12,000,000 Class B shares of Kirkland Lake Power Corp. and the interests and obligations of the Vendor related to the Kirkland Lake power project.

**BLACK MOUNTAIN SEWER COMPANY**
**2005 GENERAL RATE CASE**
**DOCKET NO. SW-02361A-05-0657**
**RESPONSE TO STAFF'S FIRST SET OF DATA REQUESTS**

Response provided by: Gerald Tremblay

Title: Controller, Algonquin Power

Company Name: Black Mountain Sewer Company
Address: 111 W. Wigwam Blvd, Suite B
Litchfield Park, AZ 85340

Company Response Number: CSB 1.48

---

Q. Affiliates: Contributions, Dues, Etc. – Please state the amount of the following that is included in inter-company billings from your affiliates:

a. Dues paid for social and service clubs;
b. Membership payments made to industry associations;
c. charitable contributions;
d. Scholarships;
e. Sponsorships;
f. Lobbying expenses;
g. Gifts and awards;
h. Food and beverages;
i. Luncheons and dinners;
j. Employee parties, picnics, or other similar events; and
k. Entertainment

A. There is no information responsive to this request.

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**BLACK MOUNTAIN SEWER COMPANY**
**2005 GENERAL RATE CASE**
**DOCKET NO. SW-02361A-05-0657**
**RESPONSE TO STAFF'S FIRST SET OF DATA REQUESTS**

Response provided by: Gerald Tremblay

Title: Controller, Algonquin Power

Company Name: Black Mountain Sewer Company
Address: 111 W. Wigwam Blvd, Suite B
Litchfield Park, AZ 85340

Company Response Number: CSB 1.49

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Q. Affiliates, Depreciation Expense – Please state the extent that depreciation expense is reflected in inter-company billings. If included, please state the applicable rates.

A. There is no affiliate depreciation.

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**BLACK MOUNTAIN SEWER COMPANY**
**2005 GENERAL RATE CASE**
**DOCKET NO. SW-02361A-05-0657**
**RESPONSE TO STAFF'S FIRST SET OF DATA REQUESTS**

Response provided by: Gerald Tremblay

Title: Controller, Algonquin Power

Company Name: Black Mountain Sewer Company
Address: 111 W. Wigwam Blvd, Suite B
Litchfield Park, AZ 85340

Company Response Number: CSB 1.51

---

Q. Affiliates, Capitalized Billings – Please state whether or not inter-company billings are capitalized.

A. Some inter-company billings from Algonquin Water Services LLC may be capitalized. If a project is capital in nature and the services of Algonquin Water Services are required, these costs will be capitalized.

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**BLACK MOUNTAIN SEWER COMPANY**
**2005 GENERAL RATE CASE**
**DOCKET NO. SW-02361A-05-0657**
**RESPONSE TO STAFF'S FIRST SET OF DATA REQUESTS**

Response provided by: Thomas J. Bourassa, CPA

Title: Rate Consultant

Company Name: Black Mountain Sewer Company
Address: 111 W. Wigwam Blvd, Suite B
Litchfield Park, AZ 85340

Company Response Number: CSB 1.52

---

Q. For all affiliated transactions identified in response to CSB 1.50, please state how the Company and its affiliate determined price for each transaction. If a price is based on fair market value ("FMV"), please state how FMV was determined and provide supporting documentation. Staff reserves the right to submit data requests related to cost components for all affiliated transactions. (As amended by Staff on November 14, 2005.)

A. The attached document reflects the costs or "prices" paid by the Company in certain affiliate transactions. The price for affiliate transactions is not based on fair market value. Rather, the price is based on an allocation of costs amongst the systems receiving the benefits of affiliate transactions and includes a small, but appropriate "operating margin". Comparing the amounts charged to the Company to similar charges paid by other public service corporations for management and other administrative and operations support, it is clear that the expenses incurred by the Company for these services are reasonable and prudent.

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**Price for Affiliated Transactions**
**CSB 1.52**

**Algonquin Power Systems Inc.:**

| Type of Transaction | Transaction Detail | Determined Price | Categories | Typical Rates |
|---|---|---|---|---|
| *Work Order Activity:* | | | | |
| | Material | Cost | | |
| | Labour | Typical Rates | Division Manager | 80/Hour |
| | | | Team Leader | 80/Hour |
| | | | Regional Supervisor | 60/Hour |
| | | | Senior Project Manager | 50/Hour |

**Algonquin Water Services LLC:**

| Type of Transaction | Transaction Detail | Determined Price | Categories | Typical Rates |
|---|---|---|---|---|
| *Operating Costs:* | | | | |
| | Operator Wages/Non direct related costs | Cost Plus | | $13,062/Month |
| *Accounting and Customer Service:* | | | | |
| | Labour/Postage/Misc | Cost Plus | | $3/Bill |
| *Work Order Activity:* | | | | |
| | Material | Cost | | |
| | Labour | Typical Rates | General Manager | 150/Hour |
| | | | Operator III & IV | 70/Hour |
| | | | Operator I & II | 50/Hour |
| | | | Technician II | 80/Hour |
| | | | Technician I | 50/Hour |
| | | | Senior Engineer | 100/Hour |
| | | | Junior Engineer | 90/Hour |
| | | | Project Engineer | 90/Hour |

**Algonquin Power Trust:**

| Type of Transaction | | Determined Price | Cost |
|---|---|---|---|
| *Central Office Costs:* | | | |
| | Non Site Related Costs | Cost | $1,500/Month |
| | Labour services-Corporate Accounting/HR/IT | Cost | Cost/hour |

**Schedule A**
**Monthly Postage Cost Build Up**
**CSB 1.52**

| | | Postage Expense |
|---|---|---|
| **Black Mountain** | | |
| Customer Count | **1633** | |
| Postage Cost Per Bill | **0.32** | $522.56 |
| Envlope/Stationary Cost per Bill | **0.10** | $163.30 |
| **Total Postage Cost** | | **$685.86** |

**Schedule B**
**Algonquin Water Services Monthly Allocation of Shared Personnel by Facility**
**CSB 1.52**

| | | Gold Canyon | Black Mountain | Tall Timbers | Woodmark | Bella Vista | Litchfield Park | Total |
|---|---|---|---|---|---|---|---|---|
| **Salaries for Admin at AWS** | **From Schedule C** | | | | | | | |
| **Budgeted Customers** | | 4,534 | 1,633 | 1,125 | 970 | | 25,864 | 34,126.00 |
| | | 13% | 5% | 3% | 3% | | 76% | 100% |
| Patty Nielsen | 7,045.41 | 936.06 | 337.14 | 232.26 | 200.26 | - | 5,339.69 | 7,045.41 |
| Amy Sears | 7,700.00 | 1,023.03 | 368.46 | 253.84 | 218.87 | - | 5,835.80 | 7,700.00 |
| Bundy | 7,000.00 | 930.02 | 334.96 | 230.76 | 198.97 | - | 5,305.28 | 7,000.00 |
| Bobi Keen | 4,252.49 | 564.99 | 203.49 | 140.19 | 120.87 | - | 3,222.95 | 4,252.49 |
| Suzanne Wagner | 4,409.00 | 585.78 | 210.98 | 145.35 | 125.32 | - | 3,341.57 | 4,409.00 |
| Barbara Risden | 4,134.37 | 549.30 | 197.84 | 136.29 | 117.52 | - | 3,133.43 | 4,134.37 |
| Brenda Bowman | 4,205.84 | 558.79 | 201.26 | 138.65 | 119.55 | - | 3,187.59 | 4,205.84 |
| | | **5,147.96** | **1,854.13** | **1,277.34** | **1,101.35** | **-** | **29,366.32** | **38,747.10** |
| **Salaries for Ops** | | | | | | | | |
| **Budgeted Customers** | | 4,534 | 1,633 | 1,125 | 970 | 7,012 | 25,864 | 41,138 |
| | | 11% | 4% | 3% | 2% | 17% | 63% | 100% |
| Charlie Hernandez | 11,796.89 | 1,300.19 | 564.51 | 388.90 | 335.32 | - | 8,940.83 | 11,529.73 |
| Mike Weber | 15,750.01 | 1,735.88 | 625.21 | 430.72 | 371.37 | 2,684.60 | 9,902.24 | 15,750.01 |
| Joel Wade | 11,083.35 | 1,472.54 | 530.36 | 365.37 | 315.03 | - | 8,400.04 | 11,083.35 |
| | | **4,508.60** | **1,720.07** | **1,184.99** | **1,021.72** | **2,684.60** | **27,243.10** | **38,363.09** |

**Schedule C**
**Algonquin Water Services Monthly Shared Admin and Operations Personnel**
**CSB 1.52**

| | MONTHLY SALARIES | OT HRS $ | TOTAL SALARIES | BENEFITS | OTHER BENEFITS | CAR ALLOWANCE | MILEAGE | TOTAL EMPLOYEE COST |
|---|---|---|---|---|---|---|---|---|
| Bowman, Brenda | 3,004.17 | - | 3,004.17 | 1,201.67 | | | | 4,205.84 |
| Bundy | 5,000.00 | | 5,000.00 | 2,000.00 | | | | 7,000.00 |
| Dacquet, Roberta (bobi Keen) | 3,037.49 | - | 3,037.49 | 1,215.00 | | | | 4,252.49 |
| Hernandez, Charlie | 8,040.37 | - | 8,040.37 | 3,216.15 | | 540.37 | | 11,796.89 |
| Nielsen, Patricia | 4,556.24 | - | 4,556.24 | 1,822.50 | 226.67 | 440.00 | | 7,045.41 |
| Risden, Barbara | 2,953.12 | - | 2,953.12 | 1,181.25 | | | | 4,134.37 |
| Sears, Amy | 5,500.00 | - | 5,500.00 | 2,200.00 | | | | 7,700.00 |
| Wade, Joel | 7,916.68 | - | 7,916.68 | 3,166.67 | | | | 11,083.35 |
| Wagner, Suzanne | 2,835.00 | - | 2,835.00 | 1,134.00 | | 440.00 | | 4,409.00 |
| Weber, Michael | 11,250.01 | - | 11,250.01 | 4,500.00 | | | | 15,750.01 |

**BLACK MOUNTAIN SEWER COMPANY**
**2005 GENERAL RATE CASE**
**DOCKET NO. SW-02361A-05-0657**
**RESPONSE TO STAFF'S FIRST SET OF DATA REQUESTS**

Response provided by: Greg Sorensen

Title: Controller – Algonquin Water

Company Name: Black Mountain Sewer Corporation
Address: 12725 W. Indian School Rd., Suite D-101
Avondale, AZ 85323

Company Response Number: CSB 1.52 (amended)

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Q. For all affiliated transactions identified in response to CSB 1.50, please state how the Company and its affiliate determined price for each transaction. If a price is based on fair market value ("FMV"), please state how FMV was determined and provide supporting documentation. Staff reserves the right to submit data requests related to cost components for all affiliated transactions. (As amended by Staff on November 14, 2005.)

A. Please see the attached summary sheets, which update BMSC's original response to CSB 1.52. This now includes Operating Margin or 3rd party rate quotes where appropriate. Also, please see the attached build-up of costs for BMSC presented as if it had to hire personnel to perform the functions provided by AWS. The cost of doing so almost doubles the cost (Operating and Administrative) per customer bill versus the $11/bill fee charged by AWS.

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**BLACK MOUNTAIN SEWER CORPORATION**
**2005 GENERAL RATE CASE**
**DOCKET NO. SW-02361A-05-0657**
**RESPONSE TO STAFF'S THIRD SET OF DATA REQUESTS**

Response provided by: Greg Sorensen

Title: Controller - Algonquin Water

Company Name: Black Mountain Sewer Corporation
Address: 12725 W. Indian School Rd., Suite D-101
Avondale, AZ 85323

Company Response Number: CSB 4.1

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Q. Affiliates, Profit – This is a follow-up to CSB 1-52. Thank you for providing the information. However, the following questions were not answered:

a. please state the return, "profit" or "operating margin" component included in the billings of each affiliate;

b. please explain how such profit factors were determined;

c. please explain how the amounts are accounted for; and

d. please state the actual profits/"operating margin" included in test year billings.

A. a. Please see the attached AWS budget/price build-up for its provision of services to BMSC. The estimate included a 10.4% pre-tax and 6.2% post-tax operating margin. However, the actual test year AWS pre-tax operating margin for the services to BMSC was only 6.5% and the post tax operating margin was only 3.92%.

b. Please see the attached budget/price build-up for explanation of how factors were determined.

c. Beginning in 2004, revenues and costs, to the extent they were specifically identifiable, were coded to the AWS customer to which they belonged. Costs not specifically identifiable to a particular customer of AWS were allocated to each customer based upon that customer's percentage of billings for AWS.

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d. Please see the attached spreadsheet which updates prior summary schedule provided in response to CSB 1.52 to include actual AWS operating margin (3.92%) related to BMSC for the Test Year.

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**Price for Affiliated Transactions**
**CSB 1.52**

**Algonquin Power Systems Inc.:**

| Type of Transaction | Transaction Detail | Determined Price | Categories | Typical Rates |
|---|---|---|---|---|
| *Work Order Activity:* | | | | |
| | Material | Cost | | |
| | Labour | Typical Rates | Division Manager | 80/Hour |
| | | | Team Leader | 80/Hour |
| | | | Regional Supervisor | 60/Hour |
| | | | Senior Project Manager | 50/Hour |

**Algonquin Water Services LLC:**

| Type of Transaction | Transaction Detail | Determined Price | Categories | Typical Rates |
|---|---|---|---|---|
| *Operating Costs:* | | | | |
| | Operator Wages/Non direct related costs | Cost Plus | | $13,062/Month |
| *Accounting and Customer Service:* | | | | |
| | Labour/Postage/Misc | Cost Plus | | $3/Bill |
| *Work Order Activity:* | | | | |
| | Material | Cost | | |
| | Labour | Typical Rates | General Manager | 150/Hour |
| | | | Operator III & IV | 70/Hour |
| | | | Operator I & II | 50/Hour |
| | | | Technician II | 80/Hour |
| | | | Technician I | 50/Hour |
| | | | Senior Engineer | 100/Hour |
| | | | Junior Engineer | 90/Hour |
| | | | Project Engineer | 90/Hour |

**Algonquin Power Trust:**

| Type of Transaction | Determined Price | Cost |
|---|---|---|
| *Central Office Costs:* | | |
| Non Site Related Costs | Cost | $1,500/Month |
| Labour services-Corporate Accounting/HR/IT | Cost | Cost/hour |

**Schedule A**
**Monthly Postage Cost Build Up**
**CSB 1.52**

| | | Postage Expense |
|---|---|---|
| **Black Mountain** | | |
| Customer Count | **1633** | |
| Postage Cost Per Bill | **0.32** | $522.56 |
| Envlope/Stationary Cost per Bill | **0.10** | $163.30 |
| **Total Postage Cost** | | **$685.86** |

**Schedule B**
**Algonquin Water Services Monthly Allocation of Shared Personnel by Facility**
**CSB 1.52**

| | | Gold Canyon | Black Mountain | Tall Timbers | Woodmark | Bella Vista | Litchfield Park | Total |
|---|---|---|---|---|---|---|---|---|
| **Salaries for Admin at AWS** | **From Schedule C** | | | | | | | |
| **Budgeted Customers** | | 4,534 | 1,633 | 1,125 | 970 | | 25,864 | 34,126.00 |
| | | 13% | 5% | 3% | 3% | | 76% | 100% |
| Patty Nielsen | 7,045.41 | 936.06 | 337.14 | 232.26 | 200.26 | - | 5,339.69 | 7,045.41 |
| Amy Sears | 7,700.00 | 1,023.03 | 368.46 | 253.84 | 218.87 | - | 5,835.80 | 7,700.00 |
| Bundy | 7,000.00 | 930.02 | 334.96 | 230.76 | 198.97 | - | 5,305.28 | 7,000.00 |
| Bobi Keen | 4,252.49 | 564.99 | 203.49 | 140.19 | 120.87 | - | 3,222.95 | 4,252.49 |
| Suzanne Wagner | 4,409.00 | 585.78 | 210.98 | 145.35 | 125.32 | - | 3,341.57 | 4,409.00 |
| Barbara Risden | 4,134.37 | 549.30 | 197.84 | 136.29 | 117.52 | - | 3,133.43 | 4,134.37 |
| Brenda Bowman | 4,205.84 | 558.79 | 201.26 | 138.65 | 119.55 | - | 3,187.59 | 4,205.84 |
| | | **5,147.96** | **1,854.13** | **1,277.34** | **1,101.35** | **-** | **29,366.32** | **38,747.10** |
| **Salaries for Ops** | | | | | | | | |
| **Budgeted Customers** | | 4,534 | 1,633 | 1,125 | 970 | 7,012 | 25,864 | 41,138 |
| | | 11% | 4% | 3% | 2% | 17% | 63% | 100% |
| Charlie Hernandez | 11,796.89 | 1,300.19 | 564.51 | 388.90 | 335.32 | - | 8,940.83 | 11,529.73 |
| Mike Weber | 15,750.01 | 1,735.88 | 625.21 | 430.72 | 371.37 | 2,684.60 | 9,902.24 | 15,750.01 |
| Joel Wade | 11,083.35 | 1,472.54 | 530.36 | 365.37 | 315.03 | - | 8,400.04 | 11,083.35 |
| | | **4,508.60** | **1,720.07** | **1,184.99** | **1,021.72** | **2,684.60** | **27,243.10** | **38,363.09** |

**Schedule C**
**Algonquin Water Services Monthly Shared Admin and Operations Personnel**
**CSB 1.52**

| | MONTHLY SALARIES | OT HRS $ | TOTAL SALARIES | BENEFITS | OTHER BENEFITS | CAR ALLOWANCE | MILEAGE | TOTAL EMPLOYEE COST |
|---|---|---|---|---|---|---|---|---|
| Bowman, Brenda | 3,004.17 | - | 3,004.17 | 1,201.67 | | | | 4,205.84 |
| Bundy | 5,000.00 | | 5,000.00 | 2,000.00 | | | | 7,000.00 |
| Dacquet, Roberta (bobi Keen) | 3,037.49 | - | 3,037.49 | 1,215.00 | | | | 4,252.49 |
| Hernandez, Charlie | 8,040.37 | - | 8,040.37 | 3,216.15 | | 540.37 | | 11,796.89 |
| Nielsen, Patricia | 4,556.24 | - | 4,556.24 | 1,822.50 | 226.67 | 440.00 | | 7,045.41 |
| Risden, Barbara | 2,953.12 | - | 2,953.12 | 1,181.25 | | | | 4,134.37 |
| Sears, Amy | 5,500.00 | - | 5,500.00 | 2,200.00 | | | | 7,700.00 |
| Wade, Joel | 7,916.68 | - | 7,916.68 | 3,166.67 | | | | 11,083.35 |
| Wagner, Suzanne | 2,835.00 | - | 2,835.00 | 1,134.00 | | 440.00 | | 4,409.00 |
| Weber, Michael | 11,250.01 | - | 11,250.01 | 4,500.00 | | | | 15,750.01 |

**BLACK MOUNTAIN SEWER CORPORATION**
**2005 GENERAL RATE CASE**
**DOCKET NO. SW-02361A-05-0657**
**RESPONSE TO STAFF'S FIFTH SET OF DATA REQUESTS**

Response provided by: Gerald Tremblay

Title: Controller – Algonquin Power

Company Name: Black Mountain Sewer Corporation
Address: 12725 W. Indian School Rd., Suite D-101
Avondale, AZ 85323

Company Response Number: CSB 5.1

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Q. Affiliated Contract Employee Costs – This is a follow-up to CSB 1.52 (delivered November 28, 2005). For the years 2002 and 2003, please provide the same information and schedules for affiliated contract employee costs as was provided for affiliated contract employee costs in 2004. Also, as part of your response, please explain the basis for any payroll and labor burden increases from 2002 to 2003.

A. *See* Schedules CSB 5.1-2002 and CSB 5.1-2003, which were previously submitted in response to CSB 5.1. These schedules included the same information/schedules as was provided for CSB 1.52. Post-tax Operating Margin for AWS overall for 2002 and 2003 was 13.0% and 7.2%, respectively. In 2002 and 2003, separation of expenses between AWS customers was not done so profitability by customer information is not available for these years.

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**Price for Affiliated Transactions - 2002**
**CSB 1.52**

**Algonquin Power Systems Inc.:**

| Type of Transaction | Transaction Detail | Determined Price | Categories | Typical Rates | Margin % | 3rd Party Information |
|---|---|---|---|---|---|---|
| *Work Order Activity:* | | | | | | |
| | Material | Cost | | | 0.00% | |

**Algonquin Water Services LLC:**

| Type of Transaction | Transaction Detail | Determined Price | Categories | Typical Rates | | |
|---|---|---|---|---|---|---|
| *Operating Costs:* | | | | | | |
| | Operator Wages/Non direct related costs | Cost Plus | | $7,500/Month | 13.00% | |
| | Repair & Maintenance Fee | Cost Plus | | $7,500/Month | 13.00% | |
| *Accounting and Customer Service:* | | | | | | |
| | Labour/Postage/Misc | Cost Plus | | $5,000/Month | 13.00% | C |
| *Work Order Activity:* | | | | | | |
| | Material | Cost | | | 0.00% | |
| | Labour | Typical Rates | General Manager | 150/Hour | 13.00% | A |
| | | | Operator III & IV | 70/Hour | 13.00% | |
| | | | Operator I & II | 50/Hour | 13.00% | |
| | | | Technician II | 80/Hour | 13.00% | |
| | | | Technician I | 50/Hour | 13.00% | |
| | | | Senior Engineer | 100/Hour | 13.00% | A |
| | | | Junior Engineer | 90/Hour | 13.00% | A |
| | | | Project Engineer | 90/Hour | 13.00% | A |

**Algonquin Power Trust:**

| Type of Transaction | | Determined Price | Cost | |
|---|---|---|---|---|
| *Central Office Costs:* | | | | |
| | Non Site Related Costs | Cost | $1,020/Month | 0.00% |
| | Labour services-Corporate Accounting/HR/IT | Cost | Cost/hour | 0.00% |

A - Third party quote on rates form Carollo to LPSCO (also managed by AWS)
C - See 1998 Quote for billing/bookkeeping services from Western Environmental Technologies, Inc. (3rd party)

Price for Affiliated Transactions - 2003
CSB 1.52

**Algonquin Power Systems Inc.:**

| Type of Transaction | Transaction Detail | Determined Price | Categories | Typical Rates | Margin % | 3rd Party Information |
|---|---|---|---|---|---|---|
| *Work Order Activity:* | | | | | | |
| Material | | Cost | | | 0.00% | |
| Labour | | Typical Rates | Division Manager | 80/Hour | 1.84% | B |
| | | | Team Leader | 80/Hour | 1.84% | B |
| | | | Regional Supervisor | 60/Hour | 1.84% | B |
| | | | Senior Project Manager | 50/Hour | 1.84% | B |

**Algonquin Water Services LLC:**

| Type of Transaction | Transaction Detail | Determined Price | Categories | Typical Rates | | |
|---|---|---|---|---|---|---|
| *Operating Costs:* | | | | | | |
| | Operator Wages/Non direct related costs | Cost Plus | | $7,500/Month | 7.20% | |
| | Repair & Maintenance Fee | Cost Plus | | $7,500/Month | 7.20% | |
| *Accounting and Customer Service:* | | | | | | |
| | Labour/Postage/Misc | Cost Plus | | $5,000/Month | 7.20% | C |
| *Work Order Activity:* | | | | | | |
| Material | | Cost | | | 0.00% | |
| Labour | | Typical Rates | General Manager | 150/Hour | 7.20% | A |
| | | | Operator III & IV | 70/Hour | 7.20% | |
| | | | Operator I & II | 50/Hour | 7.20% | |
| | | | Technician II | 80/Hour | 7.20% | |
| | | | Technician I | 50/Hour | 7.20% | |
| | | | Senior Engineer | 100/Hour | 7.20% | A |
| | | | Junior Engineer | 90/Hour | 7.20% | A |
| | | | Project Engineer | 90/Hour | 7.20% | A |

**Algonquin Power Trust:**

| Type of Transaction | Determined Price | Cost | |
|---|---|---|---|
| *Central Office Costs:* | | | |
| Non Site Related Costs | Cost | $0/Month | 0.00% |
| Labour services-Corporate Accounting/HR/IT | Cost | Cost/hour | 0.00% |

A - Third party quote on rates form Carollo to LPSCO (also managed by AWS)
B - Summary of 3rd party rates received by APS
C - See 1998 Quote for billing/bookkeeping services from Western Environmental Technologies, Inc. (3rd party)

**Price for Affiliated Transactions - 2004**
**CSB 1.52**

**Algonquin Power Systems Inc.:**

| Type of Transaction | Transaction Detail | Determined Price | Categories | Typical Rates | Margin % | 3rd Party Information |
|---|---|---|---|---|---|---|
| *Work Order Activity:* | | | | | | |
| Material | | Cost | | | 0.00% | |
| Labour | | Typical Rates | Division Manager | 80/Hour | 5.24% | B |
| | | | Team Leader | 80/Hour | 5.24% | B |
| | | | Regional Supervisor | 60/Hour | 5.24% | B |
| | | | Senior Project Manager | 50/Hour | 5.24% | B |

**Algonquin Water Services LLC:**

| Type of Transaction | Transaction Detail | Determined Price | Categories | Typical Rates | | |
|---|---|---|---|---|---|---|
| *Operating Costs:* | | | | | | |
| | Operator Wages/Non direct related costs | Cost Plus | | $13,062/Month | 3.92% | |
| *Accounting and Customer Service:* | | | | | | |
| | Labour/Postage/Misc | Cost Plus | | $3/Bill | 3.92% | C |
| *Work Order Activity:* | | | | | | |
| Material | | Cost | | | 0.00% | |
| Labour | | Typical Rates | General Manager | 150/Hour | 3.92% | A |
| | | | Operator III & IV | 70/Hour | 3.92% | |
| | | | Operator I & II | 50/Hour | 3.92% | |
| | | | Technician II | 80/Hour | 3.92% | |
| | | | Technician I | 50/Hour | 3.92% | |
| | | | Senior Engineer | 100/Hour | 3.92% | A |
| | | | Junior Engineer | 90/Hour | 3.92% | A |
| | | | Project Engineer | 90/Hour | 3.92% | A |

**Algonquin Power Trust:**

| Type of Transaction | Determined Price | Cost | | |
|---|---|---|---|---|
| *Central Office Costs:* | | | | |
| Non Site Related Costs | Cost | $1,500/Month | 0.00% | See CSB 5.10 |
| Labour services-Corporate Accounting/HR/IT | Cost | Cost/hour | 0.00% | |

A - Third party quote on rates form Carollo to LPSCO (also managed by AWS)
B - Summary of 3rd party rates received by APS
C - See 1998 Quote for billing/bookkeeping services from Western Environmental Technologies, Inc. (3rd party)

Algonquin Water Services, LLC
Black Mountain Sewer Company Pricing

| | | BUDGET Monthly | BUDGET Annual | |
|---|---|---|---|---|
| **OPERATOR FEE:** | | $ 13,062.00 | $ 156,744.00 | |
| **BILLING FEE:** | | | | |
| Test Year Budgeted Bills per Month | 1,633 | | | |
| Fee per Bill | $ 3.00 | $ 4,899.00 | $ 58,788.00 | |
| **TOTAL FEE:** | | $ 17,961.00 | $ 215,532.00 | |
| **COSTS:** | | | | |
| *Cost of Wages, Benefits & Related* | | | | |
| Waste water Operator | $ 6,532.06 | | | CSB 1.52 Summary |
| Waste water Operator | 3,503.50 | $ 10,035.56 | $ 120,426.71 | CSB 1.52 Summary |
| Shared Ops Wages, Benefits & Related | | 1,720.07 | 20,640.88 | CSB 1.52 Schedule B |
| Total Operations Wage/Related | | $ 11,755.63 | $ 141,067.59 | |
| Shared Admin Wages ( Accounting/Billing/Cust. Svcs) | | $ 1,854.13 | $ 22,249.55 | CSB 1.52 Schedule B |
| Total Wages, Benefits & Related | | $ 13,609.76 | $ 163,317.14 | |
| Postage | $ 0.42 | 685.86 | 8,230.32 | CSB 1.52 Schedule A |
| Overhead | 10.0% | 1,796.10 | 21,553.20 | |
| Total Costs | | $ 16,091.72 | $ 193,100.66 | |
| Operating Margin | 10.4% | $ 1,869.28 | $ 22,431.34 | |
| Estimated Tax | 40.0% | $ (747.71) | $ (8,972.54) | |
| Planned Operating Margin - Post Tax | 6.2% | $ 1,121.57 | $ 13,458.80 | |
| Actual Operating Margin 2004 - Post Tax | 3.92% | | | |

Black Mountain Sewer Company
Projected Stand-alone Operator and Billing Cost

| | Monthly | Monthly | Annual | |
|---|---|---|---|---|
| Wastewater Manager | $ 11,796.89 | | | Per CSB 1.52 Schedule B |
| Waste water Operator | 6,532.06 | | | Per CSB 1.52 Schedule B |
| Waste water Operator | 3,503.50 | $ 21,832.45 | | Per CSB 1.52 Schedule B |
| Customer Service | $ 4,409.00 | | | Per CSB 1.52 Schedule B |
| Customer Service | 4,409.00 | 8,818.00 | | |
| Senior Accountant (salary $60k plus benefits/taxes, etc.) | | 7,000.00 | | |
| | | $ 37,650.45 | $ 451,805.37 | |
| Overhead of 2.5% (postage, etc.) | | | 11,295.13 | |
| | | | 463,100.51 | |
| Number of Test Year Bills | | | 21,825 | |
| Cost per Bill | | | $ 21.22 | |
| Operator Fee - AWS | | $ 156,744.00 | | $13,062 per month |
| Billing Fee - AWS | | 65,475.00 | | $3 per bill |
| APIF Fee | | 18,000.00 | $ 240,219.00 | $1,500 per month |
| Number of Test Year Bills | | | 21,825 | |
| Cost per Bill | | | $ 11.01 | |
| Savings to BMSC due to AWS and Economy of Scale | | | 222,881.51 | |

WESTERN ENVIRONMENTAL TECHNOLOGIES, INC.

P. O. Box 4752 • Cave Creek, Arizona 85331
(602) 488-1385

September 9, 1998

Mr. Don Reilly, CFO
Grandbay Resorts
11811 N. Tatum Boulevard Suite 1060
Phoenix, Arizona 85028

RE: CONTRACT FOR BILLING AND BOOKKEEPING SERVICES

Dear Marianne,

Thank you for the opportunity to present the following proposal and contract for Monthly Sewer Billing and Bookkeeping for the Boulders Carefree Sewer Corporations.

**Agreement**

This agreement is entered into this _____ day of _____, 1998 by and between Grandbay Resorts (hereinafter owner) and Western Environmental Technologies, Inc. (hereinafter WET)

WET will provide for $4750.00 /month:

**Expenses**

Covered by WET:
- MAS90 software program
- Modem access with separate line
- Zip Drive
- 1 phone line for customer access
- Postage
- Sewer bills (Same as current)

**Scope of Work**

Bill monthly sewer customers up to 1400 accounts
Including:
- Tracking all accounts
- Generating all sewer bills
- Mailing bills
- Opening mail daily
- Making copies of all checks for deposit
- Depositing checks daily
- Customer interaction
- Monthly Reporting

Monthly Bookkeeping of the Boulders Carefree Sewer Corporation.

Including:

- Tracking accounts receivables and payables
- Generating all checks for signatures
- Printing out non audited accounting reported monthly for owner's review
- Correcting all accounting errors as determined by owner's accounting staff or auditors

**Additional services**

All additional sewer bills (over 1400) will be billed to owner at $ 3.00 per bill.

WET would spend up to 10 hours a month to field verify properties make sure that all properties that are connected are billed. Billed to owner at $40.00 an hour.

**Provisions**

If at any time owner requires different software, sewer bills or requires additional unforseen capital outlay or changes the original scope of work or responsibilities ie. WET is required to perform accounting task above and beyond simple bookkeeping, the parties shall attempt to agree on appropriate adjustments to the compensation to be paid to WET there after. If the parties are unable to agree on appropriate adjustments within sixty days from the commencement of negotiations, this agreement shall terminate without further actions of the parties.

**Term**

The contract shall commence the first day of _____ and shall expire five years thereafter. Both parties, at their discretion, after the first year, shall have the right to terminate this agreement with a ninety day written notice. In the event of a default by a party, the non-defaulting party shall provide written notice of such default to the other party. If such default is not cured within ten days of the receipt of the default, then the non-defaulting party, in its discretion may terminate the agreement by providing written notice.

Grandbay Resorts.

By_____

CFO, Grandbay Resorts

Western Environmental Technologies, Inc.

By_____

President, WET Inc.

Algonquin Power Systems Inc.

06/12/2005

## STANDARD HOURLY CHARGE OUT RATES

(Source Information - 2005 Rate Sheets)

| Description | EXIST. | AVE | Hickham | K'schmidt | Turner | ISN | Wood Group | | EXIST. | AVE | VA Tech | AMEC | Wardrop | Sandwell | SITCA | ABB | Siemens | SET | SOS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Houston | New England | New England | New England | USA | | | | Canada | Winnipeg | Winnipeg | Ontario | Quebec City | Edmonton | Quebec City | Montreal | Montreal |
| | | | USD | USD | USD | USD | USD | | | | CDN | CDN | CDN | CDN | CDN | CDN | CDN | CDN | CDN |
| General Labour/Clerical/Trades/Administration | 40 | $52 | $55 | $45 | $50 | $53 | $56 | | $50 | $48 | | $50 | $45 | $40 | $58 | | | | $45 |
| Technician (Elec./Mech)/Specialized Trades | | $74 | $82 | | | $63 | $76 | | | $75 | $80 | | | | $65 | | $95 | $60 | $75 |
| Foreman | 75 | $73 | | $65 | | | $80 | | $80 | $83 | $90 | | | | $75 | | | | |
| Project Manager / Project Engineer | | | | | | | | | | $79 | | | $70 | | $87 | | | $80 | |
| Senior Project Manager / Senior Project Engineer | 75 | $105 | | $105 | | | | | $85 | $101 | | $100 | | $105 | $98 | | | | |
| (Regional) Supervisor/Team Leader | 85 | $95 | $95 | $105 | $100 | $90 | $85 | | $95 | $113 | $108 | $135 | $100 | $105 | | $115 | | | |
| Technical Director/Division Manager | 115 | $134 | $126 | $125 | $150 | | | | $125 | $155 | | $165 | | | $145 | | | | |

**ENGINEERING FEE PROPOSAL**
**Litchfield Park Service Company**
**Airline Site Booster Station & Reservoir - Phase I Design Services**
**November 22, 2005**

**ESTIMATE OF EFFORT AND COSTS BY WORK TASK**

**Carollo Engineers - Staff Hours By Task**

| Task | Description | Partner | Project Manager | Senior Reg. Civil Engineer | Senior Reg. Struct. Engineer | Senior Reg. Mech. Engineer | Senior Reg. Elect. Engineer | Project Engineer & Designer | CADD Drafter | Clerical | Inspector | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BASIC SERVICES - PHASE I | | | | | | | | | | | | |
| 1 | Design Camp Activities | | | | | | | | | | | |
| | Conduct Design Camp | 8 | 48 | 48 | 48 | 48 | 48 | 40 | 40 | 16 | | 344 |
| | Procurement/Cost Management Plan | 1 | 8 | | 8 | 8 | 4 | | | 4 | | 33 |
| | Water Model Verification/System Hydraulics | 1 | 16 | 124 | | | | 40 | 16 | 8 | | 205 |
| | Basis of Design Report Development | 1 | 32 | 60 | 24 | 24 | 24 | 40 | 48 | 16 | | 289 |
| | QA/QC Plan | 2 | 8 | 4 | 4 | 4 | 4 | | | 4 | | 30 |
| | Phase I Project Mgmt. & Communication | 2 | 60 | | | | | | | 16 | | 78 |
| | Preliminary Site Work | | | | | | | | | | | |
| 2 | Site Surveys and Easements | 1 | 16 | 8 | | | | | 16 | | | 41 |
| 3 | Geotechnical Investigations | 1 | 16 | 8 | 16 | | | | 8 | | | 49 |
| 4 | Pump Station Design | 2 | 48 | 40 | 120 | 80 | 80 | 80 | 120 | 24 | | 594 |
| 5 | Reservoir Design | 2 | 60 | 48 | 160 | 48 | 24 | 120 | 160 | 16 | | 638 |
| 6 | Earthwork and Yard Piping | 1 | 8 | 80 | | 16 | | 80 | 120 | 6 | | 311 |
| 7 | Chlorination Facilities | 1 | 4 | 24 | | 8 | 16 | 16 | 40 | 2 | | 111 |
| 8 | Monitoring and Control Systems (SCADA) | 1 | 4 | | | | 40 | 16 | 40 | 5 | | 106 |
| 9 | Standby Emergency Power System | 1 | 8 | | 8 | 8 | 36 | 20 | 24 | 2 | | 107 |
| 10 | Site Paving and Drainage | 1 | 4 | 40 | 8 | | | 40 | 48 | 4 | | 145 |
| 11 | Site Lighting | 1 | 4 | | 8 | | 24 | 16 | 24 | 2 | | 79 |
| 12 | Perimeter Security Walls and Gates | 1 | 8 | 24 | 24 | | 16 | 24 | 40 | 6 | | 143 |
| 13 | Connections to Water System | 1 | 8 | 40 | | | | 40 | 60 | 6 | | 155 |
| 14 | Landscaping Water Supply & Coordination | 1 | 4 | 16 | | | | 16 | 16 | 6 | | 59 |
| 15 | Meetings & Developer Communications | 2 | 36 | 24 | 8 | 8 | 8 | | 24 | 16 | | 126 |
| 16 | Coordination with Permit Requirements | 2 | 24 | 16 | | | | 4 | 16 | 6 | | 68 |
| 17 | Agency Coordination | 2 | 24 | 24 | 8 | 8 | 8 | 4 | 24 | 8 | | 110 |
| 18 | Additional Services | TO BE DETERMINED | | | | | | | | | | |
| | **Subtotal, Phase I** | 36 | 448 | 648 | 444 | 260 | 332 | 596 | 884 | 173 | 0 | 3821 |
| | **Labor Cost w/o Profit [1]** | $175 | $165 | $132 | $132 | $132 | $132 | $98 | $69 | $58 | $85 | |
| | | | | | | | | | **Subtotal Labor Cost [1]** | | | **$431,946** |
| | | | | | | | | | **Profit Multiplier @ 12% of Labor** | | | **$51,834** |
| | | | | | | | | | **Direct Expenses [2]** | | | **$12,600** |
| 19 | On-Call Modeling Services | | | | | | | | **(Allowance)** | | | **$22,000** |
| 20 | Temporary Pump Station Modifications | | | | | | | | **(Allowance)** | | | **$30,000** |
| | | | | | | | | | **TOTAL PHASE I COSTS** | | | **$548,380** |

Note 1: Labor Cost = Raw Labor + Overhead
Note 2: *Phase I Direct Costs include Geotech, Survey, Mileage, and Printing*

**Algonquin Water Services**
**Build up of Monthly Operating and Accounting Fees for Black Mountain Sewer Company**
**CSB 5.1-2002**

| | | Customer Count | Monthly Salaries | Over Time Wages | Total Salaries | Benefits | Total Employee Cost | Total ADM/OPS Costs |
|---|---|---|---|---|---|---|---|---|
| **BLACK MOUNTAIN** | | **1731** | | | | | | |
| **Administration Fee Build Up ($3/bill)** | | | | | | | | |
| Shared Admin Wages | See schedule B | | | | | | 3,626.86 | |
| Postage | See schedule A | | | | | | $727.02 | |
| Other | ** | | | | | | 839.12 | |
| **Total Administration Costs** | | | | | | | | **$5,193.00** |
| **Operations Fee Build Up** | | | | | | | | |
| Western Environmental Technologies | | | - | - | - | - | 8,500.00 | |
| Shared Ops Wages | See schedule B | | | | | | 4,238.11 | |
| Other | ** | | | | | | 1,306.37 | |
| **Total Operation Costs** | | | | | | | | **$14,044.48** |

**** These costs include other overhead costs such as rent, legal fees, communication, travel, etc.**

**Schedule A**
**Monthly Postage Cost Build Up**
**CSB 5.1-2002**

| | | Postage Expense |
|---|---|---|
| **Black Mountain** | | |
| Customer Count | **1731** | |
| Postage Cost Per Bill | **0.32** | $553.92 |
| Envlope/Stationary Cost per Bill | **0.10** | $173.10 |
| **Total Postage Cost** | | **$727.02** |

**Schedule B**
**Algonquin Water Services Monthly Allocation of Shared Personnel by Facility**
**CSB 5.1-2002**

| | | Gold Canyon | Black Mountain | Tall Timbers | Woodmark | Total |
|---|---|---|---|---|---|---|
| **Salaries for Admin at AWS** | **From Schedule C** | | | | | |
| **Budgeted Customers** | | 3,908 | 1,731 | 907 | 664 | 7,210.00 |
| | | 54% | 24% | 13% | 9% | 100% |
| Patty Nielsen | 6,783.17 | 3,676.65 | 1,628.52 | 853.31 | 624.69 | 6,783.17 |
| Bobi Keen | 4,077.68 | 2,210.21 | 978.98 | 512.96 | 375.53 | 4,077.68 |
| Suzanne Wagner | 4,245.83 | 2,301.35 | 1,019.35 | 534.12 | 391.02 | 4,245.83 |
| | | **8,188.20** | **3,626.86** | **1,900.38** | **1,391.24** | **15,106.68** |
| **Salaries for Ops** | | | | | | |
| **Budgeted Customers** | | 4,318 | 2,000 | 1,145 | 1,111 | 41,138 |
| | | 11% | 4% | 3% | 2% | 100% |
| Graham Symmonds | 9,819.67 | 5,388.82 | 2,357.54 | 1,235.29 | 904.34 | 9,885.98 |
| Ed Adair | 9,514.54 | 5,221.36 | 1,880.57 | 1,295.55 | 1,117.05 | 9,514.54 |
| | | **10,610.18** | **4,238.11** | **2,530.84** | **2,021.39** | **19,400.52** |

**Schedule C**
**Algonquin Water Services Monthly Shared Admin and Operations Personnel**
**CSB 5.1-2002**

| | MONTHLY SALARIES | OT HRS $ | TOTAL SALARIES | BENEFITS | OTHER BENEFITS | CAR ALLOWANCE | MILEAGE | TOTAL EMPLOYEE COST |
|---|---|---|---|---|---|---|---|---|
| Dacquet, Roberta (bobi Keen) | 2,912.63 | - | 2,912.63 | 1,165.05 | | | | 4,077.68 |
| Scessoms, Graham | 6,628.07 | - | 6,628.07 | 2,651.23 | | 540.37 | | 9,819.67 |
| Nielsen, Patricia | 4,368.93 | - | 4,368.93 | 1,747.57 | 226.67 | 440.00 | | 6,783.17 |
| Ed Adair | 6,796.10 | - | 6,796.10 | 2,718.44 | | | | 9,514.54 |
| Wagner, Suzanne | 2,718.45 | - | 2,718.45 | 1,087.38 | | 440.00 | | 4,245.83 |

**Algonquin Water Services**
**Build up of Monthly Operating and Accounting Fees for Black Mountain Sewer Company**
**CSB 5.1-2003**

| | | Customer Count | Monthly Salaries | Over Time Wages | Total Salaries | Benefits | Total Employee Cost | Total ADM/OPS Costs |
|---|---|---|---|---|---|---|---|---|
| **BLACK MOUNTAIN** | | **1798** | | | | | | |
| **Administration Fee Build Up ($3/bill)** | | | | | | | | |
| Shared Admin Wages | See schedule B | | | | | | 1,409.36 | |
| Postage | See schedule A | | | | | | $755.16 | |
| Other | ** | | | | | | 3,229.48 | |
| **Total Administration Costs** | | | | | | | | **$5,394.00** |
| **Operations Fee Build Up** | | | | | | | | |
| Western Environmental Technologies | | | - | - | - | - | 8,500.00 | |
| Shared Ops Wages | See schedule B | | | | | | 4,107.39 | |
| Other | ** | | | | | | 1,306.37 | |
| **Total Operation Costs** | | | | | | | | **$13,913.76** |

**** These costs include other overhead costs such as rent, legal fees, communication, travel, etc.**

**Schedule A**
**Monthly Postage Cost Build Up**
**CSB 5.1-2003**

| | | Postage Expense |
|---|---|---|
| **Black Mountain** | | |
| Customer Count | **1798** | |
| Postage Cost Per Bill | **0.32** | $575.36 |
| Envlope/Stationary Cost per Bill | **0.10** | $179.80 |
| **Total Postage Cost** | | **$755.16** |

**Schedule B**
**Algonquin Water Services Monthly Allocation of Shared Personnel by Facility**
**CSB 5.1-2003**

| | | Gold Canyon | Black Mountain | Tall Timbers | Woodmark | Bella Vista | Litchfield Park | Total |
|---|---|---|---|---|---|---|---|---|
| **Salaries for Admin at AWS** | **From Schedule C** | | | | | | | |
| **Budgeted Customers** | | 4,318 | 1,798 | 1,145 | 1,111 | | 21,920 | 30,292.00 |
| | | 14% | 6% | 4% | 4% | | 72% | 100% |
| Patty Nielsen | 6,966.66 | 993.07 | 413.51 | 263.33 | 255.51 | - | 5,041.24 | 6,966.66 |
| Bobi Keen | 4,200.01 | 598.69 | 249.29 | 158.76 | 154.04 | - | 3,039.23 | 4,200.01 |
| Suzanne Wagner | 4,360.01 | 621.50 | 258.79 | 164.80 | 159.91 | - | 3,155.00 | 4,360.01 |
| Barbara Risden | 4,134.37 | 589.34 | 245.40 | 156.27 | 151.63 | - | 2,991.73 | 4,134.37 |
| Brenda Bowman | 4,083.32 | 582.06 | 242.37 | 154.34 | 149.76 | - | 2,954.79 | 4,083.32 |
| | | **3,384.66** | **1,409.36** | **897.51** | **870.86** | **-** | **17,181.99** | **23,744.38** |
| **Salaries for Ops** | | | | | | | | |
| **Budgeted Customers** | | 4,318 | 1,798 | 1,145 | 1,111 | 6,970 | 21,920 | 41,138 |
| | | 11% | 4% | 3% | 2% | 17% | 63% | 100% |
| Charlie Hernandez | 11,796.89 | 1,300.19 | 700.21 | 445.91 | 432.67 | - | 8,536.50 | 11,415.48 |
| Adair, Edward (4 Sewer) | 9,799.97 | 2,449.99 | 2,449.99 | 2,449.99 | 2,449.99 | | | |
| Mike Weber | 8,465.06 | 932.97 | 336.03 | 231.49 | 199.60 | 1,442.88 | 5,322.09 | 8,465.06 |
| Joel Wade | 10,464.97 | 1,491.74 | 621.15 | 395.56 | 383.82 | - | 7,572.70 | 10,464.97 |
| | | **6,174.89** | **4,107.39** | **3,522.96** | **3,466.08** | **1,442.88** | **21,431.29** | **30,345.50** |

**Schedule C**
**Algonquin Water Services Monthly Shared Admin and Operations Personnel**
**CSB 5.1-2003**

| | MONTHLY SALARIES | OT HRS $ | TOTAL SALARIES | BENEFITS | OTHER BENEFITS | CAR ALLOWANCE | MILEAGE | TOTAL EMPLOYEE COST |
|---|---|---|---|---|---|---|---|---|
| Bowman, Brenda | 2,916.66 | - | 2,916.66 | 1,166.66 | | | | 4,083.32 |
| Dacquet, Roberta (bobi Keen) | 3,000.01 | - | 3,000.01 | 1,200.00 | | | | 4,200.01 |
| Hernandez, Charlie | 8,040.37 | - | 8,040.37 | 3,216.15 | | 540.37 | | 11,796.89 |
| Nielsen, Patricia | 4,499.99 | - | 4,499.99 | 1,800.00 | 226.67 | 440.00 | | 6,966.66 |
| Risden, Barbara | 2,916.66 | - | 2,916.66 | 1,166.66 | | | | 4,083.32 |
| Wade, Joel and Ed Adair | 7,474.98 | - | 7,474.98 | 2,989.99 | | | | 10,464.97 |
| Wagner, Suzanne | 2,800.01 | - | 2,800.01 | 1,120.00 | | 440.00 | | 4,360.01 |
| Adair, Ed | 6,999.98 | | 6,999.98 | 2,799.99 | | | | 9,799.97 |
| Kuta, Robert and Mike Weber | 6,046.47 | - | 6,046.47 | 2,418.59 | | | | 8,465.06 |

Affiliates, Transactions
CSB 1.50

| Journal Entry | Series | TRX Date | Account Number | NARUC | Account Description | Amount | Description | Originating Document Number | Originating Master ID | Originating Master Name | Reference |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Algonquin Power Systems Inc.** | | | | | | | | | | | |
| 19796 | Purchasing | 1/30/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $581.90 | Purchases | 1410 | 8100APSINC | Algonquin Power Systems Inc. | INS PROP B/M -BLACK MOUNTAIN |
| 20345 | Purchasing | 2/15/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $581.90 | Purchases | 0001449 | 8100APSINC | Algonquin Power Systems Inc. | INS PROP/B/M-BLACK MOUNTAIN |
| 20954 | Purchasing | 3/29/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $581.90 | Purchases | 1490 | 8100APSINC | Algonquin Power Systems Inc. | INSURANCE B&M-MAR 04 |
| 20955 | Purchasing | 3/29/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $511.83 | Purchases | 1550 | 8100APSINC | Algonquin Power Systems Inc. | UMBRELLA INSURANCE MAR 2004 |
| 21665 | Purchasing | 4/15/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $581.90 | Purchases | 1595 | 8100APSINC | Algonquin Power Systems Inc. | INSURANCE B&M |
| 21666 | Purchasing | 4/15/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $255.92 | Purchases | 1665 | 8100APSINC | Algonquin Power Systems Inc. | UMBRELLA INSURANCE\ |
| 22318 | Purchasing | 5/18/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $581.90 | Purchases | 1739 | 8100APSINC | Algonquin Power Systems Inc. | MONTHLY ADMIN FEE- MAY04 |
| 22319 | Purchasing | 5/18/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $255.92 | Purchases | 1700 | 8100APSINC | Algonquin Power Systems Inc. | UMBRELLA INS |
| 23065 | Purchasing | 6/25/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $255.92 | Purchases | 1782 | 8100APSINC | Algonquin Power Systems Inc. | UMB INS JUNE04 |
| 23069 | Purchasing | 6/25/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $581.90 | Purchases | 1822 | 8100APSINC | Algonquin Power Systems Inc. | PROPERTY B/M JUNE04 |
| 23763 | Purchasing | 7/29/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $581.90 | Purchases | 1863 | 8100APSINC | Algonquin Power Systems Inc. | PROPERTY, B&M INS JULY04 |
| 23767 | Purchasing | 7/29/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $255.92 | Purchases | 1901 | 8100APSINC | Algonquin Power Systems Inc. | UMBRELLA INS JULY04 |
| 24115 | Purchasing | 8/20/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $581.90 | Purchases | 1945 | 8100APSINC | Algonquin Power Systems Inc. | PROPERTY INS AUG04 |
| 24116 | Purchasing | 8/20/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $255.92 | Purchases | 1983 | 8100APSINC | Algonquin Power Systems Inc. | UMBRELLA INS AUG04 |
| 24417 | Purchasing | 9/29/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $255.92 | Purchases | 2068 | 8100APSINC | Algonquin Power Systems Inc. | UMBRELLA INS SEPT04 |
| 24418 | Purchasing | 9/29/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $581.90 | Purchases | 2030 | 8100APSINC | Algonquin Power Systems Inc. | PROP B&M INS SEPT04 |
| 24600 | Purchasing | 10/21/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $581.90 | Purchases | 2121 | 8100APSINC | Algonquin Power Systems Inc. | PROP INS OCT04 |
| 24601 | Purchasing | 10/21/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $255.92 | Purchases | 2163 | 8100APSINC | Algonquin Power Systems Inc. | UMBRELLA INS OCT04 |
| 24793 | Purchasing | 11/19/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $255.92 | Purchases | 2205 | 8100APSINC | Algonquin Power Systems Inc. | UMBRELLA INS NOV04 |
| 24995 | Purchasing | 12/21/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $255.92 | Purchases | 2251 | 8100APSINC | Algonquin Power Systems Inc. | UMBRELLA INS DEC04 |
| 24996 | Purchasing | 12/21/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $539.02 | Purchases | JC19935 | 8100APSINC | Algonquin Power Systems Inc. | B&M INS DP & 1ST INSTAL 2005 |
| 21829 | Purchasing | 4/30/2004 | 8100-2-0200-69-5520-0000 | 720.8 | Materials and Supplies | $24.32 | Purchases | JC17292 | 8100APSINC | Algonquin Power Systems Inc. | GOLD C-UNDERTAKE WORK/SAFETY |
| 22545 | Purchasing | 6/1/2004 | 8100-2-0200-69-5520-0000 | 720.8 | Materials and Supplies | ($24.32) | Purchases | JC17292 | 8100APSINC | Algonquin Power Systems Inc. | Void Open Trx |
| 24643 | Purchasing | 10/29/2004 | 8100-2-0200-52-5520-0000 | 720.5 | Materials and Supplies | $621.79 | Purchases | JC19512 | 8100APSINC | Algonquin Power Systems Inc. | PURCHASE SAFETY EQUIPMENT |
| 22482 | Purchasing | 5/31/2004 | 8100-2-0200-69-5700-0006 | 736.8 | Central Office - Operations | $639.12 | Purchases | JC17724 | 8100APSINC | Algonquin Power Systems Inc. | UNDERTAKE WORK/SAFETY |
| 23157 | Purchasing | 6/30/2004 | 8100-2-0200-69-5700-0006 | 736.8 | Central Office - Operations | $80.53 | Purchases | JC18058 | 8100APSINC | Algonquin Power Systems Inc. | BMSC- UNDERTAKE WORK/SAFETY |
| 23903 | Purchasing | 7/31/2004 | 8100-2-0200-69-5700-0006 | 736.8 | Central Office - Operations | $319.56 | Purchases | JC18460 | 8100APSINC | Algonquin Power Systems Inc. | BLACK-UNDERTAKE WORK/SAFETY |
| 24187 | Purchasing | 8/30/2004 | 8100-2-0200-69-5700-0006 | 736.8 | Central Office - Operations | $679.07 | Purchases | JC18770 | 8100APSINC | Algonquin Power Systems Inc. | UNDERTAKE WORK/SAFETY M GRIFFI |
| 24447 | Purchasing | 9/30/2004 | 8100-2-0200-69-5700-0006 | 736.8 | Central Office - Operations | $3,464.75 | Purchases | JC19139 | 8100APSINC | Algonquin Power Systems Inc. | PURCHASE SAFETY EQUIP |
| 24448 | Purchasing | 9/30/2004 | 8100-2-0200-69-5700-0006 | 736.8 | Central Office - Operations | $360.00 | Purchases | JC19133 | 8100APSINC | Algonquin Power Systems Inc. | UNDERTAKE WORK SAFETY |
| 24883 | Purchasing | 11/30/2004 | 8100-2-0200-69-5700-0006 | 736.8 | Central Office - Operations | $11,773.18 | Purchases | JC19825 | 8100APSINC | Algonquin Power Systems Inc. | CATCH UP |
| 25058 | Purchasing | 12/30/2004 | 8100-2-0200-69-5700-0006 | 736.8 | Central Office - Operations | $200.00 | Purchases | JC20165 | 8100APSINC | Algonquin Power Systems Inc. | SAFETY |
| **Total for Algonquin Power Systems Inc.** | | | | | | $27,311.13 | | | | | |
| **Algonquin Power Trust** | | | | | | | | | | | |
| 23363 | Purchasing | 6/30/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | $5,000.00 | Purchases | JC254 | 8100APT | Algonquin Power Trust | MGMNT FEE JUNE04 |
| 23771 | Purchasing | 7/29/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | $5,000.00 | Purchases | JC260 | 8100APT | Algonquin Power Trust | MGMNT FEE JULY04 |
| 24163 | Purchasing | 8/31/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | $5,000.00 | Purchases | 2539 | 8100APT | Algonquin Power Trust | MANAGEMENT FEE AUG04 |
| 24430 | Purchasing | 9/30/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | $5,000.00 | Purchases | 2568 | 8100APT | Algonquin Power Trust | MANAGEMENT FEE SEPT04 |
| 24636 | Purchasing | 10/29/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | $5,000.00 | Purchases | 2594 | 8100APT | Algonquin Power Trust | MANAGEMENT FEE OCT04 |
| 24745 | Purchasing | 10/31/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | ($3,500.00) | Purchases | 210 | 8100APT | Algonquin Power Trust | APT Mgmt Fee Overbill Aug04 |
| 24746 | Purchasing | 10/31/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | ($3,500.00) | Purchases | 209 | 8100APT | Algonquin Power Trust | APT Mgmt Fee Overbill Sep04 |
| 24747 | Purchasing | 10/31/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | ($3,500.00) | Purchases | 208 | 8100APT | Algonquin Power Trust | APT Mgmt Fee Overbill Oct04 |
| 24828 | Purchasing | 11/25/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | $1,500.00 | Purchases | 2619 | 8100APT | Algonquin Power Trust | MANAGEMENT FEE NOV04 |
| 24943 | Purchasing | 12/15/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | $1,500.00 | Purchases | 2658 | 8100APT | Algonquin Power Trust | MANAGEMENT FEE DEC04 |
| 24259 | Purchasing | 9/9/2004 | 8100-2-0200-50-5520-0000 | 720.1 | Materials and Supplies | $57.63 | Purchases | 2551 | 8100APT | Algonquin Power Trust | GENERAL OPS COSTS |
| 19975 | Purchasing | 1/31/2004 | 8100-2-0200-69-5700-0006 | 736.8 | Central Office - Operations | $642.92 | Purchases | JC21 | 8100APT | Algonquin Power Trust | GENERAL OPS COSTS |
| 19976 | Purchasing | 1/31/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $2,456.90 | Purchases | JC9 | 8100APT | Algonquin Power Trust | GENERAL ACT COSTS |
| 20512 | Purchasing | 2/29/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $824.90 | Purchases | JC45 | 8100APT | Algonquin Power Trust | GENERAL ACT COSTS - BLACK MOUN |
| 21203 | Purchasing | 3/30/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $975.95 | Purchases | JC89 | 8100APT | Algonquin Power Trust | GENERAL ACT COSTS |
| 21828 | Purchasing | 4/30/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $1,068.19 | Purchases | JC126 | 8100APT | Algonquin Power Trust | GENERAL ACT COSTS |
| 22459 | Purchasing | 5/31/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $550.44 | Purchases | JC155 | 8100APT | Algonquin Power Trust | GENERAL ACCTG COSTS BMSC |
| 23364 | Purchasing | 6/30/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $877.86 | Purchases | JC243 | 8100APT | Algonquin Power Trust | GENERAL ACCTG COSTS JUNE04 |
| 23365 | Purchasing | 6/30/2004 | 8100-2-0200-69-5700-0002 | 736.8 | Central Office - Human Resources | $73.74 | Purchases | JC244 | 8100APT | Algonquin Power Trust | GENERAL HR COSTS JUNE04 |
| 23831 | Purchasing | 7/30/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $953.09 | Purchases | JC269 | 8100APT | Algonquin Power Trust | GENERAL ACCTG COSTS JULY04 |
| 24161 | Purchasing | 8/31/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $1,339.32 | Purchases | JC324 | 8100APT | Algonquin Power Trust | GENERAL ACCTG COSTS AUG04 |
| 24162 | Purchasing | 8/31/2004 | 8100-2-0200-69-5700-0006 | 736.8 | Central Office - Operations | $650.36 | Purchases | JC336 | 8100APT | Algonquin Power Trust | GENERAL OPS COSTS AUG04 |
| 24420 | Purchasing | 9/30/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $1,020.18 | Purchases | JC363 | 8100APT | Algonquin Power Trust | GENERAL ACCTG SEPT04 |
| 24637 | Purchasing | 10/29/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $1,396.57 | Purchases | JC400 | 8100APT | Algonquin Power Trust | GENERAL ACCT COSTS |
| 24873 | Purchasing | 11/30/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $801.49 | Purchases | JC438 | 8100APT | Algonquin Power Trust | GENERAL ACCTG COSTS |
| 25057 | Purchasing | 12/30/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $827.28 | Purchases | JC477 | 8100APT | Algonquin Power Trust | GENERAL ACCTG COSTS |

**BLACK MOUNTAIN SEWER CORPORATION**
**2005 GENERAL RATE CASE**
**DOCKET NO. SW-02361A-05-0657**
**RESPONSE TO STAFF'S SEVENTH SET OF DATA REQUESTS**

Response provided by: Greg Sorensen

Title: Controller – Algonquin Water

Company Name: Black Mountain Sewer Corporation
Address: 12725 W. Indian School Road, Suite D-101
Avondale, AZ 85323

Company Response Number: CSB 7.14

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Q. Affiliated Transactions – This is a follow-up to CSB 1.50. Thank you for providing the information, however, the copy is unreadable in some areas. Please provide a readable copy.

A. Please see the attached document with revised formatting.

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EXHIBIT
S-20
admitted
ALL-STATE LEGAL®

Affiliates, Transactions
CSB 1.50

| Journal Entry | Series | TRX Date | Account Number | NARUC | Account Description | Amount | Description | Originating Document Number | Originating Master ID | Originating Master Name | Reference |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Algonquin Power Systems Inc.** | | | | | | | | | | | |
| 19796 | Purchasing | 1/30/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $581.90 | Purchases | 1410 | 8100APSINC | Algonquin Power Systems Inc. | INS PROP B/M -BLACK MOUNTAIN |
| 20345 | Purchasing | 2/15/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $581.90 | Purchases | 0001449 | 8100APSINC | Algonquin Power Systems Inc. | INS PROP/B/M-BLACK MOUNTAIN |
| 20954 | Purchasing | 3/29/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $581.90 | Purchases | 1490 | 8100APSINC | Algonquin Power Systems Inc. | INSURANCE B&M-MAR 04 |
| 20955 | Purchasing | 3/29/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $511.83 | Purchases | 1550 | 8100APSINC | Algonquin Power Systems Inc. | UMBRELLA INSURANCE MAR 2004 |
| 21665 | Purchasing | 4/15/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $581.90 | Purchases | 1595 | 8100APSINC | Algonquin Power Systems Inc. | INSURANCE B&M |
| 21666 | Purchasing | 4/15/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $255.92 | Purchases | 1665 | 8100APSINC | Algonquin Power Systems Inc. | UMBRELLA INSURANCE\ |
| 22318 | Purchasing | 5/18/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $581.90 | Purchases | 1739 | 8100APSINC | Algonquin Power Systems Inc. | MONTHLY ADMIN FEE- MAY04 |
| 22319 | Purchasing | 5/18/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $255.92 | Purchases | 1700 | 8100APSINC | Algonquin Power Systems Inc. | UMBRELLA INS |
| 23065 | Purchasing | 6/25/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $255.92 | Purchases | 1782 | 8100APSINC | Algonquin Power Systems Inc. | UMB INS JUNE04 |
| 23069 | Purchasing | 6/25/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $581.90 | Purchases | 1822 | 8100APSINC | Algonquin Power Systems Inc. | PROPERTY B/M JUNE04 |
| 23763 | Purchasing | 7/29/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $581.90 | Purchases | 1863 | 8100APSINC | Algonquin Power Systems Inc. | PROPERTY, B&M INS JULY04 |
| 23767 | Purchasing | 7/29/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $255.92 | Purchases | 1901 | 8100APSINC | Algonquin Power Systems Inc. | UMBRELLA INS JULY04 |
| 24115 | Purchasing | 8/20/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $581.90 | Purchases | 1945 | 8100APSINC | Algonquin Power Systems Inc. | PROPERTY INS AUG04 |
| 24116 | Purchasing | 8/20/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $255.92 | Purchases | 1983 | 8100APSINC | Algonquin Power Systems Inc. | UMBRELLA INS AUG04 |
| 24417 | Purchasing | 9/29/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $255.92 | Purchases | 2068 | 8100APSINC | Algonquin Power Systems Inc. | UMBRELLA INS SEPT04 |
| 24418 | Purchasing | 9/29/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $581.90 | Purchases | 2030 | 8100APSINC | Algonquin Power Systems Inc. | PROP B&M INS SEPT04 |
| 24600 | Purchasing | 10/21/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $581.90 | Purchases | 2121 | 8100APSINC | Algonquin Power Systems Inc. | PROP INS OCT04 |
| 24601 | Purchasing | 10/21/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $255.92 | Purchases | 2163 | 8100APSINC | Algonquin Power Systems Inc. | UMBRELLA INS OCT04 |
| 24793 | Purchasing | 11/19/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $255.92 | Purchases | 2205 | 8100APSINC | Algonquin Power Systems Inc. | UMBRELLA INS NOV04 |
| 24995 | Purchasing | 12/21/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $255.92 | Purchases | 2251 | 8100APSINC | Algonquin Power Systems Inc. | UMBRELLA INS DEC04 |
| 24996 | Purchasing | 12/21/2004 | 8100-2-0200-69-5280-0000 | 757.8 | Insurance-General Liability | $539.02 | Purchases | JC19935 | 8100APSINC | Algonquin Power Systems Inc. | B&M INS DP & 1ST INSTAL 2005 |
| 21829 | Purchasing | 4/30/2004 | 8100-2-0200-69-5520-0000 | 720.8 | Materials and Supplies | $24.32 | Purchases | JC17292 | 8100APSINC | Algonquin Power Systems Inc. | GOLD C-UNDERTAKE WORK/SAFETY |
| 22545 | Purchasing | 6/1/2004 | 8100-2-0200-69-5520-0000 | 720.8 | Materials and Supplies | ($24.32) | Purchases | JC17292 | 8100APSINC | Algonquin Power Systems Inc. | Void Open Trx |
| 24643 | Purchasing | 10/29/2004 | 8100-2-0200-52-5520-0000 | 720.5 | Materials and Supplies | $621.79 | Purchases | JC19512 | 8100APSINC | Algonquin Power Systems Inc. | PURCHASE SAFETY EQUIPMENT |
| 22482 | Purchasing | 5/31/2004 | 8100-2-0200-69-5700-0006 | 736.8 | Central Office - Operations | $639.12 | Purchases | JC17724 | 8100APSINC | Algonquin Power Systems Inc. | UNDERTAKE WORK/SAFETY |
| 23157 | Purchasing | 6/30/2004 | 8100-2-0200-69-5700-0006 | 736.8 | Central Office - Operations | $80.53 | Purchases | JC18058 | 8100APSINC | Algonquin Power Systems Inc. | BMSC- UNDERTAKE WORK/SAFETY |
| 23903 | Purchasing | 7/31/2004 | 8100-2-0200-69-5700-0006 | 736.8 | Central Office - Operations | $319.56 | Purchases | JC18460 | 8100APSINC | Algonquin Power Systems Inc. | BLACK-UNDERTAKE WORK/SAFETY |
| 24187 | Purchasing | 8/30/2004 | 8100-2-0200-69-5700-0006 | 736.8 | Central Office - Operations | $679.07 | Purchases | JC18770 | 8100APSINC | Algonquin Power Systems Inc. | UNDERTAKE WORK/SAFETY M GRIFFI |
| 24447 | Purchasing | 9/30/2004 | 8100-2-0200-69-5700-0006 | 736.8 | Central Office - Operations | $3,464.75 | Purchases | JC19139 | 8100APSINC | Algonquin Power Systems Inc. | PURCHASE SAFETY EQUIP |
| 24448 | Purchasing | 9/30/2004 | 8100-2-0200-69-5700-0006 | 736.8 | Central Office - Operations | $360.00 | Purchases | JC19133 | 8100APSINC | Algonquin Power Systems Inc. | UNDERTAKE WORK SAFETY |
| 24883 | Purchasing | 11/30/2004 | 8100-2-0200-69-5700-0006 | 736.8 | Central Office - Operations | $11,773.18 | Purchases | JC19825 | 8100APSINC | Algonquin Power Systems Inc. | CATCH UP |
| 25058 | Purchasing | 12/30/2004 | 8100-2-0200-69-5700-0006 | 736.8 | Central Office - Operations | $200.00 | Purchases | JC20165 | 8100APSINC | Algonquin Power Systems Inc. | SAFETY |
| **Total for Algonquin Power Systems Inc.** | | | | | | $27,311.13 | | | | | |
| **Algonquin Power Trust** | | | | | | | | | | | |
| 23363 | Purchasing | 6/30/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | $5,000.00 | Purchases | JC254 | 8100APT | Algonquin Power Trust | MGMNT FEE JUNE04 |
| 23771 | Purchasing | 7/29/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | $5,000.00 | Purchases | JC260 | 8100APT | Algonquin Power Trust | MGMNT FEE JULY04 |
| 24163 | Purchasing | 8/31/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | $5,000.00 | Purchases | 2539 | 8100APT | Algonquin Power Trust | MANAGEMENT FEE AUG04 |
| 24430 | Purchasing | 9/30/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | $5,000.00 | Purchases | 2568 | 8100APT | Algonquin Power Trust | MANAGEMENT FEE SEPT04 |
| 24636 | Purchasing | 10/29/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | $5,000.00 | Purchases | 2594 | 8100APT | Algonquin Power Trust | MANAGEMENT FEE OCT04 |
| 24745 | Purchasing | 10/31/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | ($3,500.00) | Purchases | 210 | 8100APT | Algonquin Power Trust | APT Mgmt Fee Overbill Aug04 |
| 24746 | Purchasing | 10/31/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | ($3,500.00) | Purchases | 209 | 8100APT | Algonquin Power Trust | APT Mgmt Fee Overbill Sep04 |
| 24747 | Purchasing | 10/31/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | ($3,500.00) | Purchases | 208 | 8100APT | Algonquin Power Trust | APT Mgmt Fee Overbill Oct04 |
| 24828 | Purchasing | 11/25/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | $1,500.00 | Purchases | 2619 | 8100APT | Algonquin Power Trust | MANAGEMENT FEE NOV04 |
| 24943 | Purchasing | 12/15/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | $1,500.00 | Purchases | 2658 | 8100APT | Algonquin Power Trust | MANAGEMENT FEE DEC04 |
| 24259 | Purchasing | 9/9/2004 | 8100-2-0200-50-5520-0000 | 720.1 | Materials and Supplies | $57.63 | Purchases | 2551 | 8100APT | Algonquin Power Trust | GENERAL OPS COSTS |
| 19975 | Purchasing | 1/31/2004 | 8100-2-0200-69-5700-0006 | 736.8 | Central Office - Operations | $642.92 | Purchases | JC21 | 8100APT | Algonquin Power Trust | GENERAL OPS COSTS |
| 19976 | Purchasing | 1/31/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $2,456.90 | Purchases | JC9 | 8100APT | Algonquin Power Trust | GENERAL ACT COSTS |
| 20512 | Purchasing | 2/29/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $824.90 | Purchases | JC45 | 8100APT | Algonquin Power Trust | GENERAL ACT COSTS - BLACK MOUN |
| 21203 | Purchasing | 3/30/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $975.95 | Purchases | JC89 | 8100APT | Algonquin Power Trust | GENERAL ACT COSTS |
| 21828 | Purchasing | 4/30/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $1,068.19 | Purchases | JC126 | 8100APT | Algonquin Power Trust | GENERAL ACT COSTS |
| 22459 | Purchasing | 5/31/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $550.44 | Purchases | JC155 | 8100APT | Algonquin Power Trust | GENERAL ACCTG COSTS BMSC |
| 23364 | Purchasing | 6/30/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $877.86 | Purchases | JC243 | 8100APT | Algonquin Power Trust | GENERAL ACCTG COSTS JUNE04 |
| 23365 | Purchasing | 6/30/2004 | 8100-2-0200-69-5700-0002 | 736.8 | Central Office - Human Resources | $73.74 | Purchases | JC244 | 8100APT | Algonquin Power Trust | GENERAL HR COSTS JUNE04 |
| 23831 | Purchasing | 7/30/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $953.09 | Purchases | JC269 | 8100APT | Algonquin Power Trust | GENERAL ACCTG COSTS JULY04 |
| 24161 | Purchasing | 8/31/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $1,339.32 | Purchases | JC324 | 8100APT | Algonquin Power Trust | GENERAL ACCTG COSTS AUG04 |
| 24162 | Purchasing | 8/31/2004 | 8100-2-0200-69-5700-0006 | 736.8 | Central Office - Operations | $650.36 | Purchases | JC336 | 8100APT | Algonquin Power Trust | GENERAL OPS COSTS AUG04 |
| 24420 | Purchasing | 9/30/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $1,020.18 | Purchases | JC363 | 8100APT | Algonquin Power Trust | GENERAL ACCTG SEPT04 |
| 24637 | Purchasing | 10/29/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $1,396.57 | Purchases | JC400 | 8100APT | Algonquin Power Trust | GENERAL ACCT COSTS |
| 24873 | Purchasing | 11/30/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $801.49 | Purchases | JC438 | 8100APT | Algonquin Power Trust | GENERAL ACCTG COSTS |
| 25057 | Purchasing | 12/30/2004 | 8100-2-0200-69-5700-0003 | 736.8 | Central Office - Accounting/Administration | $827.28 | Purchases | JC477 | 8100APT | Algonquin Power Trust | GENERAL ACCTG COSTS |

**Total for Algonquin Power Trust** $32,016.82

**Algonquin Water Services LLC**

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 25076 | Purchasing | 12/31/2004 | 8100-2-0200-64-5110-0001 | 742.12 | Rental of Equipment | $813.16 | Job 8100-0200-OPS 4 | JC282 | 8100NEW | Algonquin Water Services LLC | REPAIRS & MAIN- TELEPHONE, GAS |
| 22492 | Purchasing | 5/31/2004 | 8100-2-0200-69-5150-0000 | 775.8 | Telephone | $1,041.60 | Purchases | JC34 | 8100NEW | Algonquin Water Services LLC | REPAIRS & MAINT. |
| 24635 | Purchasing | 10/29/2004 | 8100-2-0200-69-5150-0000 | 775.8 | Telephone | $805.18 | Purchases | JC171 | 8100NEW | Algonquin Water Services LLC | REPAIRS & MAINTENANCE |
| 19734 | Purchasing | 1/29/2004 | 8100-2-0200-50-5200-0100 | 736.1 | Contractual Services-Other | $7,500.00 | Purchases | 617 | 8100NEW | Algonquin Water Services LLC | CONTRACT OPERATORS JAN 04 |
| 19737 | Purchasing | 1/29/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | $5,000.00 | Purchases | 611 | 8100NEW | Algonquin Water Services LLC | MANAGEMENT FEE JAN 2004 |
| 19979 | Purchasing | 1/31/2004 | 8100-2-0200-69-5200-0021 | 732.8 | Contractual Services-Accounting | $5,394.00 | Purchases | 630 | 8100NEW | Algonquin Water Services LLC | ACCOUNTING BILLING FEE JAN 04 |
| 20501 | Purchasing | 2/29/2004 | 8100-2-0200-69-5200-0021 | 732.8 | Contractual Services-Accounting | $5,421.00 | Purchases | 646 | 8100NEW | Algonquin Water Services LLC | ACCOUNTING & BILLING FEB 04 |
| 20504 | Purchasing | 2/29/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | $5,000.00 | Purchases | 634 | 8100NEW | Algonquin Water Services LLC | MANAGEMENT FEE -FEB 2004 |
| 20507 | Purchasing | 2/29/2004 | 8100-2-0200-50-5200-0100 | 736.1 | Contractual Services-Other | $7,500.00 | Purchases | 640 | 8100NEW | Algonquin Water Services LLC | CONTRACT OPERATORS-FEB 2004 |
| 21174 | Purchasing | 3/30/2004 | 8100-2-0200-50-5200-0100 | 736.1 | Contractual Services-Other | $7,500.00 | Purchases | 658 | 8100NEW | Algonquin Water Services LLC | CONTRACT OPS MAR 2004 |
| 21175 | Purchasing | 3/30/2004 | 8100-2-0200-69-5200-0021 | 732.8 | Contractual Services-Accounting | $5,448.00 | Purchases | 665 | 8100NEW | Algonquin Water Services LLC | ACCOUNTING/BILLING MAR 2004 |
| 21177 | Purchasing | 3/30/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | $5,000.00 | Purchases | 652 | 8100NEW | Algonquin Water Services LLC | MANAGEMENT FEE MAR 2004 |
| 21813 | Purchasing | 4/30/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | $5,000.00 | Purchases | 669 | 8100NEW | Algonquin Water Services LLC | MANAGEMENT FEE |
| 21817 | Purchasing | 4/30/2004 | 8100-2-0200-50-5200-0100 | 736.1 | Contractual Services-Other | $7,500.00 | Purchases | 675 | 8100NEW | Algonquin Water Services LLC | CONTRACT OPERATORS APR 04 |
| 21855 | Purchasing | 4/30/2004 | 8100-2-0200-69-5200-0021 | 732.8 | Contractual Services-Accounting | $5,505.00 | Purchases | 685 | 8100NEW | Algonquin Water Services LLC | ACCOUNTING/BILLING APR 2004 |
| 22484 | Purchasing | 5/31/2004 | 8100-2-0200-69-5200-0023 | 734.8 | Contractual Services-Management Fees | $5,000.00 | Purchases | 686 | 8100NEW | Algonquin Water Services LLC | MANAGEMENT FEE |
| 22488 | Purchasing | 5/31/2004 | 8100-2-0200-50-5200-0100 | 736.1 | Contractual Services-Other | $7,500.00 | Purchases | 692 | 8100NEW | Algonquin Water Services LLC | CONTRACT OPERATORS |
| 22536 | Purchasing | 5/31/2004 | 8100-2-0200-69-5200-0021 | 732.8 | Contractual Services-Accounting | $5,622.00 | Purchases | 699 | 8100NEW | Algonquin Water Services LLC | ACCOUNTING/BILLING MAY 2004 |
| 23325 | Purchasing | 6/30/2004 | 8100-2-0200-50-5200-0100 | 736.1 | Contractual Services-Other | $27,809.07 | Purchases | 710 | 8100NEW | Algonquin Water Services LLC | OPS FEES BILLED JAN-MAY04 |
| 23326 | Purchasing | 6/30/2004 | 8100-2-0200-50-5200-0100 | 736.1 | Contractual Services-Other | $13,061.81 | Purchases | 704 | 8100NEW | Algonquin Water Services LLC | OPERATING FEE JUNE04 |
| 23328 | Purchasing | 6/30/2004 | 8100-2-0200-69-5200-0021 | 732.8 | Contractual Services-Accounting | $5,622.00 | Purchases | 715 | 8100NEW | Algonquin Water Services LLC | ACCTG/BILLING JUNE04 |
| 23329 | Purchasing | 6/30/2004 | 8100-2-0200-69-5200-0022 | 733.8 | Contractual Services-Legal | $12.38 | Purchases | JC49 | 8100NEW | Algonquin Water Services LLC | 8100-0200-REPAIRS |
| 23887 | Purchasing | 7/31/2004 | 8100-2-0200-69-5200-0021 | 732.8 | Contractual Services-Accounting | $5,622.00 | Purchases | 730 | 8100NEW | Algonquin Water Services LLC | ACCOUNTING BILLING JUL 04 |
| 23890 | Purchasing | 7/31/2004 | 8100-2-0200-50-5200-0100 | 736.1 | Contractual Services-Other | $13,061.81 | Purchases | 725 | 8100NEW | Algonquin Water Services LLC | OPERATIN FEE JUL 2004 |
| 24222 | Purchasing | 8/31/2004 | 8100-2-0200-69-5200-0021 | 732.8 | Contractual Services-Accounting | $5,646.00 | Purchases | 743 | 8100NEW | Algonquin Water Services LLC | ACCTG/BILLING AUG04 |
| 24223 | Purchasing | 8/31/2004 | 8100-2-0200-50-5200-0100 | 736.1 | Contractual Services-Other | $13,061.81 | Purchases | 736 | 8100NEW | Algonquin Water Services LLC | OPERATING FEE AUG04 |
| 24224 | Purchasing | 8/31/2004 | 8100-2-0200-69-5200-0021 | 732.8 | Contractual Services-Accounting | $226.05 | Purchases | JC100 | 8100NEW | Algonquin Water Services LLC | 8100-0200-REPAIRS |
| 24428 | Purchasing | 9/30/2004 | 8100-2-0200-69-5200-0110 | 736.8 | Contractual Services-AWS | $5,646.00 | Purchases | 754 | 8100NEW | Algonquin Water Services LLC | ACCTG/BILLING SEPT04 |
| 24429 | Purchasing | 9/30/2004 | 8100-2-0200-50-5200-0110 | 736.1 | Contractual Services-AWS | $13,061.81 | Purchases | 749 | 8100NEW | Algonquin Water Services LLC | OPERATING FEE SEPT04 |
| 24624 | Purchasing | 10/28/2004 | 8100-2-0200-50-5200-0110 | 736.1 | Contractual Services-AWS | $13,061.81 | Purchases | 761 | 8100NEW | Algonquin Water Services LLC | OPERATING FEE OCT04 |
| 24625 | Purchasing | 10/28/2004 | 8100-2-0200-69-5200-0110 | 736.8 | Contractual Services-AWS | $5,655.00 | Purchases | 768 | 8100NEW | Algonquin Water Services LLC | ACCTG/ BILLING OCT04 |
| 24872 | Purchasing | 11/30/2004 | 8100-2-0200-69-5200-0110 | 736.8 | Contractual Services-AWS | $5,661.00 | Purchases | 779 | 8100NEW | Algonquin Water Services LLC | ACCTG/BILLING NOV04 |
| 24874 | Purchasing | 11/30/2004 | 8100-2-0200-50-5200-0110 | 736.1 | Contractual Services-AWS | $13,061.81 | Purchases | 773 | 8100NEW | Algonquin Water Services LLC | OPERATING FEE NOV04 |
| 24944 | Purchasing | 12/15/2004 | 8100-2-0200-50-5200-0110 | 736.1 | Contractual Services-AWS | $13,061.81 | Purchases | 785 | 8100NEW | Algonquin Water Services LLC | OPERATING FEE DEC04 |
| 24945 | Purchasing | 12/15/2004 | 8100-2-0200-69-5200-0110 | 736.8 | Contractual Services-AWS | $5,667.00 | Purchases | 791 | 8100NEW | Algonquin Water Services LLC | ACCTG/BILLING DEC04 |
| 22492 | Purchasing | 5/31/2004 | 8100-2-0200-69-5320-0000 | 750.8 | Transportation Expenses | $30.00 | Purchases | JC34 | 8100NEW | Algonquin Water Services LLC | REPAIRS & MAINT. |
| 23329 | Purchasing | 6/30/2004 | 8100-2-0200-69-5320-0000 | 750.8 | Transportation Expenses | $193.77 | Purchases | JC49 | 8100NEW | Algonquin Water Services LLC | 8100-0200-REPAIRS |
| 23884 | Purchasing | 7/31/2004 | 8100-2-0200-69-5320-0000 | 750.8 | Transportation Expenses | $385.05 | Purchases | JC78 | 8100NEW | Algonquin Water Services LLC | REPAIRS/MAINTENANCE -BLACK M |
| 24224 | Purchasing | 8/31/2004 | 8100-2-0200-69-5320-0000 | 750.8 | Transportation Expenses | $684.65 | Purchases | JC100 | 8100NEW | Algonquin Water Services LLC | 8100-0200-REPAIRS |
| 24635 | Purchasing | 10/29/2004 | 8100-2-0200-69-5320-0000 | 750.8 | Transportation Expenses | $302.09 | Purchases | JC171 | 8100NEW | Algonquin Water Services LLC | REPAIRS & MAINTENANCE |
| 24875 | Purchasing | 11/30/2004 | 8100-2-0200-69-5320-0000 | 750.8 | Transportation Expenses | $162.40 | Purchases | JC202 | 8100NEW | Algonquin Water Services LLC | REPAIRS & MAINTENANCE |
| 25076 | Purchasing | 12/31/2004 | 8100-2-0200-50-5320-0000 | 750.1 | Transportation Expenses | $193.94 | Job 8100-0200-OPS 5 | JC282 | 8100NEW | Algonquin Water Services LLC | REPAIRS & MAIN- TELEPHONE, GAS |
| 19978 | Purchasing | 1/31/2004 | 8100-2-0200-60-5520-0000 | 720.2 | Materials and Supplies | $2,500.00 | Purchases | 628 | 8100NEW | Algonquin Water Services LLC | REPAIR/MAINTENANCE JAN 04 |
| 19978 | Purchasing | 1/31/2004 | 8100-2-0200-61-5520-0000 | 720.4 | Materials and Supplies | $2,500.00 | Purchases | 628 | 8100NEW | Algonquin Water Services LLC | REPAIR/MAINTENANCE JAN 04 |
| 19978 | Purchasing | 1/31/2004 | 8100-2-0200-62-5520-0000 | 720.6 | Materials and Supplies | $2,500.00 | Purchases | 628 | 8100NEW | Algonquin Water Services LLC | REPAIR/MAINTENANCE JAN 04 |
| 20523 | Purchasing | 2/29/2004 | 8100-2-0200-60-5520-0000 | 720.2 | Materials and Supplies | $5,488.97 | Purchases | JC5 | 8100NEW | Algonquin Water Services LLC | REPAIRS MAINTENANCE BLACK |
| 21183 | Purchasing | 3/30/2004 | 8100-2-0200-60-5520-0000 | 720.2 | Materials and Supplies | $888.69 | Purchases | JC10 | 8100NEW | Algonquin Water Services LLC | REPAIR/ MAINTENANCE |
| 21830 | Purchasing | 4/30/2004 | 8100-2-0200-60-5520-0000 | 720.2 | Materials and Supplies | $3,375.03 | Purchases | JC22 | 8100NEW | Algonquin Water Services LLC | REPAIRS/MAINTENANCE BLACK MOUT |
| 22492 | Purchasing | 5/31/2004 | 8100-2-0200-69-5520-0000 | 720.8 | Materials and Supplies | $1,173.89 | Purchases | JC34 | 8100NEW | Algonquin Water Services LLC | REPAIRS & MAINT. |
| 23329 | Purchasing | 6/30/2004 | 8100-2-0200-69-5520-0000 | 720.8 | Materials and Supplies | $83.67 | Purchases | JC49 | 8100NEW | Algonquin Water Services LLC | 8100-0200-REPAIRS |
| 23884 | Purchasing | 7/31/2004 | 8100-2-0200-69-5520-0000 | 720.8 | Materials and Supplies | $58.09 | Purchases | JC78 | 8100NEW | Algonquin Water Services LLC | REPAIRS/MAINTENANCE -BLACK M |
| 24224 | Purchasing | 8/31/2004 | 8100-2-0200-69-5520-0000 | 720.8 | Materials and Supplies | $717.94 | Purchases | JC100 | 8100NEW | Algonquin Water Services LLC | 8100-0200-REPAIRS |
| 24427 | Purchasing | 9/30/2004 | 8100-2-0200-69-5520-0000 | 720.8 | Materials and Supplies | $2,094.58 | Purchases | JC136 | 8100NEW | Algonquin Water Services LLC | REPAIRS & MAINTENANCE SEPT04 |
| 24635 | Purchasing | 10/29/2004 | 8100-2-0200-69-5520-0000 | 720.8 | Materials and Supplies | $548.65 | Purchases | JC171 | 8100NEW | Algonquin Water Services LLC | REPAIRS & MAINTENANCE |
| 25076 | Purchasing | 12/31/2004 | 8100-2-0200-64-5520-0000 | 720.12 | Materials and Supplies | $30.36 | Job 8100-0200-OPS 2 | JC282 | 8100NEW | Algonquin Water Services LLC | REPAIRS & MAIN- TELEPHONE, GAS |

**Total for Algonquin Water Services Inc.** $275,460.88

**Total for all Related Parties** $334,788.83

**BLACK MOUNTAIN SEWER CORPORATION**
**2005 GENERAL RATE CASE**
**DOCKET NO. SW-02361A-05-0657**
**RESPONSE TO STAFF'S TENTH SET OF DATA REQUESTS**

Response provided by: Greg Sorensen

Title: Controller – Algonquin Water

Company Name: Black Mountain Sewer Corporation
Address: 12725 W. Indian School Road, Suite D-101
Avondale, AZ 85323

Company Response Number: CSB 10.1

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Q. Affiliates, Capitalized Billings – This is a follow-up to CSB 1.51. Please state the amount of capitalized affiliate "operating margin" or "profit" included in each of the plant additions shown on Schedule B-2, pages 3a to 3k. As part of your response, please identify the addition by year, plant account number, description, and amount of "operating margin" or "profit" included in each addition.

A. Please see the attached schedules for 2001 – 2004. There was no capitalized affiliate margin prior to 2001. *See* also BMSC's responses to CSB 1.52 (amended), 4.1, 5.1, and 7.3 (delivered February 14, 2006).

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ALL-STATE LEGAL®
EXHIBIT
S-21
admitted

Black I ı Sewer Company
CSB 10.

| Journal Entry | TRX Date | Account Number | Account Description | Amount | Originating Master Name | Reference | NARUC | Profit % | Profit $ |
|---|---|---|---|---|---|---|---|---|---|
| 800 | 10/12/2001 | 8100-2-0000-10-1618-3900 | Office Equipment / Automation - BMSC | $5,333.04 | Algonquin Power Income Fund | APIF Inv#237 Quiettouch Inv | 390.7 | 0% | $0.00 |
| 1212 | 11/21/2001 | 8100-2-0000-10-1618-3900 | Office Equipment / Automation - BMSC | $4,347.92 | Algonquin Power Income Fund | Grt Plains Licences | 390.7 | 0% | $0.00 |
| 1286 | 11/30/2001 | 8100-2-0000-10-1618-0364 | Flow Devices | $95.46 | NewSpring Water L.L.C. | Telephone repairs | 364.2 | 0% | $0.00 |
| 1522 | 12/31/2001 | 8100-2-0000-10-1618-0371 | Electric Pumping Equipment | $2,782.50 | NewSpring Water L.L.C. | Engineering Invoice | 371.3 | 12% | $333.07 |
| 1496 | 12/31/2001 | 8100-2-0000-10-1618-0390 | Office Equipment | $1,256.09 | NewSpring Water L.L.C. | Pefanis Invoices-Pd by NewSpri | 390.7 | 0% | $0.00 |
| 1496 | 12/31/2001 | 8100-2-0000-10-1618-0390 | Office Equipment | $3,248.75 | NewSpring Water L.L.C. | Pefanis Invoices-Pd by NewSpri | 390.7 | 0% | $0.00 |
| 1041 | 10/26/2001 | 8100-2-0000-10-1618-3540 | Structures & Improvements - BMSC | $2,268.00 | NewSpring Water L.L.C. | NewSprings Water Oct Inv | 354 | 12% | $271.48 |
| 1286 | 11/30/2001 | 8100-2-0000-10-1618-3541 | Plant Rerating - BMSC | $59.50 | NewSpring Water L.L.C. | Telephone repairs | 354 | 0% | $0.00 |
| 1286 | 11/30/2001 | 8100-2-0000-10-1618-3541 | Plant Rerating - BMSC | $127.60 | NewSpring Water L.L.C. | Telephone repairs | 354 | 0% | $0.00 |
| 1286 | 11/30/2001 | 8100-2-0000-10-1618-3541 | Plant Rerating - BMSC | $862.20 | NewSpring Water L.L.C. | Telephone repairs | 354 | 0% | $0.00 |
| 1522 | 12/31/2001 | 8100-2-0000-10-1618-3541 | Plant Rerating - BMSC | $1,625.00 | NewSpring Water L.L.C. | Engineering Invoice | 354 | 12% | $194.51 |
| 1522 | 12/31/2001 | 8100-2-0000-10-1618-3541 | Plant Rerating - BMSC | $1,732.50 | NewSpring Water L.L.C. | Engineering Invoice | 354 | 12% | $207.38 |
| 1221 | 11/23/2001 | 8100-2-0000-10-1618-3630 | Service Taps - BMSC | $187.50 | NewSpring Water L.L.C. | NewSpring-Engineer-Nov | 363.2 | 12% | $22.44 |
| 1286 | 11/30/2001 | 8100-2-0000-10-1618-3710 | Electric Pumping Equipment - BMSC | $1,088.00 | NewSpring Water L.L.C. | Telephone repairs | 371.3 | 0% | $0.00 |
| 1522 | 12/31/2001 | 8100-2-0000-10-1618-3891 | Other Plant - BMSC | $1,125.00 | NewSpring Water L.L.C. | Engineering Invoice | 389 | 12% | $134.66 |
| 1221 | 11/23/2001 | 8100-2-0000-10-1618-3900 | Office Equipment / Automation - BMSC | $2,000.00 | NewSpring Water L.L.C. | NewSpring-Engineer-Nov | 390.7 | 12% | $239.40 |
| 1441 | 12/26/2001 | 8100-2-0000-10-1618-3900 | Office Equipment / Automation - BMSC | $2,200.00 | NewSpring Water L.L.C. | Management Charges-Dec | 390.7 | 12% | $263.34 |
| Total | | | | **$30,339.06** | | | | | **$1,666.28** |

Black M[illegible]ewer Company
CSB 10[illegible]

| Journal Entry | TRX Date | Account Number | Account Description | Amount | Originating Document Number | Originating Master Name | Reference | NARUC # | Profit % | Profit $ |
|---|---|---|---|---|---|---|---|---|---|---|
| 1974 | 2/28/2002 | 8100-2-0000-10-1618-0360 | Collection Sewers-Force | $1,575.00 | 119FEB2002 | NewSpring Water L.L.C. | Feb NWSP Engineering Invoice | 360.2 | 13% | $204.75 |
| 1974 | 2/28/2002 | 8100-2-0000-10-1618-0363 | Service Taps | $315.00 | 119FEB2002 | NewSpring Water L.L.C. | Feb NWSP Engineering Invoice | 363.2 | 13% | $40.95 |
| 1974 | 2/28/2002 | 8100-2-0000-10-1618-0363 | Service Taps | $105.00 | 119FEB2002 | NewSpring Water L.L.C. | Feb NWSP Engineering Invoice | 363.2 | 13% | $13.65 |
| 2488 | 4/30/2002 | 8100-2-0000-10-1618-0364 | Flow Devices | $375.00 | APR02 | NewSpring Water L.L.C. | Engineering Invoices - April 2 | 364.2 | 13% | $48.75 |
| 1833 | 1/31/2002 | 8100-2-0000-10-1618-0389 | Other Plant | $250.00 | 119JAN02 | NewSpring Water L.L.C. | Engineering January 2002 | 389 | 13% | $32.50 |
| 3681 | 9/30/2002 | 8100-2-0000-10-1618-0389 | Other Plant | $2,000.00 | SEPT 2002 ENGIN | NewSpring Water L.L.C. | Sept Engineering | 389 | 13% | $260.00 |
| 3681 | 9/30/2002 | 8100-2-0000-10-1618-0389 | Other Plant | $375.00 | SEPT 2002 ENGIN | NewSpring Water L.L.C. | Sept Engineering | 389 | 13% | $48.75 |
| 3289 | 7/31/2002 | 8100-2-0000-10-1619-0000 | Scottsdale Plant Capacity | $420.00 | JULY 2002 | NewSpring Water L.L.C. | Engineering July 2002 | 174 | 13% | $54.60 |
| 1974 | 2/28/2002 | 8100-2-0000-10-1610-3530 | Land & Land Rights - BMSC | $1,125.00 | 119FEB2002 | NewSpring Water L.L.C. | Feb NWSP Engineering Invoice | 353 | 13% | $146.25 |
| 2943 | 6/30/2002 | 8100-2-0000-10-1618-3540 | Structures & Improvements - BMSC | $420.00 | JUNE ENGINEER | NewSpring Water L.L.C. | BMSC Engineering June 2002 | 354 | 13% | $54.60 |
| 1833 | 1/31/2002 | 8100-2-0000-10-1618-3541 | Plant Rerating - BMSC | $2,835.00 | 119JAN02 | NewSpring Water L.L.C. | Engineering January 2002 | 354 | 13% | $368.55 |
| 1974 | 2/28/2002 | 8100-2-0000-10-1618-3541 | Plant Rerating - BMSC | $420.00 | 119FEB2002 | NewSpring Water L.L.C. | Feb NWSP Engineering Invoice | 354 | 13% | $54.60 |
| 2290 | 4/15/2002 | 8100-2-0000-10-1618-3541 | Plant Rerating - BMSC | $3,885.00 | ENG MAR | NewSpring Water L.L.C. | Engineering March 2002 BMSC | 354 | 13% | $505.05 |
| 2290 | 4/15/2002 | 8100-2-0000-10-1618-3541 | Plant Rerating - BMSC | $630.00 | ENG MAR | NewSpring Water L.L.C. | Engineering March 2002 BMSC | 354 | 13% | $81.90 |
| 3289 | 7/31/2002 | 8100-2-0000-10-1618-3541 | Plant Rerating - BMSC | $105.00 | JULY 2002 | NewSpring Water L.L.C. | Engineering July 2002 | 354 | 13% | $13.65 |
| 3310 | 7/31/2002 | 8100-2-0000-10-1618-3541 | Plant Rerating - BMSC | $1,250.00 | JULY 31 #2 | NewSpring Water L.L.C. | July Engineering | 354 | 13% | $162.50 |
| 3310 | 7/31/2002 | 8100-2-0000-10-1618-3541 | Plant Rerating - BMSC | $1,500.00 | JULY 31 #2 | NewSpring Water L.L.C. | July Engineering | 354 | 13% | $195.00 |
| 3310 | 7/31/2002 | 8100-2-0000-10-1618-3541 | Plant Rerating - BMSC | $875.00 | JULY 31 #2 | NewSpring Water L.L.C. | July Engineering | 354 | 13% | $113.75 |
| 4328 | 11/30/2002 | 8100-2-0000-10-1618-3541 | Plant Rerating - BMSC | $375.00 | 8617 | NewSpring Water L.L.C. | Engineering Invoice - November | 354 | 13% | $48.75 |
| 2290 | 4/15/2002 | 8100-2-0000-10-1618-3542 | Scada - Plant & Lift Stations | $735.00 | ENG MAR | NewSpring Water L.L.C. | Engineering March 2002 BMSC | 354 | 13% | $95.55 |
| 2290 | 4/15/2002 | 8100-2-0000-10-1618-3542 | Scada - Plant & Lift Stations | $750.00 | ENG MAR | NewSpring Water L.L.C. | Engineering March 2002 BMSC | 354 | 13% | $97.50 |
| 2488 | 4/30/2002 | 8100-2-0000-10-1618-3542 | Scada - Plant & Lift Stations | $250.00 | APR02 | NewSpring Water L.L.C. | Engineering Invoices - April 2 | 354 | 13% | $32.50 |
| 3310 | 7/31/2002 | 8100-2-0000-10-1618-3542 | Scada - Plant & Lift Stations | $1,500.00 | JULY 31 #2 | NewSpring Water L.L.C. | July Engineering | 354 | 13% | $195.00 |
| 4073 | 10/31/2002 | 8100-2-0000-10-1618-3542 | Scada - Plant & Lift Stations | $420.00 | 8602 | NewSpring Water L.L.C. | Engineering Invoice October | 354 | 13% | $54.60 |
| 1833 | 1/31/2002 | 8100-2-0000-10-1618-3543 | Plant Expansion | $312.50 | 119JAN02 | NewSpring Water L.L.C. | Engineering January 2002 | 354 | 13% | $40.63 |
| 3942 | 10/29/2002 | 8100-2-0000-10-1618-3543 | Plant Expansion | $6,622.80 | CCINTERCONNECTOR | NewSpring Water L.L.C. | Refund Payment | 354 | 13% | $860.96 |
| 1974 | 2/28/2002 | 8100-2-0000-10-1618-0361 | Collection Sewers - Gravity | $125.00 | 119FEB2002 | NewSpring Water L.L.C. | Feb NWSP Engineering Invoice | 361.2 | 13% | $16.25 |
| 1974 | 2/28/2002 | 8100-2-0000-10-1618-0361 | Collection Sewers - Gravity | $472.50 | 119FEB2002 | NewSpring Water L.L.C. | Feb NWSP Engineering Invoice | 361.2 | 13% | $61.43 |
| 1974 | 2/28/2002 | 8100-2-0000-10-1618-0361 | Collection Sewers - Gravity | $105.00 | 119FEB2002 | NewSpring Water L.L.C. | Feb NWSP Engineering Invoice | 361.2 | 13% | $13.65 |
| 2844 | 6/26/2002 | 8100-2-0000-10-1618-0361 | Collection Sewers - Gravity | $210.00 | JUNE APS | NewSpring Water L.L.C. | Engineering May 2002 | 361.2 | 13% | $27.30 |
| 1833 | 1/31/2002 | 8100-2-0000-10-1618-3610 | Collection Sewers - Gravity | $1,312.50 | 119JAN02 | NewSpring Water L.L.C. | Engineering January 2002 | 361.2 | 13% | $170.63 |
| 1833 | 1/31/2002 | 8100-2-0000-10-1618-3610 | Collection Sewers - Gravity | $687.50 | 119JAN02 | NewSpring Water L.L.C. | Engineering January 2002 | 361.2 | 13% | $89.38 |
| 2943 | 6/30/2002 | 8100-2-0000-10-1618-3610 | Collection Sewers - Gravity | $630.00 | JUNE ENGINEER | NewSpring Water L.L.C. | BMSC Engineering June 2002 | 361.2 | 13% | $81.90 |
| 2290 | 4/15/2002 | 8100-2-0000-10-1618-3630 | Service Taps - BMSC | $315.00 | ENG MAR | NewSpring Water L.L.C. | Engineering March 2002 BMSC | 363.2 | 13% | $40.95 |
| 3289 | 7/31/2002 | 8100-2-0000-10-1618-3630 | Service Taps - BMSC | $420.00 | JULY 2002 | NewSpring Water L.L.C. | Engineering July 2002 | 363.2 | 13% | $54.60 |
| 3310 | 7/31/2002 | 8100-2-0000-10-1618-3630 | Service Taps - BMSC | $3,125.00 | JULY 31 #2 | NewSpring Water L.L.C. | July Engineering | 363.2 | 13% | $406.25 |
| 3681 | 9/30/2002 | 8100-2-0000-10-1618-3630 | Service Taps - BMSC | $840.00 | SEPT 2002 ENGIN | NewSpring Water L.L.C. | Sept Engineering | 363.2 | 13% | $109.20 |
| 3681 | 9/30/2002 | 8100-2-0000-10-1618-3630 | Service Taps - BMSC | $840.00 | SEPT 2002 ENGIN | NewSpring Water L.L.C. | Sept Engineering | 363.2 | 13% | $109.20 |
| 3681 | 9/30/2002 | 8100-2-0000-10-1618-3630 | Service Taps - BMSC | $525.00 | SEPT 2002 ENGIN | NewSpring Water L.L.C. | Sept Engineering | 363.2 | 13% | $68.25 |
| 3681 | 9/30/2002 | 8100-2-0000-10-1618-3630 | Service Taps - BMSC | $375.00 | SEPT 2002 ENGIN | NewSpring Water L.L.C. | Sept Engineering | 363.2 | 13% | $48.75 |
| 3681 | 9/30/2002 | 8100-2-0000-10-1618-3630 | Service Taps - BMSC | $750.00 | SEPT 2002 ENGIN | NewSpring Water L.L.C. | Sept Engineering | 363.2 | 13% | $97.50 |
| 4073 | 10/31/2002 | 8100-2-0000-10-1618-3630 | Service Taps - BMSC | $105.00 | 8602 | NewSpring Water L.L.C. | Engineering Invoice October | 363.2 | 13% | $13.65 |
| 4328 | 11/30/2002 | 8100-2-0000-10-1618-3630 | Service Taps - BMSC | $420.00 | 8617 | NewSpring Water L.L.C. | Engineering Invoice - November | 363.2 | 13% | $54.60 |
| 4328 | 11/30/2002 | 8100-2-0000-10-1618-3630 | Service Taps - BMSC | $630.00 | 8617 | NewSpring Water L.L.C. | Engineering Invoice - November | 363.2 | 13% | $81.90 |
| 4328 | 11/30/2002 | 8100-2-0000-10-1618-3630 | Service Taps - BMSC | $420.00 | 8617 | NewSpring Water L.L.C. | Engineering Invoice - November | 363.2 | 13% | $54.60 |
| 4328 | 11/30/2002 | 8100-2-0000-10-1618-3630 | Service Taps - BMSC | $315.00 | 8617 | NewSpring Water L.L.C. | Engineering Invoice - November | 363.2 | 13% | $40.95 |
| 4328 | 11/30/2002 | 8100-2-0000-10-1618-3630 | Service Taps - BMSC | $420.00 | 8617 | NewSpring Water L.L.C. | Engineering Invoice - November | 363.2 | 13% | $54.60 |
| 4328 | 11/30/2002 | 8100-2-0000-10-1618-3630 | Service Taps - BMSC | $420.00 | 8617 | NewSpring Water L.L.C. | Engineering Invoice - November | 363.2 | 13% | $54.60 |
| 3472 | 8/31/2002 | 8100-2-0000-10-1618-3560 | Odor Control | $625.00 | ENGINEERING AUG | NewSpring Water L.L.C. | Engineering Invoice August | 365.2 | 13% | $81.25 |
| 3472 | 8/31/2002 | 8100-2-0000-10-1618-3560 | Odor Control | $1,125.00 | ENGINEERING AUG | NewSpring Water L.L.C. | Engineering Invoice August | 365.2 | 13% | $146.25 |
| 3682 | 9/30/2002 | 8100-2-0000-10-1618-3560 | Odor Control | $135.00 | 8572B | NewSpring Water L.L.C. | Adjustment to Aug Engineering | 365.2 | 13% | $17.55 |
| 4073 | 10/31/2002 | 8100-2-0000-10-1618-3560 | Odor Control | $630.00 | 8602 | NewSpring Water L.L.C. | Engineering Invoice October | 365.2 | 13% | $81.90 |
| 4073 | 10/31/2002 | 8100-2-0000-10-1618-3560 | Odor Control | $840.00 | 8602 | NewSpring Water L.L.C. | Engineering Invoice October | 365.2 | 13% | $109.20 |
| 4073 | 10/31/2002 | 8100-2-0000-10-1618-3560 | Odor Control | $1,875.00 | 8602 | NewSpring Water L.L.C. | Engineering Invoice October | 365.2 | 13% | $243.75 |
| 4328 | 11/30/2002 | 8100-2-0000-10-1618-3560 | Odor Control | $2,310.00 | 8617 | NewSpring Water L.L.C. | Engineering Invoice - November | 365.2 | 13% | $300.30 |
| 4328 | 11/30/2002 | 8100-2-0000-10-1618-3560 | Odor Control | $250.00 | 8617 | NewSpring Water L.L.C. | Engineering Invoice - November | 365.2 | 13% | $32.50 |
| 4328 | 11/30/2002 | 8100-2-0000-10-1618-3560 | Odor Control | $375.00 | 8617 | NewSpring Water L.L.C. | Engineering Invoice - November | 365.2 | 13% | $48.75 |
| 4328 | 11/30/2002 | 8100-2-0000-10-1618-3560 | Odor Control | $3,125.00 | 8617 | NewSpring Water L.L.C. | Engineering Invoice - November | 365.2 | 13% | $406.25 |
| 2290 | 4/15/2002 | 8100-2-0000-10-1618-0000 | Pump Station | $210.00 | ENG MAR | NewSpring Water L.L.C. | Engineering March 2002 BMSC | 370.3 | 13% | $27.30 |
| 2290 | 4/15/2002 | 8100-2-0000-10-1618-0000 | Pump Station | $630.00 | ENG MAR | NewSpring Water L.L.C. | Engineering March 2002 BMSC | 370.3 | 13% | $81.90 |
| 2290 | 4/15/2002 | 8100-2-0000-10-1618-0000 | Pump Station | $250.00 | ENG MAR | NewSpring Water L.L.C. | Engineering March 2002 BMSC | 370.3 | 13% | $32.50 |
| 2290 | 4/15/2002 | 8100-2-0000-10-1618-0000 | Pump Station | $250.00 | ENG MAR | NewSpring Water L.L.C. | Engineering March 2002 BMSC | 370.3 | 13% | $32.50 |
| 2290 | 4/15/2002 | 8100-2-0000-10-1618-0000 | Pump Station | $500.00 | ENG MAR | NewSpring Water L.L.C. | Engineering March 2002 BMSC | 370.3 | 13% | $65.00 |
| 2290 | 4/15/2002 | 8100-2-0000-10-1618-0000 | Pump Station | $500.00 | ENG MAR | NewSpring Water L.L.C. | Engineering March 2002 BMSC | 370.3 | 13% | $65.00 |
| 3310 | 7/31/2002 | 8100-2-0000-10-1618-0000 | Pump Station | $500.00 | JULY 31 #2 | NewSpring Water L.L.C. | July Engineering | 370.3 | 13% | $65.00 |
| 2844 | 6/26/2002 | 8100-2-0000-10-1618-3712 | Pump Station - Indian Rock - BMSC | $210.00 | JUNE APS | NewSpring Water L.L.C. | Engineering May 2002 | 371.3 | 13% | $27.30 |
| 1833 | 1/31/2002 | 8100-2-0000-10-1618-3850 | Diesel Generator | $3,360.00 | 119JAN02 | NewSpring Water L.L.C. | Engineering January 2002 | 389 | 13% | $436.80 |

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|---|---|---|---|---|---|---|---|---|---|---|
| 1833 | 1/31/2002 | 8100-2-0000-10-1618-3850 | Diesel Generator | $2,375.00 | 119JAN02 | NewSpring Water L.L.C. | Engineering January 2002 | 389 | 13% | $308.75 |
| 1974 | 2/28/2002 | 8100-2-0000-10-1618-3850 | Diesel Generator | $250.00 | 119FEB2002 | NewSpring Water L.L.C. | Feb NWSP Engineering Invoice | 389 | 13% | $32.50 |
| 1974 | 2/28/2002 | 8100-2-0000-10-1618-3850 | Diesel Generator | $525.00 | 119FEB2002 | NewSpring Water L.L.C. | Feb NWSP Engineering Invoice | 389 | 13% | $68.25 |
| 1833 | 1/31/2002 | 8100-2-0000-10-1618-3855 | By Pass Line | $1,470.00 | 119JAN02 | NewSpring Water L.L.C. | Engineering January 2002 | 389 | 13% | $191.10 |
| 1974 | 2/28/2002 | 8100-2-0000-10-1618-3855 | By Pass Line | $250.00 | 119FEB2002 | NewSpring Water L.L.C. | Feb NWSP Engineering Invoice | 389 | 13% | $32.50 |
| 1974 | 2/28/2002 | 8100-2-0000-10-1618-3855 | By Pass Line | $472.50 | 119FEB2002 | NewSpring Water L.L.C. | Feb NWSP Engineering Invoice | 389 | 13% | $61.43 |
| 2943 | 6/30/2002 | 8100-2-0000-10-1618-3855 | By Pass Line | $1,260.00 | JUNE ENGINEER | NewSpring Water L.L.C. | BMSC Engineering June 2002 | 389 | 13% | $163.80 |
| 3472 | 8/31/2002 | 8100-2-0000-10-1618-3855 | By Pass Line | $1,500.00 | ENGINEERING AUG | NewSpring Water L.L.C. | Engineering Invoice August | 389 | 13% | $195.00 |
| 3681 | 9/30/2002 | 8100-2-0000-10-1618-3855 | By Pass Line | $1,470.00 | SEPT 2002 ENGIN | NewSpring Water L.L.C. | Sept Engineering | 389 | 13% | $191.10 |
| 4073 | 10/31/2002 | 8100-2-0000-10-1618-3883 | By-Pass Line - Monteray | $625.00 | 8602 | NewSpring Water L.L.C. | Engineering Invoice October | 389 | 13% | $81.25 |
| 4073 | 10/31/2002 | 8100-2-0000-10-1618-3884 | By Pass Line - PWD | $105.00 | 8602 | NewSpring Water L.L.C. | Engineering Invoice October | 389 | 13% | $13.65 |
| 4073 | 10/31/2002 | 8100-2-0000-10-1618-3884 | By Pass Line - PWD | $625.00 | 8602 | NewSpring Water L.L.C. | Engineering Invoice October | 389 | 13% | $81.25 |
| 2488 | 4/30/2002 | 8100-2-0000-10-1618-3885 | BWWTP Bypass Line | $735.00 | APR02 | NewSpring Water L.L.C. | Engineering Invoices - April 2 | 389 | 13% | $95.55 |
| 3289 | 7/31/2002 | 8100-2-0000-10-1618-3885 | BWWTP Bypass Line | $2,940.00 | JULY 2002 | NewSpring Water L.L.C. | Engineering July 2002 | 389 | 13% | $382.20 |
| 3296 | 8/19/2002 | 8100-2-0000-10-1618-3885 | BWWTP Bypass Line | $1,000.00 | 2 CHECKS | NewSpring Water L.L.C. | Repay Operating Account | 389 | 13% | $130.00 |
| 3310 | 7/31/2002 | 8100-2-0000-10-1618-3885 | BWWTP Bypass Line | $2,500.00 | JULY 31 #2 | NewSpring Water L.L.C. | July Engineering | 389 | 13% | $325.00 |
| 3310 | 7/31/2002 | 8100-2-0000-10-1618-3885 | BWWTP Bypass Line | $250.00 | JULY 31 #2 | NewSpring Water L.L.C. | July Engineering | 389 | 13% | $32.50 |
| 3472 | 8/31/2002 | 8100-2-0000-10-1618-3885 | BWWTP Bypass Line | $1,375.00 | ENGINEERING AUG | NewSpring Water L.L.C. | Engineering Invoice August | 389 | 13% | $178.75 |
| 3681 | 9/30/2002 | 8100-2-0000-10-1618-3885 | BWWTP Bypass Line | $875.00 | SEPT 2002 ENGIN | NewSpring Water L.L.C. | Sept Engineering | 389 | 13% | $113.75 |
| 3682 | 9/30/2002 | 8100-2-0000-10-1618-3885 | BWWTP Bypass Line | $180.00 | 8572B | NewSpring Water L.L.C. | Adjustment to Aug Engineering | 389 | 13% | $23.40 |
| 4073 | 10/31/2002 | 8100-2-0000-10-1618-3885 | BWWTP Bypass Line | $1,680.00 | 8602 | NewSpring Water L.L.C. | Engineering Invoice October | 389 | 13% | $218.40 |
| 4328 | 11/30/2002 | 8100-2-0000-10-1618-3885 | BWWTP Bypass Line | $945.00 | 8617 | NewSpring Water L.L.C. | Engineering Invoice - November | 389 | 13% | $122.85 |
| 2943 | 6/30/2002 | 8100-2-0000-10-1618-3887 | Boulders Parkway Sewer Line | $500.00 | JUNE ENGINEER | NewSpring Water L.L.C. | BMSC Engineering June 2002 | 389 | 13% | $65.00 |
| 2943 | 6/30/2002 | 8100-2-0000-10-1618-3887 | Boulders Parkway Sewer Line | $250.00 | JUNE ENGINEER | NewSpring Water L.L.C. | BMSC Engineering June 2002 | 389 | 13% | $32.50 |
| 2488 | 4/30/2002 | 8100-2-0000-10-1618-3891 | Other Plant - BMSC | $1,260.00 | APR02 | NewSpring Water L.L.C. | Engineering Invoices - April 2 | 389 | 13% | $163.80 |
| 3289 | 7/31/2002 | 8100-2-0000-10-1618-3891 | Other Plant - BMSC | $420.00 | JULY 2002 | NewSpring Water L.L.C. | Engineering July 2002 | 389 | 13% | $54.60 |
| 3472 | 8/31/2002 | 8100-2-0000-10-1618-3891 | Other Plant - BMSC | $1,125.00 | ENGINEERING AUG | NewSpring Water L.L.C. | Engineering Invoice August | 389 | 13% | $146.25 |
| 3681 | 9/30/2002 | 8100-2-0000-10-1618-3891 | Other Plant - BMSC | $525.00 | SEPT 2002 ENGIN | NewSpring Water L.L.C. | Sept Engineering | 389 | 13% | $68.25 |
| 1974 | 2/28/2002 | 8100-2-0000-10-1618-3900 | Office Equipment / Automation - BMSC | $281.25 | 119FEB2002 | NewSpring Water L.L.C. | Feb NWSP Engineering Invoice | 390.7 | 13% | $36.56 |
| 4076 | 11/14/2002 | 8100-2-0000-10-1618-3900 | Office Equipment / Automation - BMSC | $2,200.00 | 1377DCL | NewSpring Water L.L.C. | Equipment Automation-DCL | 390.7 | 13% | $286.00 |
| 4162 | 11/30/2002 | 8100-2-0000-10-1618-3900 | Office Equipment / Automation - BMSC | $2,200.00 | 1376 | NewSpring Water L.L.C. | Automation - October DCL | 390.7 | 13% | $286.00 |
| 4163 | 11/30/2002 | 8100-2-0000-10-1618-3900 | Office Equipment / Automation - BMSC | $6,600.00 | 8601 JUL,AUG,SEP | NewSpring Water L.L.C. | July, Aug, Sep Automation DCL | 390.7 | 13% | $858.00 |
| 4294 | 12/11/2002 | 8100-2-0000-10-1618-3900 | Office Equipment / Automation - BMSC | $2,200.00 | 1378 | NewSpring Water L.L.C. | Automation - Dec | 390.7 | 13% | $286.00 |
| | | | | **$101,556.55** | | | | | | **$13,202.35** |

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| Journal Entry | TRX Date | Account Number | Account Description | Amount | Originating Document Number | Originating Master Name | Reference | NARUC # | Profit % | Profit $ |
|---|---|---|---|---|---|---|---|---|---|---|
| 8761 | 5/15/2003 | 8100-2-0000-10-1618-0381 | Plant Sewers | $3,875.00 | 363 | NewSpring Water L.L.C. | ENGINEERING - APRIL 2003 | 381.4 | 7.20% | $279.00 |
| 9427 | 5/30/2003 | 8100-2-0000-10-1618-0381 | Plant Sewers | $2,875.00 | 368 | NewSpring Water L.L.C. | Engineering Fee May03 | 381.4 | 7.20% | $207.00 |
| 11184 | 6/30/2003 | 8100-2-0000-10-1618-0381 | Plant Sewers | $2,750.00 | 406 | NewSpring Water L.L.C. | Engineering Fees June03 | 381.4 | 7.20% | $198.00 |
| 12767 | 7/31/2003 | 8100-2-0000-10-1618-0381 | Plant Sewers | $2,750.00 | 441 | NewSpring Water L.L.C. | Engineering July03 | 381.4 | 7.20% | $198.00 |
| 14393 | 8/31/2003 | 8100-2-0000-10-1618-0381 | Plant Sewers | $1,875.00 | 474 | NewSpring Water L.L.C. | Engineering Aug03 | 381.4 | 7.20% | $135.00 |
| 15567 | 9/30/2003 | 8100-2-0000-10-1618-0381 | Plant Sewers | $1,875.00 | 498 | NewSpring Water L.L.C. | Engineering Sept03 | 381.4 | 7.20% | $135.00 |
| 11187 | 6/30/2003 | 8100-2-0000-10-1618-0390 | Office Equipment | $718.67 | 805 | APS | Crystal Report Training- Leo | 390 | 1.84% | $13.22 |
| 12895 | 7/31/2003 | 8100-2-0000-10-1618-1000 | Vehicles/Equipment | $166.62 | CK 1053 | NewSpring Impress Account | CK 1053-TOBIAS AUTOMOTIVE | 391.7 | 0.00% | $0.00 |
| 4916 | 1/13/2003 | 8100-2-0000-10-1618-3541 | Plant Rerating - BMSC | $630.00 | 8617DEC ENG | NewSpring Water L.L.C. | Engineering - Dec | 354 | 7.20% | $45.36 |
| 4916 | 1/13/2003 | 8100-2-0000-10-1618-3541 | Plant Rerating - BMSC | $250.00 | 8617DEC ENG | NewSpring Water L.L.C. | Engineering - Dec | 354 | 7.20% | $18.00 |
| 5807 | 1/31/2003 | 8100-2-0000-10-1618-3542 | Scada - Plant & Lift Stations | $1,470.00 | J-E101 JAN | NewSpring Water L.L.C. | Engineering Invoice - Jan 2003 | 354 | 7.20% | $105.84 |
| 5807 | 1/31/2003 | 8100-2-0000-10-1618-3542 | Scada - Plant & Lift Stations | $2,520.00 | J-E101 JAN | NewSpring Water L.L.C. | Engineering Invoice - Jan 2003 | 354 | 7.20% | $181.44 |
| 4916 | 1/13/2003 | 8100-2-0000-10-1618-3560 | Odor Control | $3,150.00 | 8617DEC ENG | NewSpring Water L.L.C. | Engineering - Dec | 365.2 | 7.20% | $226.80 |
| 4916 | 1/13/2003 | 8100-2-0000-10-1618-3560 | Odor Control | $5,000.00 | 8617DEC ENG | NewSpring Water L.L.C. | Engineering - Dec | 365.2 | 7.20% | $360.00 |
| 5807 | 1/31/2003 | 8100-2-0000-10-1618-3560 | Odor Control | $750.00 | J-E101 JAN | NewSpring Water L.L.C. | Engineering Invoice - Jan 2003 | 365.2 | 7.20% | $54.00 |
| 6689 | 2/28/2003 | 8100-2-0000-10-1618-3560 | Odor Control | $625.00 | E102 | NewSpring Water L.L.C. | Feb Engineering Invoices | 365.2 | 7.20% | $45.00 |
| 12148 | 7/17/2003 | 8100-2-0000-10-1618-3560 | Odor Control | $721.24 | CK 1052 | NewSpring Impress Account | ck 1052 CAPITAL METALS | 365.2 | 0.00% | $0.00 |
| 4916 | 1/13/2003 | 8100-2-0000-10-1618-3630 | Service Taps - BMSC | $630.00 | 8617DEC ENG | NewSpring Water L.L.C. | Engineering - Dec | 363.2 | 7.20% | $45.36 |
| 4916 | 1/13/2003 | 8100-2-0000-10-1618-3630 | Service Taps - BMSC | $630.00 | 8617DEC ENG | NewSpring Water L.L.C. | Engineering - Dec | 363.2 | 7.20% | $45.36 |
| 4916 | 1/13/2003 | 8100-2-0000-10-1618-3630 | Service Taps - BMSC | $630.00 | 8617DEC ENG | NewSpring Water L.L.C. | Engineering - Dec | 363.2 | 7.20% | $45.36 |
| 8506 | 5/8/2003 | 8100-2-0000-10-1618-3710 | Electric Pumping Equipment - BMSC | $331.41 | CK 1021 | NewSpring Impress Account | CK #1021 - BROWN WHOLESALE | 371.3 | 0.00% | $0.00 |
| 11745 | 7/11/2003 | 8100-2-0000-10-1618-3850 | Diesel Generator | $329.01 | CK 1045 | NewSpring Impress Account | CK 1045 - TIRES | 389 | 0.00% | $0.00 |
| 4916 | 1/13/2003 | 8100-2-0000-10-1618-3885 | BWWTP Bypass Line | $210.00 | 8617DEC ENG | NewSpring Water L.L.C. | Engineering - Dec | 389 | 7.20% | $15.12 |
| 12896 | 7/31/2003 | 8100-2-0000-10-1618-3890 | Utility Plant in Service - BMSC | $778.32 | CK 1055 | NewSpring Impress Account | CK 1055 TOP NOTCH LOCKSMITH | 389 | 0.00% | $0.00 |
| 15525 | 9/30/2003 | 8100-2-0000-10-1618-3891 | Other Plant - BMSC | $3,804.11 | JC14367 | APS | Undertake Work/Safety | 389 | 1.84% | $70.00 |
| 16421 | 10/23/2003 | 8100-2-0000-10-1618-3891 | Other Plant - BMSC | $1,059.11 | JC14591 | Algonquin Power Systems Inc. | UNDERTAKE WORK/SAFETY | 389 | 1.84% | $19.49 |
| 17099 | 10/31/2003 | 8100-2-0000-10-1618-3891 | Other Plant - BMSC | $2,800.45 | JC14918 | Algonquin Power Systems Inc. | UNDERTAKE WORK/SAFETY | 389 | 1.84% | $51.53 |
| 4916 | 1/13/2003 | 8100-2-0000-10-1618-3891 | Other Plant - BMSC | $315.00 | 8617DEC ENG | NewSpring Water L.L.C. | Engineering - Dec | 389 | 7.20% | $22.68 |
| 7047 | 3/21/2003 | 8100-2-0000-10-1618-3900 | Office Equipment / Automation - BMSC | $911.09 | 18.1 | Algonquin Water Resources of America | COMPUTER EXPENSES | 390.7 | 0.00% | $0.00 |
| 4916 | 1/13/2003 | 8100-2-0000-10-1618-3900 | Office Equipment / Automation - BMSC | $375.00 | 8617DEC ENG | NewSpring Water L.L.C. | Engineering - Dec | 390.7 | 7.20% | $27.00 |
| 5807 | 1/31/2003 | 8100-2-0000-10-1618-3900 | Office Equipment / Automation - BMSC | $1,500.00 | J-E101 JAN | NewSpring Water L.L.C. | Engineering Invoice - Jan 2003 | 390.7 | 7.20% | $108.00 |
| 6689 | 2/28/2003 | 8100-2-0000-10-1618-3900 | Office Equipment / Automation - BMSC | $6,250.00 | E102 | NewSpring Water L.L.C. | Feb Engineering Invoices | 390.7 | 7.20% | $450.00 |
| | | | | **$52,555.03** | | | | | | **$3,101.56** |

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| Journal Entry | TRX Date | Account Number | Account Description | Amount | Originating Document Number | Originating Master Name | Reference | | NARUC # | Profit % | Profit $ |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 19892 | 1/31/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $1,318.20 | JC16170 | Algonquin Power Systems Inc. | BLACK MT-UNDERTAKE WORK/SAFETY | | 354 | 5.24% | $69.07 |
| 20519 | 2/29/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $1,902.11 | JC16597 | Algonquin Power Systems Inc. | BLACK MTN UNDERTAKE WORK/SAFET | | 354 | 5.24% | $99.67 |
| 21170 | 3/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $801.28 | JC16940 | Algonquin Power Systems Inc. | BLACK MT-UNDERTAKE WORK/SAFETY | | 354 | 5.24% | $41.99 |
| 21825 | 4/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $49.88 | JC17291 | Algonquin Power Systems Inc. | BLACK MT-UNDERTAKE WORK/SAFETY | | 354 | 5.24% | $2.61 |
| 22455 | 5/31/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $389.19 | 80 | Algonquin Water Resources of America | SERVER REPLACEMENT | | 390 | 0.00% | $0.00 |
| 23330 | 6/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $2,187.50 | JC50 | NewSpring Water L.L.C. | 8100-20003-000204 | 04 | 354 | 3.92% | $85.75 |
| 23331 | 6/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $3,500.00 | JC51 | NewSpring Water L.L.C. | 8100-20004-000304 | 04 | 354 | 3.92% | $137.20 |
| 23332 | 6/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $1,025.00 | JC52 | NewSpring Water L.L.C. | 8100-20004-000404 | 04 | 354 | 3.92% | $40.18 |
| 24220 | 8/31/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $500.00 | JC102 | NewSpring Water L.L.C. | 8100-20004-000404 | 04 | 354 | 3.92% | $19.60 |
| 24423 | 9/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $750.00 | JC139 | NewSpring Water L.L.C. | 8100-20004-000404 | 04 | 354 | 3.92% | $29.40 |
| 24426 | 9/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $8,960.00 | JC138 | NewSpring Water L.L.C. | 8100-20004-000304 | 04 | 354 | 3.92% | $351.23 |
| 24634 | 10/29/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $4,120.00 | JC173 | NewSpring Water L.L.C. | 8100-20004-000304 | 04 | 354 | 3.92% | $161.50 |
| 25051 | 12/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $1,562.50 | JC247 | NewSpring Water L.L.C. | 8100-20004-000404 | 04 | 354 | 3.92% | $61.25 |
| 25055 | 12/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $1,625.00 | JC246 | NewSpring Water L.L.C. | 8100-20004-000304 | 04 | 354 | 3.92% | $63.70 |
| 23334 | 6/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $500.00 | JC54 | NewSpring Water L.L.C. | 8100-20004-000707 | 07 | 361.2 | 3.92% | $19.60 |
| 24221 | 8/31/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $696.00 | JC104 | NewSpring Water L.L.C. | 8100-20004-001107 | 07 | 361.2 | 3.92% | $27.28 |
| 24421 | 9/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $1,450.00 | JC142 | NewSpring Water L.L.C. | 8100-20004-001207 | 07 | 361.2 | 3.92% | $56.84 |
| 24422 | 9/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $4,325.00 | JC141 | NewSpring Water L.L.C. | 8100-20004-001107 | 07 | 361.2 | 3.92% | $169.54 |
| 24424 | 9/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $350.00 | JC140 | NewSpring Water L.L.C. | 8100-20004-000707 | 07 | 361.2 | 3.92% | $13.72 |
| 24630 | 10/29/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $2,150.00 | JC176 | NewSpring Water L.L.C. | 8100-20004-001207 | 07 | 361.2 | 3.92% | $84.28 |
| 24632 | 10/29/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $1,062.50 | JC175 | NewSpring Water L.L.C. | 8100-20004-001107 | 07 | 361.2 | 3.92% | $41.65 |
| 25050 | 12/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $500.00 | JC248 | NewSpring Water L.L.C. | 8100-20004-000607 | 07 | 361.2 | 3.92% | $19.60 |
| 25053 | 12/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $1,465.12 | JC250 | NewSpring Water L.L.C. | 8100-2004-001107 | 07 | 361.2 | 3.92% | $57.43 |
| 25054 | 12/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $1,600.00 | JC251 | NewSpring Water L.L.C. | 8100-20004-001207 | 07 | 361.2 | 3.92% | $62.72 |
| 23333 | 6/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $2,975.00 | JC53 | NewSpring Water L.L.C. | 8100-20004-000521 | 21 | 389 | 3.92% | $116.62 |
| 24219 | 8/31/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $140.00 | JC101 | NewSpring Water L.L.C. | 8100-20003-000121 | 21 | 389 | 3.92% | $5.49 |
| 24425 | 9/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $140.00 | JC137 | NewSpring Water L.L.C. | 8100-20003-000121 | 21 | 389 | 3.92% | $5.49 |
| 24631 | 10/29/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $119.70 | JC172 | NewSpring Water L.L.C. | 8100-20003-000121 | 21 | 389 | 3.92% | $4.69 |
| 24633 | 10/29/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $32.85 | JC174 | NewSpring Water L.L.C. | 8100-20004-000521 | 21 | 389 | 3.92% | $1.29 |
| 25056 | 12/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $49.70 | JC245 | NewSpring Water L.L.C. | 8100-20003-000121 | 21 | 389 | 3.92% | $1.95 |
| 25052 | 12/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $2,062.50 | JC249 | NewSpring Water L.L.C. | 8100-20004-000950 | 50 | 363 | 3.92% | $80.85 |
| 23888 | 7/31/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $1,050.00 | JC80 | NewSpring Water L.L.C. | 8100-20004-000304 BOULDERS LAN | AN | 354 | 3.92% | $41.16 |
| 24876 | 11/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $2,937.50 | JC204 | NewSpring Water L.L.C. | 8100-20004-000304 BOULDERS LAN | AN | 354 | 3.92% | $115.15 |
| 24881 | 11/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $4,910.00 | JC208 | NewSpring Water L.L.C. | 8100-20004-001207 BOULDERS CAS | AS | 361.2 | 3.92% | $192.47 |
| 23889 | 7/31/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $125.00 | JC79 | NewSpring Water L.L.C. | 8100-20003-000204 BOULDERS BY | BY | 354 | 3.92% | $4.90 |
| 24875 | 11/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $1,690.38 | JC202 | NewSpring Water L.L.C. | REPAIRS & MAINTENANCE | CE | 390 | 3.92% | $66.26 |
| 24877 | 11/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $140.00 | JC203 | NewSpring Water L.L.C. | 8100-20003-000121 ON-SITE SODI | DI | 389 | 3.92% | $5.49 |
| 23885 | 7/31/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $1,250.00 | JC81 | NewSpring Water L.L.C. | 8100-20004-000404 NOISE STUDY | DY | 354 | 3.92% | $49.00 |
| 23886 | 7/31/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $5,125.00 | JC82 | NewSpring Water L.L.C. | 8100-20004-000521 ODOR STUDY | DY | 389 | 3.92% | $200.90 |
| 24880 | 11/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $3,875.00 | JC207 | NewSpring Water L.L.C. | 8100-20004-001107 HERITAGE HEA | EA | 361.2 | 3.92% | $151.90 |
| 24878 | 11/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $375.00 | JC205 | NewSpring Water L.L.C. | 8100-20004-000404 NOISE ATTENT | NT | 354 | 3.92% | $14.70 |
| 24218 | 8/31/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $4,125.00 | JC103 | NewSpring Water L.L.C. | 8100-20004-000521 ODOR ATTENT. | T. | 389 | 3.92% | $161.70 |
| 24879 | 11/30/2004 | 8100-2-0000-10-1618-9999 | Fixed Asset Clearing | $500.00 | JC206 | NewSpring Water L.L.C. | 8100-20004-000521 ODOR ATTENTU | TU | 389 | 3.92% | $19.60 |
| | | | | $74,411.91 | | | | | | | $2,955.43 |

**ARIZONA CORPORATION COMMISSION STAFF'S RESPONSES TO BLACK MOUNTAIN SEWER CORPORATION'S FOURTH SET OF DATA REQUESTS DOCKET NO. SW-02361A-05-0657 MAY 19, 2006**

4.20 Identify every "non-affiliated third party" Staff is aware of that can provide BMSC some or all of the services being provided by affiliated entities. For each such third party, state the cost of those services.

**Answer:** Staff does not have the requested information because BMSC did not solicit or did not provide Staff with the results of solicitations for sealed bids for its management and operations contracts.

4.21 Referring to Ms. Brown's surrebuttal at p. 9, ls. 13-18, how are customers harmed if the shareholder keeps the affiliate profit?

**Answer:** Wealth is unnecessarily transferred from ratepayers to shareholders.

4.22 Regarding the data request above, for each "harm" identified by Staff, would the same harm occur if the same amount is paid to a non-affiliated third party?

**Answer:** No.

4.23 Is it Staff's position that a utility can be precluded from recovering reasonably incurred costs of service?

**Answer:** No.

4.24 Provide all known authority, including Commission precedent, for Ms. Brown's surrebuttal testimony found on p. 10, ls. 13-15.

**Answer:** In other words, Staff is saying that if the Company is not selling to an independent third party (i.e. forgoing other profitable opportunities) then the profit should be treated as a consolidated inter-company transaction and should be disallowed. This treatment is consistent with the elimination of unrealized profit on consolidated inter-company transactions in accordance with GAAP.

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**BLACK MOUNTAIN SEWER CORPORATION**
**2005 GENERAL RATE CASE**
**DOCKET NO. SW-02361A-05-0657**
**RESPONSE TO STAFF'S SEVENTH SET OF DATA REQUESTS**

Response provided by: Greg Sorensen

Title: Controller – Algonquin Water

Company Name: Black Mountain Sewer Corporation
Address: 12725 W. Indian School Road, Suite D-101
Avondale, AZ 85323

Company Response Number: CSB 7.3

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Q. Contract Operator Fee – This is a follow-up to CSB 1.52. In your response to CSB 1.54 you provided several schedules.

This first schedule is entitled "Priced for Affiliated Transactions." It shows that the operating contract fee is $13,062 per month. Schedule B, entitled "Algonquin Water Service Monthly Allocation of Shared Personnel by Facility", shows $1,854.13 was allocated to Black Mountain for administration salaries and $1,720.07 was allocated for operations salaries, for a total of $3,574.20 for actual administrative and operations salaries.

Is the $9,487.80 difference (i.e., $13,062 - $3,574.20) the "operating margin?" If not, please provide a calculation showing the $13,062 contract fee amount less the actual amounts paid to workers and the resulting "operating margin". As part of your response, please identify the names of all workers, actual monthly salary, and calculation of percentage charged to Black Mountain.

A. No, $9,487.80 is not the "operating margin." Excluded from the above calculation is the cost of two wastewater operators; Daniel Schanaman and Myra McDaniel, as noted on the schedule titled "Build up of Monthly Operating and Accounting Fees for Black Mountain Sewer Company" also submitted as part of the response to CSB 1.52. Including their fees in the amount of $6,532.06 and $3,503.50, respectively, brings the total wage cost/fee to $13,609.76. Added to this are the costs for Postage ($685.86 per Schedule A), Overhead ($1,796.10), and Estimated Income Tax ($747.71). This results in a budgeted post tax operating margin of $1,121.57, or 6.2% of revenue from the monthly Operating/Billing/Administrative services. The names, monthly salaries, and calculation of percentage charged to BMSC were provided as part of our original response to CSB 1.52. For an additional illustration of the above calculation,

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please see the AWS monthly budget for its BMSC customer in the amended response to CSB 4.1.

1763007.1

**Algonquin Water Services**
**Build up of Monthly Operating and Accounting Fees for Black Mountain Sewer Company**
**CSB 1.52 Summary**

| | | Customer Count | Monthly Salaries | Over Time Wages | Total Salaries | Benefits | Total Employee Cost | Total ADM/OPS Costs | |
|---|---|---|---|---|---|---|---|---|---|
| **BLACK MOUNTAIN** | | **1633** | | | | | | | |
| **Administration Fee Build Up ($3/bill)** | | | | | | | | | |
| Shared Admin Wages | See schedule B | | | | | | 1,854.13 | | |
| Postage | See schedule A | | | | | | $685.86 | | |
| Other | ** | | | | | | 2,359.01 | | |
| **Total Administration Costs** | | | | | | | | **$4,899.00** | **4899** |
| **Operations Fee Build Up** | | | | | | | | | |
| Schanaman, Daniel | Waste water Operator | | 4,241.60 | 424.16 | 4,665.76 | 1,866.30 | 6,532.06 | | |
| McDaniel, Myra | Waste water Operator | | 2,275.00 | 227.50 | 2,502.50 | 1,001.00 | 3,503.50 | | |
| Shared Ops Wages | See schedule B | | | | | | 1,720.07 | | |
| Other | ** | | | | | | 1,306.37 | | |
| **Total Operation Costs** | | | | | | | | **$13,062.00** | |

** These costs include other overhead costs such as rent, legal fees, communication, travel, etc.

**Schedule A**
**Monthly Postage Cost Build Up**
**CSB 1.52**

| | | Postage Expense |
|---|---|---|
| **Black Mountain** | | |
| Customer Count | **1633** | |
| Postage Cost Per Bill | **0.32** | $522.56 |
| Envlope/Stationary Cost per Bill | **0.10** | $163.30 |
| **Total Postage Cost** | | **$685.86** |

**Schedule B**
**Algonquin Water Services Monthly Allocation of Shared Personnel by Facility**
**CSB 1.52**

| | | Gold Canyon | Black Mountain | Tall Timbers | Woodmark | Bella Vista | Litchfield Park | Total |
|---|---|---|---|---|---|---|---|---|
| **Salaries for Admin at AWS** | **From Schedule C** | | | | | | | |
| **Budgeted Customers** | | 4,534 | 1,633 | 1,125 | 970 | | 25,864 | 34,126.00 |
| | | 13% | 5% | 3% | 3% | | 76% | 100% |
| Patty Nielsen | 7,045.41 | 936.06 | 337.14 | 232.26 | 200.26 | - | 5,339.69 | 7,045.41 |
| Amy Sears | 7,700.00 | 1,023.03 | 368.46 | 253.84 | 218.87 | - | 5,835.80 | 7,700.00 |
| Bundy | 7,000.00 | 930.02 | 334.96 | 230.76 | 198.97 | - | 5,305.28 | 7,000.00 |
| Bobi Keen | 4,252.49 | 564.99 | 203.49 | 140.19 | 120.87 | - | 3,222.95 | 4,252.49 |
| Suzanne Wagner | 4,409.00 | 585.78 | 210.98 | 145.35 | 125.32 | - | 3,341.57 | 4,409.00 |
| Barbara Risden | 4,134.37 | 549.30 | 197.84 | 136.29 | 117.52 | - | 3,133.43 | 4,134.37 |
| Brenda Bowman | 4,205.84 | 558.79 | 201.26 | 138.65 | 119.55 | - | 3,187.59 | 4,205.84 |
| | | **5,147.96** | **1,854.13** | **1,277.34** | **1,101.35** | **-** | **29,366.32** | **38,747.10** |
| **Salaries for Ops** | | | | | | | | |
| **Budgeted Customers** | | 4,534 | 1,633 | 1,125 | 970 | 7,012 | 25,864 | 41,138 |
| | | 11% | 4% | 3% | 2% | 17% | 63% | 100% |
| Charlie Hernandez | 11,796.89 | 1,300.19 | 564.51 | 388.90 | 335.32 | - | 8,940.83 | 11,529.73 |
| Mike Weber | 15,750.01 | 1,735.88 | 625.21 | 430.72 | 371.37 | 2,684.60 | 9,902.24 | 15,750.01 |
| Joel Wade | 11,083.35 | 1,472.54 | 530.36 | 365.37 | 315.03 | - | 8,400.04 | 11,083.35 |
| | | **4,508.60** | **1,720.07** | **1,184.99** | **1,021.72** | **2,684.60** | **27,243.10** | **38,363.09** |

**Schedule C**
**Algonquin Water Services Monthly Shared Admin and Operations Personnel**
**CSB 1.52**

| | MONTHLY SALARIES | OT HRS $ | TOTAL SALARIES | BENEFITS | OTHER BENEFITS | CAR ALLOWANCE | MILEAGE | TOTAL EMPLOYEE COST |
|---|---|---|---|---|---|---|---|---|
| Bowman, Brenda | 3,004.17 | - | 3,004.17 | 1,201.67 | | | | 4,205.84 |
| Bundy | 5,000.00 | | 5,000.00 | 2,000.00 | | | | 7,000.00 |
| Dacquet, Roberta (bobi Keen) | 3,037.49 | - | 3,037.49 | 1,215.00 | | | | 4,252.49 |
| Hernandez, Charlie | 8,040.37 | - | 8,040.37 | 3,216.15 | | 540.37 | | 11,796.89 |
| Nielsen, Patricia | 4,556.24 | - | 4,556.24 | 1,822.50 | 226.67 | 440.00 | | 7,045.41 |
| Risden, Barbara | 2,953.12 | - | 2,953.12 | 1,181.25 | | | | 4,134.37 |
| Sears, Amy | 5,500.00 | - | 5,500.00 | 2,200.00 | | | | 7,700.00 |
| Wade, Joel | 7,916.68 | - | 7,916.68 | 3,166.67 | | | | 11,083.35 |
| Wagner, Suzanne | 2,835.00 | - | 2,835.00 | 1,134.00 | | 440.00 | | 4,409.00 |
| Weber, Michael | 11,250.01 | - | 11,250.01 | 4,500.00 | | | | 15,750.01 |

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-0a

**REVENUE REQUIREMENT CHANGES FROM STAFF'S SURREBUTTAL**

| LINE NO. | DESCRIPTION | [A] STAFF SURREBUTTAL | [B] ADJUSTMENTS | [C] STAFF LATE FILED |
|---|---|---|---|---|
| 1 | Adjusted Rate Base | $ 1,753,118 | $ (405,846) | $ 1,347,272 |
| 2 | Adjusted Operating Income (Loss) | $ 42,834 | $ (12,479) | $ 30,355 |
| 3 | Current Rate of Return (L2 / L1) | 2.44% | $ (0.0019) | 2.25% |
| 4 | Required Rate of Return | 9.60% | $ - | 9.60% |
| 5 | Required Operating Income (L4 * L1) | $ 168,299 | $ (38,961) | $ 129,338 |
| 6 | Operating Income Deficiency (L5 - L2) | $ 125,465 | $ (26,482) | $ 98,983 |
| 7 | Gross Revenue Conversion Factor | 1.72948 | $ 0.01121 | 1.74069 |
| 8 | Increase In Gross Revenue (L7 * L6) | $ 216,990 | $ (44,691) | $ 172,299 |
| 9 | Adjusted Test Year Revenue | $ 1,205,452 | $ - | $ 1,205,452 |
| 10 | Proposed Annual Revenue (L8 + L9) | $ 1,422,442 | $ (44,691) | $ 1,377,751 |
| 11 | Required Increase in Revenue (%) (L8/L9) | 18.00% | -3.71% | 14.29% |

References:
Column [A]: Staff Surrebuttal Schedule CSB-1
Column [B]: Column C - Column A
Column [C]: Staff's Late Filed Surrebuttal Schedule CSB-1

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Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-0b

## RATE BASE CHANGES FROM SURREBUTTAL

| LINE NO. | | (A) STAFF SURREBUTTAL | (B) STAFF ADJUSTMENTS | Ref | (C) STAFF LATE-FILED |
|---|---|---|---|---|---|
| 1 | Plant in Service | $ 8,677,160 | $ (472,006) | 1 | $ 8,205,154 |
| 2 | Post-Test Year Plant | - | 85,699 | 2 | 85,699 |
| 3 | Total Plant In Service | $ 8,677,160 | $ (386,307) | | $ 8,290,853 |
| 4 | Less: Accumulated Depreciation | 4,366,379 | 19,539 | 3 | 4,385,918 |
| 3 | Net Plant in Service | $ 4,310,781 | $ (405,846) | | $ 3,904,935 |
| | *LESS:* | | | | |
| 4 | Advances in Aid of Construction (AIAC) | $ 1,315,900 | $ - | | $ 1,315,900 |
| 5 | Service Line and Meter Advances | $ - | $ - | | $ - |
| 6 | Contributions in Aid of Construction (CIAC) | $ 4,707,536 | $ - | | $ 4,707,536 |
| 7 | Less: Accumulated Amortization | 3,301,772 | - | | 3,301,772 |
| 8 | Net CIAC | $ 1,405,764 | - | | $ 1,405,764 |
| 9 | Total Advances and Contributions | $ 2,721,664 | $ - | | $ 2,721,664 |
| 10 | Customer Deposits | $ - | $ - | | $ - |
| 11 | Accumulated Deferred Income Taxes | $ 164,000 | $ - | | $ 164,000 |
| | *ADD:* | | | | |
| 12 | Prepayments | $ - | $ - | | $ - |
| 13 | Working Capital | $ - | $ - | | $ - |
| 14 | **Total Rate Base** | $ 1,753,117 | $ (405,846) | | $ 1,347,271 |

Ref ***Explanation of Adjustments***

1 To remove land & Test Year Chlorinator

| | |
|---|---|
| ($452,467) | Land |
| ($19,539) | Test Year Chlorinator |
| ($472,006) | |

2 To add Post-Test Year chlorinator

3 To remove Test Year chlorinator accumulated depreciation

References:
Column [A], Staff Surrebuttal Sch CSB-4
Column [B]: Column [C] - Column [A]
Column [C]: Staff Late Filed Surr Sch CSB-4

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-0c

**OPERATING INCOME - CHANGES FROM STAFF'S SURREBUTTAL**

| LINE NO. | DESCRIPTION | [A] STAFF SURREBUTTAL | [B] ADJUSTMENTS | [C] STAFF LATE FILED SURREBUTTAL |
|---|---|---|---|---|
| | *REVENUES:* | | | |
| 1 | Flat Rate Revenues | $ 1,188,980 | $ - | $ 1,188,980 |
| 2 | Other Wastewater Revenues | 16,472 | - | 16,472 |
| 3 | Total Operating Revenues | $ 1,205,452 | $ - | $ 1,205,452 |
| | *EXPENSES:* | | | |
| 4 | Salaries and Wages | $ - | $ - | $ - |
| 5 | Purchased Wastewater Treatment | 162,082 | - | 162,082 |
| 6 | Sludge Removal Expense | 981 | - | 981 |
| 7 | Purchased Power | 47,727 | - | 47,727 |
| 8 | Fuel for Power Production | - | - | - |
| 9 | Chemicals | 76,612 | - | 76,612 |
| 10 | Materials and Supplies | 26,796 | (0) | 26,796 |
| 11 | Contractual Services - Professional | 159,250 | (0) | 159,250 |
| 12 | Contractual Services - Testing | 11,000 | - | 11,000 |
| 13 | Contractual Services - Other | 204,325 | (0) | 204,325 |
| 14 | Rental Expense | 10,259 | (0) | 10,259 |
| 15 | Transportation Expense | 2,543 | 0 | 2,543 |
| 16 | Insurance - General Liability | 15,608 | (0) | 15,608 |
| 17 | Regulatory Commission Expense | 31,200 | - | 31,200 |
| 18 | Miscellaneous Expense | 63,851 | 0 | 63,851 |
| 19 | Scottsdale Capacity Operating Lease | 161,821 | (0) | 161,821 |
| 20 | Depreciation | 76,696 | 2,906 | 79,602 |
| 21 | Taxes Other Than Income | - | - | - |
| 22 | Property Taxes | 46,313 | (542) | 45,771 |
| 23 | Income Taxes | 66,755 | 8,915 | 75,670 |
| 24 | **Total Operating Expenses** | $ 1,163,819 | $ 11,278 | $ 1,175,097 |
| 25 | **Operating Income (Loss)** | $ 41,633 | $ (11,278) | $ 30,355 |

References:
Column (A): Staff's Surrebuttal Schedule CSB-13
Column (B): Column (C) + Column (A)
Column (C): Staff's Late Filed Surrebuttal Schedule CSB-13

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-1

**REVENUE REQUIREMENT**

| LINE NO. | DESCRIPTION | [A] COMPANY ORIGINAL COST | [B] STAFF ORIGINAL COST |
|---|---|---|---|
| 1 | Adjusted Rate Base | $ 887,449 | $ 1,347,272 |
| 2 | Adjusted Operating Income (Loss) | $ (14,232) | $ 30,355 |
| 3 | Current Rate of Return (L2 / L1) | -1.60% | 2.25% |
| 4 | Required Rate of Return | 10.00% | 9.60% |
| 5 | Required Operating Income (L4 * L1) | $ 88,745 | $ 129,338 |
| 6 | Operating Income Deficiency (L5 - L2) | $ 102,977 | $ 98,983 |
| 7 | Gross Revenue Conversion Factor | 1.73080 | 1.74069 |
| 8 | Increase In Gross Revenue (L7 * L6) | $ 178,232 | $ 172,299 |
| 9 | Adjusted Test Year Revenue | $ 1,207,740 | $ 1,205,452 |
| 10 | Proposed Annual Revenue (L8 + L9) | $ 1,385,972 | $ 1,377,751 |
| 11 | Required Increase in Revenue (%) (L8/L9) | 14.76% | 14.29% |

References:
Column [A]: Company Schedules A-1, C-1, C-3, & D-1
Column [B]: Staff Schedules CSB-2, CSB-3, & CSB-7

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-2

**GROSS REVENUE CONVERSION FACTOR**

| LINE NO. | DESCRIPTION | (A) | (B) | (C) | (D) |
|---|---|---|---|---|---|
| | *Calculation of Gross Revenue Conversion Factor:* | | | | |
| 1 | Billings | 1.000000 | | | |
| 2 | Uncollectible Factor | 0.000000 | | | |
| 3 | Revenues | 1.000000 | | | |
| 4 | Less: Combined Federal and State Tax Rate (Line 12) | 0.425514 | | | |
| 5 | Subtotal (L3 - L4) | 0.5745 | | | |
| 6 | **Revenue Conversion Factor (L1 / L5)** | **1.74069** | | | |
| | *Calculation of Effective Tax Rate:* | | | | |
| 7 | Operating Income Before Taxes (Arizona Taxable Income) | 100.0000% | | | |
| 8 | Arizona State Income Tax Rate | 6.9680% | | | |
| 9 | Federal Taxable Income (L7 - L8) | 93.0320% | | | |
| 10 | Applicable Federal Income Tax Rate (Line 34) | 38.2486% | | | |
| 11 | Effective Federal Income Tax Rate (L9 x L10) | 35.5834% | | | |
| 12 | Combined Federal and State Income Tax Rate (L8 +L11) | 42.5514% | | | |

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-3

## RATE BASE - ORIGINAL COST

| LINE NO. | | (A) COMPANY AS FILED | (B) STAFF ADJUSTMENTS | (C) STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Plant in Service | $ 8,464,745 | $ (173,892) | $ 8,290,853 |
| 2 | Less: Accumulated Depreciation | 4,366,379 | 19,539 | 4,385,918 |
| 3 | Net Plant in Service | $ 4,098,366 | $ (193,431) | $ 3,904,935 |
| | *LESS:* | | | |
| 4 | Advances in Aid of Construction (AIAC) | $ 1,315,900 | $ - | $ 1,315,900 |
| 5 | Service Line and Meter Advances | $ - | $ - | $ - |
| 6 | Contributions in Aid of Construction (CIAC) | $ 5,346,615 | $ (639,079) | $ 4,707,536 |
| 7 | Less: Accumulated Amortization | 3,308,578 | (6,806) | 3,301,772 |
| 8 | Net CIAC | $ 2,038,037 | (632,273) | $ 1,405,764 |
| 9 | Total Advances and Contributions | $ 3,353,937 | $ (632,273) | $ 2,721,664 |
| 10 | Customer Deposits | $ (3,000) | $ 3,000 | $ - |
| 11 | Accumulated Deferred Income Taxes | $ - | $ 164,000 | $ 164,000 |
| | *ADD:* | | | |
| 12 | Prepayments | $ 9,512 | $ (9,512) | $ - |
| 13 | Working Capital | $ 130,508 | $ (130,508) | $ - |
| 14 | **Total Rate Base** | $ 887,449 | $ 459,823 | $ 1,347,272 |

References:
Column [A], Company Schedule B-1, Page 1
Column [B]: Schedule CSB-4
Column [C]: Column [A] + Column [B]

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-4

**SUMMARY OF RATE BASE ADJUSTMENTS**

| LINE NO. | PLANT IN SERVICE<br>Acct. No. - Plant Description | [A]<br>COMPANY AS FILED | [B]<br>Adj No.1<br>Post Test Year Plant & Accu Depreciation<br>Ref: Sch CSB-5 | [C]<br>ADJ No. 2<br>Affiliate Costs & Capitalized Profits<br>Ref: Sch CSB-6 | [D]<br>ADJ No. 3<br>Expensed Plant<br>Ref: Sch CSB-7 | [E]<br>ADJ No. 4<br>CIAC & Amort of CIAC<br>Ref: Sch CSB-8 | [F]<br>ADJ No. 5<br>Customer Deposits<br>Ref: Sch CSB-9 | [G]<br>ADJ No. 6<br>Deferred Income Taxes<br>Ref: Sch CSB-10 | [H]<br>ADJ No. 7<br>Working Capital<br>Ref: Sch CSB-11 | [I]<br>STAFF AS ADJUSTED |
|---|---|---|---|---|---|---|---|---|---|---|
| 2 | 353 - Land and Land Rights | $ 461,446 | $ - | $ (146) | $ - | $ - | $ - | $ - | $ - | $ 461,300 |
| 3 | 354 - Structures and Improvements | 1,245,292 | - | (5,387) | - | - | - | - | - | 1,239,905 |
| 4 | 360 - Collection Services - Force | 228,785 | - | (205) | - | - | - | - | - | 228,580 |
| 5 | 361 - Collection Services - Gravity | 3,608,619 | - | (1,361) | 7,286 | - | - | - | - | 3,614,545 |
| 6 | 363 - Services to Customers | 158,802 | - | (1,584) | - | - | - | - | - | 157,218 |
| 7 | 364 - Flow Measuring Devices | 39,878 | - | (49) | - | - | - | - | - | 39,829 |
| 8 | 365 - Flow Measuring Installations | 158,358 | - | (2,154) | - | - | - | - | - | 156,205 |
| 9 | 370 - Receiving Wells | 696,506 | - | (369) | - | - | - | - | - | 696,137 |
| 10 | 371 - Effluent Pumping Equipment | 451,705 | - | (360) | 2,213 | - | - | - | - | 453,558 |
| 11 | 381 - Plant Sewers | 121,651 | - | (1,152) | 2,790 | - | - | - | - | 123,289 |
| 12 | 389 - Other Plant and Miscellaneous Equip | 738,804 | (19,539) | (5,185) | 5,059 | - | - | - | - | 719,139 |
| 13 | 390 - Office Furniture and Equipment | 365,512 | - | (145,152) | - | - | - | - | - | 220,360 |
| 14 | 391 - Transportation Equipment | 87,811 | - | - | - | - | - | - | - | 87,811 |
| 15 | 394 - Laboratory Equipment | 7,279 | - | - | - | - | - | - | - | 7,279 |
| 16 | Total Plant in Service - Actual | $ 8,370,448 | $ (19,539) | $ (163,103) | $ 17,348 | $ - | $ - | $ - | $ - | $ 8,205,154 |
| 17 | Pro-forma Adjustment | 94,297 | (8,598) | - | - | - | - | - | - | 85,699 |
| 18 | Total Plant in Service | $ 8,464,745 | $ (28,137) | $ (163,103) | $ 17,348 | $ - | $ - | $ - | $ - | $ 8,290,853 |
| 19 | Less: Accumulated Depreciation - Actual | $ 4,441,760 | - | - | - | - | - | - | - | $ 4,441,760 |
| 20 | Less: Accumulated Depreciation - Pro Forma | 75,381 | (19,539) | - | - | - | - | - | - | 55,842 |
| 21 | Total Accumulated Depreciation - Adjusted | $ 4,366,379 | $ (19,539) | $ - | $ - | $ - | $ - | $ - | $ - | $ 4,385,918 |
| 22 | Net Plant in Service | $ 4,098,366 | $ (8,598) | $ (163,103) | $ 17,348 | $ - | $ - | $ - | $ - | $ 3,904,935 |
| 23 | *LESS:* | | | | | | | | | |
| 24 | Advances in Aid of Construction (AIAC) | $ 1,315,900 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ 1,315,900 |
| 25 | Service Line and Meter Advances | $ - | - | - | - | - | - | - | - | $ - |
| 26 | Contributions in Aid of Construction (CIAC) | $ 5,800,321 | - | - | - | (639,079) | - | - | - | $ 5,161,242 |
| 27 | Less: CIAC - Pro Forma | 453,706 | - | - | - | - | - | - | - | 453,706 |
| 28 | Total CIAC - Adjusted | $ 5,346,615 | $ - | $ - | $ - | $ (639,079) | $ - | $ - | $ - | $ 4,707,536 |
| 29 | Less: Accumulated Amortization | $ 3,486,218 | - | - | - | (6,806) | - | - | - | $ 3,479,412 |
| 30 | Less: Accumulated Amort - Pro Forma | 177,640 | - | - | - | - | - | - | - | 177,640 |
| | | $ 3,308,578 | $ - | $ - | $ - | $ (6,806) | $ - | $ - | $ - | $ 3,301,772 |
| 31 | Net CIAC | $ 2,038,037 | - | - | - | (632,273) | - | - | - | $ 1,405,764 |
| 32 | Total Advances and Net Contributions | $ 3,353,937 | - | - | - | (632,273) | - | - | - | $ 2,721,664 |
| 33 | Customer Deposits | $ (3,000) | - | - | - | - | 3,000 | - | - | $ - |
| 34 | Accumulated Deferred Income Taxes | - | - | - | - | - | - | 164,000 | - | 164,000 |
| 35 | *ADD:* | | | | | | | | | |
| 36 | Prepaid Expenses | $ 9,512 | - | - | - | - | - | - | (9,512) | $ - |
| 37 | Working Capital Allowance | 130,508 | - | - | - | - | - | - | (130,508) | - |
| 38 | **Total Rate Base** | $ 887,449 | $ (8,598) | $ (163,103) | $ 17,348 | $ 632,273 | $ (3,000) | $ 164,000 | $ (140,020) | $ 1,347,272 |

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-5

## RATE BASE ADJUSTMENT NO. 1 - POST-TEST YEAR PLANT & ACC DEPRECIATION

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED (Sch E-5) | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | 2004 Actual Plant - Removal of TY Chlorinator | $ 8,370,448 | $ (19,539) | $ 8,350,909 |
| 2 | Post Test Year Chlorinator | $ 94,297 | $ (8,598) | $ 85,699 |
| 3 | Total Gross Plant | $ 8,464,745 | **$ (28,137)** | $ 8,436,608 |
| | 2004 Actual Accumulated Depreciation | $ 4,366,379 | **$ (19,539)** | $ 4,346,840 |
| | Net Plant In Service | $ 4,098,366 | **$ (8,598)** | $ 4,089,768 |

References:
Column [A]: Company Schedule B-2, Pages 1 and 2
Column [B]: Testimony, CSB
Column [C]: Column [A] + Column [B]

## RATE BASE ADJUSTMENT NO. 2 - AFFILIATE COSTS

| LINE NO. | DESCRIPTION | [A] 2001 to 2004 Plant Additions PER COMPANY | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED Col A - Col B |
|---|---|---|---|---|
| 1 | 353 - Land and Land Rights | $ 453,592 | $ 146 | $ 453,446 |
| 2 | 354 - Structures and Improvements | 242,441 | 5,387 | $ 237,054 |
| 3 | 355 - Power Generation Equipment | - | - | $ - |
| 4 | 360 - Collection Services - Force | 12,210 | 205 | $ 12,005 |
| 5 | 361 - Collection Services - Gravity | 797,304 | 1,361 | $ 795,943 |
| 6 | 363 - Services to Customers | 29,161 | 1,584 | $ 27,577 |
| 7 | 364 - Flow Measuring Devices | 9,169 | 49 | $ 9,120 |
| 8 | 365 - Flow Measuring Installations | - | 2,154 | $ (2,154) |
| 9 | 370 - Receiving Wells | 58,584 | 369 | $ 58,215 |
| 10 | 371 - Effluent Pumping Equipment | 181,924 | 360 | $ 181,564 |
| 11 | 381 - Plant Sewers | 198,712 | 1,152 | $ 197,560 |
| 12 | 389 - Other Plant and Miscellaneous Equip | 699,247 | 5,185 | $ 694,062 |
| 13 | 390 - Office Furniture and Equipment | 365,511 | 145,152 | $ 220,359 |
| 14 | 391 - Transportation Equipment | 87,811 | - | $ 87,811 |
| 15 | 394 - Laboratory Equipment | 5,079 | - | $ 5,079 |
| 16 | Total | **$ 3,140,745** | **$ 163,103** | **$ 2,977,642** |

References:
Column [A]: Company Schedule B-2, Pages 3h through 3k
Column [B]: Testimony, CSB; Schedule CSB-6, Pages 2 through 4
Column [C]: Column [A] - Column [B]

## RATE BASE ADJUSTMENT NO. 2 - AFFILIATE COSTS
### Total Affiliate Costs To Be Removed

| LINE NO. | DESCRIPTION | [A] Affiliate Capitalized Profit | [B] Plant Allocated to Affiliates | [C] Total Staff Adjustments (Col A + Col B) |
|---|---|---|---|---|
| 1 | 353 - Land and Land Rights | $ 146 | $ - | $ 146 |
| 2 | 354 - Structures and Improvements | $ 5,387 | - | $ 5,387 |
| 3 | 355 - Power Generation Equipment | $ - | - | $ - |
| 4 | 360 - Collection Services - Force | $ 205 | - | $ 205 |
| 5 | 361 - Collection Services - Gravity | $ 1,361 | - | $ 1,361 |
| 6 | 363 - Services to Customers | $ 1,584 | - | $ 1,584 |
| 7 | 364 - Flow Measuring Devices | $ 49 | - | $ 49 |
| 8 | 365 - Flow Measuring Installations | $ 2,154 | - | $ 2,154 |
| 9 | 370 - Receiving Wells | $ 369 | - | $ 369 |
| 10 | 371 - Effluent Pumping Equipment | $ 360 | - | $ 360 |
| 11 | 381 - Plant Sewers | $ 1,152 | - | $ 1,152 |
| 12 | 389 - Other Plant and Miscellaneous Equip | $ 5,185 | - | $ 5,185 |
| 13 | 390 - Office Furniture and Equipment | $ 2,920 | 142,232 | $ 145,152 |
| 14 | 391 - Transportation Equipment | $ - | - | $ - |
| 15 | 394 - Laboratory Equipment | $ - | - | $ - |
| 16 | Total | $ 20,871 | $ 142,232 | $ 163,103 |

References:
Column [A]: Schedule CSB-6, Page 3
Column [B]: Schedule CSB-6, Page 4; Data Request Response CSB 1.45
Column [C]: Column [A] + Column [B]

## RATE BASE ADJUSTMENT NO. 2 - AFFILIATE COSTS
### Affiliate Capitalized Profit

| LINE NO. | DESCRIPTION | [A] 2001 to 2004 Plant Additions Per Company | [B] Plant Allocated to Affiliate Sch CSB-6, Page 2 | [C] Total (Col A - Col B) | [D] Capitalized Profit 2001 | [E] Capitalized Profit 2002 | [F] Capitalized Profit 2003 | [G] Capitalized Profit 2004 | [H] Total Capitalized Profit (Col D+E+F+G) | [I] Plant Less Capitalized Profit (Col C - Col H) |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 353 - Land and Land Rights | $ 453,592 | $ - | $ 453,592 | $ - | $ 146.25 | $ - | $ - | $ 146.25 | $ 453,446 |
| 2 | 354 - Structures and Improvements | 242,441 | - | 242,441 | $ 673.37 | $ 2,975.09 | $ 350.64 | $ 1,388.06 | $ 5,387.16 | $ 237,054 |
| 3 | 355 - Power Generation Equipment | - | - | - | $ - | $ - | $ - | $ - | $ - | $ - |
| 4 | 360 - Collection Services - Force | 12,210 | - | 12,210 | $ - | $ 204.75 | $ - | $ - | $ 204.75 | $ 12,005 |
| 5 | 361 - Collection Services - Gravity | 797,304 | - | 797,304 | $ - | $ 463.52 | $ - | $ 897.03 | $ 1,360.55 | $ 795,943 |
| 6 | 363 - Services to Customers | 29,161 | - | 29,161 | $ 22.44 | $ 1,344.20 | $ 136.08 | $ 80.85 | $ 1,583.57 | $ 27,577 |
| 7 | 364 - Flow Measuring Devices | 9,169 | - | 9,169 | $ - | $ 48.75 | $ - | $ - | $ 48.75 | $ 9,120 |
| 8 | 365 - Flow Measuring Installations | 158,358 | - | 158,358 | $ - | $ 1,467.70 | $ 685.80 | $ - | $ 2,153.50 | $ 156,205 |
| 9 | 370 - Receiving Wells | 58,584 | - | 58,584 | $ - | $ 369.20 | $ - | $ - | $ 369.20 | $ 58,215 |
| 10 | 371 - Effluent Pumping Equipment | 181,924 | - | 181,924 | $ 333.07 | $ 27.30 | $ - | $ - | $ 360.37 | $ 181,564 |
| 11 | 381 - Plant Sewers | 40,354 | - | 40,354 | $ - | $ - | $ 1,152.00 | $ - | $ 1,152.00 | $ 39,202 |
| 12 | 389 - Other Plant and Misc. Equip | 699,247 | - | 699,247 | $ 134.66 | $ 4,348.43 | $ 178.82 | $ 523.22 | $ 5,185.13 | $ 694,062 |
| 13 | 390 - Office Furniture and Equipment | 365,511 | 142,232 | 223,279 | $ 502.74 | $ 1,752.56 | $ 598.22 | $ 66.26 | $ 2,919.78 | $ 220,359 |
| 14 | 391 - Transportation Equipment | 87,811 | - | 87,811 | $ - | $ - | $ - | $ - | $ - | $ 87,811 |
| 15 | 394 - Laboratory Equipment | 5,079 | - | 5,079 | $ - | $ - | $ - | $ - | $ - | $ 5,079 |
| 16 | Total | $ 3,140,745 | $ 142,232 | $ 2,998,513 | $ 1,666.28 | $ 13,147.75 | $ 3,101.56 | $ 2,955.42 | $ 20,871.01 | $ 2,977,642 |

References:
Column [A]: Company Schedule B-2, Pages 3h through 3k
Column [B]: Schedule CSB-6, Page 4; Data Request Response CSB 1.45
Column [C]: Column [A] - Column [B]
Column [D]: Data Request Response CSB 10.1
Column [E]: Data Request Response CSB 10.1
Column [F]: Data Request Response CSB 10.1
Column [G]: Data Request Response CSB 10.1
Column [H]: Data Request Response CSB 10.1
Column [I]: Column [C] - Column [H]

## RATE BASE ADJUSTMENT NO. 2 - AFFILIATE PLANT COSTS
### Computer and Computer Software

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED (Col A - Col B) |
|---|---|---|---|---|
| 1 | Office Furniture & Equip | $ 162,908 | $ - | $ 162,908 |
| 2 | Allocated Costs for Affiliates | - | 72,505 | (72,505) |
| 3 | Direct Costs for Bella Vista CSB 2.7 | - | 69,727 | (69,727) |
| 4 | Total | $ 162,908 | **$ 142,232** | $ 20,676 |

**ALLOCATED COSTS FOR AFFILIATED SEWER COMPANIES**

| | [D] Costs to be Allocated (From Col P) | [E] Percentage for Black Mountain (From Col R) | [F] Costs to be Allocated to Black Mtn (Col D x Col E) | [G] Percentage for Affiliates (Cols S+T+U) | [H] **Costs to be Allocated to Affiliates (Col D x Col G)** | [I] Total for Black Mountain & Affiliates (Col F + Col H) |
|---|---|---|---|---|---|---|
| 5 | $ 48,800 | 22.19% | $ 10,828 | 77.81% | $ 37,972 | $ 48,800 |
| 6 | $ 8,017 | 22.19% | $ 1,779 | 77.81% | $ 6,238 | $ 8,017 |
| 7 | $ 11,076 | 22.19% | $ 2,458 | 77.81% | $ 8,618 | $ 11,076 |
| 8 | $ 10,307 | 22.19% | $ 2,287 | 77.81% | $ 8,020 | $ 10,307 |
| 9 | $ 8,459 | 22.19% | $ 1,877 | 77.81% | $ 6,582 | $ 8,459 |
| 10 | $ 6,522 | 22.19% | $ 1,447 | 77.81% | $ 5,075 | $ 6,522 |
| 11 | $ - | 22.19% | $ - | 77.81% | $ - | $ - |
| 12 | $ 93,181 | | $ 20,676 | | **$ 72,505** | $ 93,181 |

**TOTAL COST TO BE ALLOCATED FOR FOUR AFFILIATED SEWER COMPANIES**

| | [J] Year Added | [K] Account Number | [L] Description | [M] **Cost Per CSB 1.45 & CSB 2.7** | [N] Amount Included In Adj. No. 2 Acct. No. 390 | [O] Costs to be Allocated |
|---|---|---|---|---|---|---|
| 13 | 2002 | 212 | Software Upgrades | $ 48,800 | $ - | $ 48,800 |
| 14 | 2003 | 257 | Equipment/Automation | $ 8,017 | $ - | $ 8,017 |
| 15 | 2003 | 261 | Equipment/Automation | $ 11,076 | $ - | $ 11,076 |
| 16 | 2003 | 270 | Equipment/Automation | $ 10,307 | $ - | $ 10,307 |
| 17 | 2003 | 273 | System Migration | $ 8,459 | $ - | $ 8,459 |
| 18 | 2003 | 298 | Professional Services | $ 6,522 | $ - | $ 6,522 |
| 19 | 2003 | 319 | Data Conversion | $ 14,044 | $ (14,044) | $ - |
| 20 | | | Total | $ 107,225 | $ (14,044) | $ 93,181 |

**CALCULATION OF ALLOCATION PERCENTAGES FOR FOUR AFFILIATED SEWER COMPANIES**

| | [Q] | [R] Black Mountain | [S] Gold Canyon | [T] Tall Timbers | [U] Woodmark | [V] Total |
|---|---|---|---|---|---|---|
| 21 | 12/31/2005 Customer Counts[1] | 1,798 | 4,491 | 978 | 836 | 8,103 |
| 22 | Percentage of Total Customers | 22.19% | 55.42% | 12.07% | 10.32% | 100.00% |

23 Note 1: 2005 Customer counts were used as the 2002 and 2003 counts for Tall Timbers and Woodmark
24 were not provided to Staff for the calculation.

References:

Column A: Company Schedule E-5
Column B: Testimony, CSB, Company Data Request Responses CSB 1.45
Column C: Column [A] + Column [B]

## RATE BASE ADJUSTMENT NO. 3 - EXPENSED PLANT

| LINE NO. | Plant Account Number | Description | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED (Col A + Col B) |
|---|---|---|---|---|---|
| 1 | 361 | Collection Sewers, Gravity | $ 3,608,619 | $ 7,286 | $ 3,615,905 |
| 2 | 371 | Effluent Pumping Equipment | $ 451,705 | $ 2,213 | $ 453,918 |
| 3 | 381 | Plant Sewers | $ 121,651 | $ 2,790 | $ 124,441 |
| 4 | 389 | Other Plant & Misc Equip | $ 738,804 | $ 5,059 | $ 743,863 |
| 5 | | Total | $ 4,920,779 | $ 17,348 | $ 4,938,127 |

| | FROM CONTRACTUAL SERVICES , OTHER EXPENSE (CSB 1.37) | | | |
|---|---|---|---|---|
| | Acct. No. | Vendor Name | Description | Amount |
| 6 | 361-Collection Sewers | Jensen System Engineering | Algonquin Indian Basket Alarm | $ 1,499.01 |
| 7 | 361-Collection Sewers | Keller Equipment Company | Pull and Install Motors | $ 1,947.71 |
| 8 | 361-Collection Sewers | Keller Equipment Company | Rebuild Motor/Pump | $ 1,119.65 |
| 9 | 361-Collection Sewers | KSK Electric | Replace Meter Socket | $ 1,315.00 |
| 10 | 361-Collection Sewers | LTC, Inc. | Concrete Pad & Drain for Manhole | $ 1,404.92 |
| 11 | | | Subtotal | $ 7,286.29 |
| 12 | 371-Effluent Pumping Plant | Keller Equipment Company | Change out Pumps | $ 551.62 |
| 13 | 371-Effluent Pumping Plant | Keller Equipment Company | Pull Pump. Set New Pump | $ 1,095.40 |
| 14 | | | Subtotal | $ 1,647.02 |
| 15 | 381-Plant Sewers | Foster Electric Motor Service | Install Outlets in Vault | $ 589.57 |
| 16 | 381-Plant Sewers | KSK Electric | Boulder Facility Lighting Repair Proj. | $ 2,200.00 |
| 17 | | | Subtotal | $ 2,789.57 |
| 18 | | | Total | $ 11,722.88 |

| | FROM RENTS EXPENSE (CSB 1.38) | | | |
|---|---|---|---|---|
| | Acct. No. | Vendor Name | Description | Amount |
| 19 | 371-Effluent Pumping Plant | Pump Systems, Inc. | Replace Pump | $ 566.13 |
| 20 | | | Total | $ 566.13 |

References:

Column A: Company Schedule E-5
Column B: Testimony, CSB, Company Data Request Responses CSB 1.37, 1.38,1.40, & 7.13
Column C: Column [A] + Column [B]

## RATE BASE ADJUSTMENT NO. 3 - EXPENSED PLANT
## CONTINUED

| LINE NO. | FROM MISCELLANEOUS EXPENSE (CSB 1.40) | | | |
|---|---|---|---|---|
| | Maricopa County Environ. Serv. Dept, Approval to Construct Expedited Fees | | | |
| | Acct. No | Project Title | Description | Amount |
| 1 | 389-Other Plant & Misc Equi | Boulders West WWTP Bypass | Reclaimed Water Line | $ 500.00 |
| 2 | 389-Other Plant & Misc Equi | Boulders West Effluent Pump | Addition of pumps | $ 700.00 |
| 3 | 371-Effluent Pumping Plant | Indian Basket Lift Station | Replace Existing Lift Station | $ - |
| 4 | 389-Other Plant & Misc Equi | Boulders West WWTP Bypass | Add Stucture and Manhole | $ - |
| 5 | | | Subtotal | $ 1,200.00 |
| 6 | 389-Other Plant & Misc Equi | Safety Equipment | Company Response to CSB 2.13b | $ 2,184.75 |
| 7 | | | Total | $ 3,384.75 |

| | FROM MATERIALS AND SUPPLIES EXPENSE (CSB 7.13) | | | |
|---|---|---|---|---|
| | Acct. No. | Vendor Name | Description | Amount |
| 8 | 389-Other Plant & Misc Equi | Arizona Pneumatic Systems | Blower | $ 1,674.47 |
| 9 | | | Total | $ 1,674.47 |

## RATE BASE ADJUSTMENT NO. 4 - CIAC & Amortization of CIAC

| LINE NO. | Description | [A] COMPANY AS FILED | [B] ADJUSTMENTS | [C] STAFF AS ADJUSTED Col A - Col B |
|---|---|---|---|---|
| 1 | CIAC with $101,845 removed | $ 5,346,615 | $ 194,288 | $ 5,540,903 |
| 2 | Less: Amortization of CIAC | $ 3,308,578 | $ (6,806) | $ 3,301,772 |
| 3 | Net CIAC | $ 2,038,037 | $ 201,094 | $ 2,239,131 |
| | | | | |
| 4 | CIAC with $101,845 removed | $ 5,346,615 | $ 194,288 | $ 5,540,903 |
| 5 | CIAC to be Refunded | $ - | $ (833,367) | $ (833,367) |
| 6 | | $ 5,346,615 | $ (639,079) | $ 4,707,536 |

**CIAC Calculation**

| | [D] Year | [E] CIAC Charges Per Company (RUCO 1.8) | [F] Difference | [G] CIAC Balance Staff Col. E - Col. F | |
|---|---|---|---|---|---|
| 7 | | | | | |
| 8 | | | | | |
| 9 | | | | | |
| 10 | 7/01/94 Opening Balance | $ 3,127,264.00 | $ - | $ 3,127,264.00 | |
| 11 | 1994 | $ 116,507.00 | $ - | $ 116,507.00 | Removed $101,84 |
| 12 | 1995 | $ 112,578.00 | $ 3,235.00 | $ 115,813.00 | |
| 13 | 1996 | $ 182,068.56 | $ (14,172.56) | $ 167,896.00 | |
| 14 | 1996 Treatment Capacity | $ - | $ (300,000.00) | $ (300,000.00) | |
| 15 | 1997 | $ 172,749.00 | $ - | $ 172,749.00 | |
| 16 | 1997 Treatment Capacity | $ - | $ (153,706.00) | $ (153,706.00) | |
| 17 | 1998 | $ 571,000.91 | $ - | $ 571,000.91 | |
| 18 | 1999 | $ 319,182.03 | $ - | $ 319,182.03 | |
| 19 | 2000 | $ 405,077.00 | $ - | $ 405,077.00 | |
| 20 | 2001 | $ 489,268.94 | $ - | $ 489,268.94 | |
| 21 | 2002 | $ 110,490.00 | $ - | $ 110,490.00 | |
| 22 | 2003 | $ 196,061.83 | $ (28,480.00) | $ 167,581.83 | |
| 23 | 2004 | $ (1,926.25) | $ 233,705.75 | $ 231,779.50 | |
| 24 | | $ 5,800,321.02 | $ (259,417.81) | $ 5,540,903.21 | |

References:

Column A: Company Schedule B-2
Column B: Testimony, CSB, Company Data Request Responses RUCO 1.8
Column C: Column [A] + Column [B]

**RATE BASE ADJUSTMENT NO. 4 - CIAC & Amortization of CIAC Continued**

| Amortization of CIAC Calculation | | | | |
|---|---|---|---|---|
| [A] | [B] | [C] | [D] | [E] |
| Year | CIAC Balance Per Staff | Amortization Rate | Amortization of CIAC Col. A - Col. B | Accumulated Amortization of CIAC |
| 7/01/94 CIAC Balance Per Staff | $ 3,127,264.00 | | $ 1,121,838.00 | **$ 1,121,838.00** |
| 994 July to December Amortization | $ 3,127,264.00 | 2.50% | $ 78,181.60 | |
| Additions - Half Year Convention | $ 116,507.00 | 2.50% | $ 2,912.68 | |
| | $ 3,243,771.00 | | $ 81,094.28 | **$ 81,094.28** |
| **1994 Ending Accumulated Amortization of CIAC Balance:** | | | | **$ 1,202,932.28** |
| 1995 Beginning CIAC Balance | $ 3,243,771.00 | 5.00% | $ 162,188.55 | **$ 1,202,932.28** |
| Additions - Half Year Convention | $ 115,813.00 | 2.50% | $ 2,895.33 | |
| | $ 3,359,584.00 | | $ 165,083.88 | **$ 165,083.88** |
| **1995 Ending Accumulated Amortization of CIAC Balance:** | | | | **$ 1,368,016.15** |
| 1996 Beginning CIAC Balance | $ 3,359,584.00 | | | |
| Less: Scottsdale Capacity | $ (300,000.00) | | | |
| | $ 3,059,584.00 | 5.00% | $ 152,979.20 | **$ 1,368,016.15** |
| Additions - Half Year Convention | $ 167,896.00 | 2.50% | $ 4,197.40 | |
| | $ 3,227,480.00 | | $ 157,176.60 | **$ 157,176.60** |
| **1996 Ending Accumulated Amortization of CIAC Balance:** | | | | **$ 1,525,192.75** |
| 1997 Beginning CIAC Balance | $ 3,227,480.00 | | | |
| Less: Scottsdale Capacity | $ (153,706.00) | | | |
| | $ 3,073,774.00 | 5.00% | $ 153,688.70 | **$ 1,525,192.75** |
| Additions - Half Year Convention | $ 172,749.00 | 2.50% | $ 4,318.73 | |
| | $ 3,246,523.00 | | $ 158,007.43 | **$ 158,007.43** |
| **1997 Ending Accumulated Amortization of CIAC Balance:** | | | | **$ 1,683,200.18** |
| 1998 Beginning CIAC Balance | $ 3,246,523.00 | 5.00% | $ 162,326.15 | **$ 1,683,200.18** |
| Additions - Half Year Convention | $ 571,000.91 | 2.50% | $ 14,275.02 | |
| | $ 3,817,523.91 | | $ 176,601.17 | **$ 176,601.17** |
| **1998 Ending Accumulated Amortization of CIAC Balance:** | | | | **1,859,801.35** |
| 1999 Beginning CIAC Balance | $ 3,817,523.91 | 5.00% | $ 190,876.20 | **$ 1,859,801.35** |
| Additions - Half Year Convention | $ 319,182.03 | 2.50% | $ 7,979.55 | |
| | $ 4,136,705.94 | | $ 198,855.75 | **$ 198,855.75** |
| **1999 Ending Accumulated Amortization of CIAC Balance:** | | | | **2,058,657.09** |
| 2000 Beginning CIAC Balance | $ 4,136,705.94 | 5.00% | $ 206,835.30 | **$ 2,058,657.09** |
| Additions - Half Year Convention | $ 405,077.00 | 2.50% | $ 10,126.93 | |
| | $ 4,541,782.94 | | $ 216,962.22 | **$ 216,962.22** |
| **2000 Ending Accumulated Amortization of CIAC Balance:** | | | | **2,275,619.32** |
| 2001 Beginning CIAC Balance | $ 4,541,782.94 | 5.00% | $ 227,089.15 | **$ 2,275,619.32** |
| Additions - Half Year Convention | $ 489,268.94 | 2.50% | $ 12,231.72 | |
| | $ 5,031,051.88 | | $ 239,320.87 | **$ 239,320.87** |
| **2001 Ending Accumulated Amortization of CIAC Balance:** | | | | **2,514,940.19** |
| 2002 Beginning CIAC Balance | $ 5,031,051.88 | 5.00% | $ 251,552.59 | **$ 2,514,940.19** |
| Additions - Half Year Convention | $ 110,490.00 | 2.50% | $ 2,762.25 | |
| | $ 5,141,541.88 | | $ 254,314.84 | **$ 254,314.84** |
| **2002 Ending Accumulated Amortization of CIAC Balance:** | | | | **2,769,255.03** |

**RATE BASE ADJUSTMENT NO. 4 - CIAC & Amortization of CIAC Continued**

| Amortization of CIAC Calculation | | | | |
|---|---|---|---|---|
| [A] | [B] | [C] | [D] | [E] |
| Year | CIAC Balance Per Staff | Amortization Rate | Amortization of CIAC Col. A - Col. B | Total Amortization of CIAC |
| 2003 Beginning CIAC Balance | $ 5,141,541.88 | 5.00% | $ 257,077.09 | **$ 2,769,255.03** |
| Additions - Half Year Convention | $ 167,581.83 | 2.50% | $ 4,189.55 | |
| | $ 5,309,123.71 | | $ 261,266.64 | **$ 261,266.64** |
| **2003 Ending Accumulated Amortization of CIAC Balance:** | | | | **3,030,521.67** |
| 2004 Beginning CIAC Balance | $ 5,309,123.71 | 5.00% | $ 265,456.19 | **$ 3,030,521.67** |
| Additions - Half Year Convention | $ 231,779.50 | 2.50% | $ 5,794.49 | |
| | $ 5,540,903.21 | | $ 271,250.67 | **$ 271,250.67** |
| **2004 Ending Accumulated Amortization of CIAC Balance:** | | | | **3,301,772.34** |

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-9

## RATE BASE ADJUSTMENT NO. 5 - CUSTOMER DEPOSITS

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Customer Deposits - To Remove Refund | $ (3,000) | $ 3,000 | $ - |
| 2 | Customer Deposits - To Reflect Year-End Balance | - | - | - |
| 3 | Total | **$ (3,000)** | **$ 3,000** | **$ -** |

References:

Column A: Company Schedule B-2
Column B: Testimony, CSB, Company Data Request Responses CSB 5.12
Column C: Column [A] + Column [B]

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-10

## RATE BASE ADJUSTMENT NO. 6 - DEFERRED INCOME TAXES

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Deferred Income Tax Liability | $ - | 524,000 | $ 524,000 |
| 2 | Deferred Income Tax Asset | - | (360,000) | (360,000) |
| | | **$ -** | **$ 164,000** | **$ 164,000** |

References:

Column A: Company Schedule B-2, Page 1

Column B: Testimony, CSB, Company Data Request Responses to RUCO 2.7

Column C: Column [A] + Column [B]

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-11

## RATE BASE ADJUSTMENT NO. 7 - WORKING CAPITAL

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Prepaid Expenses | $ 9,512 | $ (9,512) | $ - |
| 2 | Cash Working Capital Allowance | $ 130,508 | $ (130,508) | $ - |
| 3 | Total Working Capital | $ 140,020 | $ (140,020) | $ - |

References:

Column [A]: Company Schedule B-2
Column [B]: Testimony, CSB
Column [C]: Column [A] + Column [B]

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-12

**OPERATING INCOME - TEST YEAR AND STAFF RECOMMENDED**

| LINE NO. | DESCRIPTION | [A] COMPANY TEST YEAR AS FILED | [B] STAFF TEST YEAR ADJUSTMENTS | [C] STAFF TEST YEAR AS ADJUSTED | [D] STAFF PROPOSED CHANGES | [E] STAFF RECOMMENDED |
|---|---|---|---|---|---|---|
| | *REVENUES:* | | | | | |
| 1 | Flat Rate Revenues | $ 1,191,268 | $ (2,288) | $ 1,188,980 | $ 172,299 | $ 1,361,279 |
| 2 | Other Wastewater Revenues | 16,472 | - | 16,472 | - | 16,472 |
| 3 | Total Operating Revenues | $ 1,207,740 | $ (2,288) | $ 1,205,452 | $ 172,299 | $ 1,377,751 |
| | *EXPENSES:* | | | | | |
| 4 | Salaries and Wages | $ - | $ - | $ - | $ - | $ - |
| 5 | Purchased Wastewater Treatment | 162,082 | - | 162,082 | | 162,082 |
| 6 | Sludge Removal Expense | 981 | - | 981 | | 981 |
| 7 | Purchased Power | 47,727 | - | 47,727 | | 47,727 |
| 8 | Fuel for Power Production | - | - | - | | - |
| 9 | Chemicals | 76,612 | - | 76,612 | | 76,612 |
| 10 | Materials and Supplies | 30,420 | (3,624) | 26,796 | | 26,796 |
| 11 | Contractual Services - Professional | 171,683 | (12,433) | 159,250 | | 159,250 |
| 12 | Contractual Services - Testing | 11,000 | - | 11,000 | | 11,000 |
| 13 | Contractual Services - Other | 226,595 | (22,270) | 204,325 | | 204,325 |
| 14 | Rental Expense | 10,825 | (566) | 10,259 | - | 10,259 |
| 15 | Transportation Expense | 4,870 | (2,327) | 2,543 | - | 2,543 |
| 16 | Insurance - General Liability | 16,204 | (596) | 15,608 | - | 15,608 |
| 17 | Regulatory Commission Expense | 30,000 | 1,200 | 31,200 | - | 31,200 |
| 18 | Miscellaneous Expense | 77,401 | (13,550) | 63,851 | - | 63,851 |
| 19 | Scottsdale Capacity Operating Lease | 189,622 | (27,801) | 161,821 | - | 161,821 |
| 20 | Depreciation | 126,749 | (47,147) | 79,602 | - | 79,602 |
| 21 | Taxes Other Than Income | - | - | - | - | - |
| 22 | Property Taxes | 45,745 | 26 | 45,771 | - | 45,771 |
| 23 | Income Taxes | (6,544) | 82,214 | 75,670 | 73,316 | 148,986 |
| 24 | **Total Operating Expenses** | $ 1,221,972 | $ (46,875) | $ 1,175,097 | $ 73,316 | $ 1,248,413 |
| 25 | **Operating Income (Loss)** | $ (14,232) | $ 44,587 | $ 30,355 | $ 98,983 | $ 129,338 |

References:
Column (A): Company Schedule C-1, Page 2
Column (B): Schedule CSB-8
Column (C): Column (A) + Column (B)
Column (D): Schedules CSB-1 and CSB-2
Column (E): Column (C) + Column (D)

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-13

## SUMMARY OF OPERATING INCOME ADJUSTMENTS - TEST YEAR

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] ADJ #1 Expensed Plant | [C] ADJ #2 Affiliate Expenses | [D] ADJ #3 Bad Debt Expense | [F] ADJ #4 Depreciation Expense | [G] ADJ #5 NonRecurring & Other Exp | [H] ADJ #6 Scottsdale Opera Lease | [I] ADJ #7 Food & Beverages | [J] ADJ #8 Property Taxes | [J] ADJ #9 Income Tax Expense | [L] ADJ #10 ACC Assessment | [M] ADJ #11 Rate Case Expense | [N] STAFF ADJUSTED |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | *REVENUES:* | | | | | | | | | | | | | |
| 1 | Flat Rate Revenues | $ 1,191,268 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ (2,288) | $ - | $ 1,188,980 |
| 2 | Other Wastewater Revenues | 16,472 | - | - | - | - | - | - | - | - | - | - | - | 16,472 |
| 3 | Total Revenues | $ 1,207,740 | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ - | $ (2,288) | $ - | $ 1,205,452 |
| | *OPERATING EXPENSES:* | | | | | | | | | | | | | |
| 4 | Salaries and Wages | $ - | - | - | - | - | - | - | - | - | - | - | - | $ - |
| 5 | Purchased Wastewater Treatment | 162,082 | - | - | - | - | - | - | - | - | - | - | - | 162,082 |
| 6 | Sludge Removal Expense | 981 | - | - | - | - | - | - | - | - | - | - | - | 981 |
| 7 | Purchased Power | 47,727 | - | - | - | - | - | - | - | - | - | - | - | 47,727 |
| 8 | Fuel for Power Production | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 9 | Chemicals | 76,612 | - | - | - | - | - | - | - | - | - | - | - | 76,612 |
| 10 | Materials and Supplies | 30,420 | (1,674) | (1,472) | - | - | - | - | (478) | - | - | - | - | 26,796 |
| 11 | Contractual Services - Professional | 171,683 | - | (9,205) | - | - | (3,228) | - | - | - | - | - | - | 159,250 |
| 12 | Contractual Services - Testing | 11,000 | - | - | - | - | - | - | - | - | - | - | - | 11,000 |
| 13 | Contractual Services - Other | 226,595 | (11,723) | (10,361) | - | - | - | - | (186) | - | - | - | - | 204,325 |
| 14 | Rents Expense | 10,825 | (566) | - | - | - | - | - | - | - | - | - | - | 10,259 |
| 15 | Transportation Expense | 4,870 | - | (127) | - | - | (2,200) | - | - | - | - | - | - | 2,543 |
| 16 | Insurance - General Liability | 16,204 | - | (596) | - | - | - | - | - | - | - | - | - | 15,608 |
| 17 | Regulatory Commission Expense | 30,000 | - | - | - | - | - | - | - | - | - | - | 1,200 | 31,200 |
| 18 | Miscellaneous Expense | 77,401 | (3,385) | (3,644) | (4,233) | - | - | - | - | - | - | (2,288) | - | 63,851 |
| 19 | *Scottsdale Capacity Operating Lease* | 189,622 | - | - | - | - | - | (27,801) | - | - | - | - | - | 161,821 |
| 20 | Depreciation | 126,749 | - | - | - | (47,147) | - | - | - | - | - | - | - | 79,602 |
| 21 | Taxes Other Than Income | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 22 | Property Taxes | 45,745 | - | - | - | - | - | - | - | 26 | - | - | - | 45,771 |
| 23 | Income Taxes | (6,544) | - | - | - | - | - | - | - | - | 82,214 | - | - | 75,670 |
| 24 | Total Operating Expenses | $ 1,221,972 | $(17,348) | $(25,406) | $ (4,233) | $ (47,147) | $ (5,428) | $ (27,801) | $ (664) | $ 26 | $ 82,214 | $ (2,288) | $ 1,200 | $ 1,175,097 |
| 25 | Operating Income (Loss) | $ (14,232) | $ 17,348 | $ 25,406 | $ 4,233 | $ 47,147 | $ 5,428 | $ 27,801 | $ 664 | $ (26) | $ (82,214) | $ 0 | $ (1,200) | $ 30,355 |

| ADJ No. | | References: |
|---|---|---|
| 1 | Expensed Plant | Schedule CSB-14 |
| 2 | Affiliate Expenses | Schedule CSB-15 |
| 3 | Bad Debt Expense | Schedule CSB-16 |
| 4 | Depreciation Expense | Schedule CSB-17 |
| 5 | Normalized Expenses | Schedule CSB-18 |
| 6 | Scottsdale Operating Lease Payments | Schedule CSB-19 |
| 7 | Food and Beverages | Schedule CSB-20 |
| 8 | Property Tax Expense | Schedule CSB-21 |
| 9 | Income Tax Expense | Schedule CSB-22 |
| 10 | ACC Assessment | Schedule CSB-23 |

## OPERATING INCOME ADJUSTMENT NO. 1 - EXPENSED PLANT

| LINE NO. | Description | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Contractual Services, Other | $ 226,595 | $ (11,723) | $ 214,872 |
| 2 | Rents Expense | $ 10,825 | $ (566) | $ 10,259 |
| 3 | Miscellaneous Expense | $ 77,401 | $ (3,385) | $ 74,016 |
| 4 | Material and Supplies Expense | $ 30,420 | $ (1,674) | $ 28,746 |
| 5 | Total | $ 345,241 | $ (17,348) | $ 327,893 |

**PLANT COST REMOVED FROM CONTRACTUAL SERVICES, OTHER EXPENSE (CSB 1.37)**

| | Acct. No. | Vendor Name | Description | Amount |
|---|---|---|---|---|
| 6 | 361-Collection Sewers | Jensen Sys. Engineerin | Algonquin Indian Basket Alarm | $ 1,499.01 |
| 7 | 361-Collection Sewers | Keller Equipment Co | Pull and Install Motors | $ 1,947.71 |
| 8 | 361-Collection Sewers | Keller Equipment Co | Rebuild Motor/Pump | $ 1,119.65 |
| 9 | 361-Collection Sewers | KSK Electric | Replace Meter Socket | $ 1,315.00 |
| 10 | 361-Collection Sewers | LTC, Inc. | Concrete Pad & Drain for Manhole | $ 1,404.92 |
| 11 | | | Subtotal | $ 7,286.29 |
| 12 | 371-Effluent Pumping Pla | Keller Equipment Co | Change out Pumps | $ 551.62 |
| 13 | 371-Effluent Pumping Pla | Keller Equipment Co | Pull Pump. Set New Pump | $ 1,095.40 |
| 14 | | | Subtotal | $ 1,647.02 |
| 15 | 381-Plant Sewers | Foster Elec. Motor Serv | Install Outlets in Vault | $ 589.57 |
| 16 | 381-Plant Sewers | KSK Electric | Boulder Facility Lighting Repair Proj. | $ 2,200.00 |
| 17 | | | Subtotal | $ 2,789.57 |
| 18 | | | Total | $ 11,722.88 |

**PLANT COSTS REMOVED FROM RENTS EXPENSE (CSB 1.38)**

| | Acct. No. | Vendor Name | Description | Amount |
|---|---|---|---|---|
| 21 | 371-Effluent Pumping Pla | Pump Systems, Inc. | Replace Pump | $ 566.13 |
| 22 | | | Total | $ 566.13 |

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB, Company Data Request Responses CSB 1.37, 1.38, 1.40 & 7.13
Column C: Column [A] + Column [B]

## OPERATING INCOME ADJUSTMENT NO. 1 - EXPENSED PLANT CONTINUED

| LINE NO. | PLANT COSTS REMOVED FROM MISCELLANEOUS EXPENSE (CSB 1.40) | | | | | |
|---|---|---|---|---|---|---|
| | Maricopa County Environ. Serv. Dept, Approval to Construct Expedited Fees | | | | | |
| | Acct. No | Project Title | Description | Amount | | |
| 1 | 389-Other Plant & Misc E | Boulders WWTP Bypass | Reclaimed Water Line | $ | 500.00 | |
| 2 | 389-Other Plant & Misc E | Boulders Effluent Pump | Addition of pumps | $ | - | Removed $700 |
| 3 | 371-Effluent Pumping Pla | Indian Basket Lift Station | Replace Existing Lift Station | $ | 700.00 | |
| 4 | 389-Other Plant & Misc E | Boulders WWTP Bypass | Add Stucture and Manhole | $ | - | Removed $1,200 |
| 5 | | | Subtotal | $ | 1,200.00 | |
| 6 | 389-Other Plant & Misc E | Safety Equipment | Company Response to CSB 2.13b | $ | 2,184.75 | |
| 7 | | | Total | $ | 3,384.75 | |

| | PLANT COSTS REMOVED FROM MISC. EXP., MATERIALS & SUPPLIES (CSB 7.13) | | | | |
|---|---|---|---|---|---|
| | Acct. No. | Vendor Name | Description | Amount | |
| 8 | 389-Other Plant & Misc E | Arizona Pneumatic Sys | Blower | $ | 1,674.47 |
| 9 | | | Total | $ | 1,674.47 |

Black Mountain Sewer Company
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Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-15

## OPERATING INCOME ADJUSTMENT NO. 2 - AFFILIATE EXPENSES

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Materials and Supplies Expense | $ 30,420 | $ (1,472) | $ 28,948 |
| 2 | Contractual Services - Professional Expense | 171,683 | (9,205) | 162,478 |
| 3 | Contractual Services - Other Expense | 226,595 | (10,361) | 216,234 |
| 4 | Transportation Expense | 4,870 | (127) | 4,743 |
| 5 | Insurance - General Liability Expense | 16,204 | (596) | 15,608 |
| 6 | Miscellaneous Expense | 30,420 | (3,644) | 26,776 |
| 7 | Total | **$ 480,192** | **$ (25,406)** | **$ 454,786** |

| | Description | Affiliate Phone Charges Summary | | |
|---|---|---|---|---|
| 8 | Miscellaneous Expense, AT&T Long Distance | $ 2,186 | $ - | $ 2,186 |
| 9 | Misc Exp, Long Distance - Direct Charge to Gold Ca | 161 | (161) | - |
| 10 | Miscellaneous Exp, AT&T Long Distance - Direct Charged to Texa | | (514) | (514) |
| 11 | Misc Exp, Long Distance - Allocation to 3 Affiliated ( | - | (1,254) | (1,254) |
| 12 | **Total** | **$ 2,346** | **$ (1,928)** | **$ 418** |

| | Description | Affiliate Paging Charges Summary | | |
|---|---|---|---|---|
| 13 | Miscellaneous Expense, Teletouch Paging | $ 2,651 | $ - | $ 2,651 |
| 14 | Misc Exp, Paging Services - Direct Charge to Texas | - | (1,716) | (1,716) |
| 15 | **Total** | **$ 2,651** | **$ (1,716)** | **$ 935** |

| | | Profit Included In Affiliate Billings | | |
|---|---|---|---|---|
| 16 | Materials and Supplies | $ 22,639 | 6.50% | $ 1,472 |
| 17 | Contractual Services - Professional | 141,623 | 6.50% | $ 9,205 |
| 18 | Contractual Services - Other | 159,402 | 6.50% | $ 10,361 |
| 19 | Transportation Expense | 1,952 | 6.50% | $ 127 |
| 20 | Insurance - General Liability | 9,173 | 6.50% | $ 596 |
| 21 | | **$ 334,789** | | **$ 21,761** |

References:

Column A: Company Data Request Response CSB 1.40
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-16

## OPERATING INCOME ADJUSTMENT NO. 3 - BAD DEBT EXPENSE

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Bad Debt Expense - Direct Testimony | $ 5,926 | $ (5,926) | $ - |
| 2 | To Accept Company's Rebuttal Adjustment | | 1,693 | 1,693 |
| 3 | Bad Debt Expense - Surrebuttal Testimony | $ 5,926 | $ (4,233) | $ 1,693 |

References:

Column A: Company Data Request Response CSB 1.30 & 5.9
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Black Mountain Sewer Company
Docket No. WS-01025A-03-0350
Test Year Ended December 31, 2002

Late Filed Surrebuttal Schedule CSB-17

## OPERATING INCOME ADJUSTMENT NO. 4 - DEPRECIATION EXPENSE ON TEST YEAR PLANT

| LINE NO. | DESCRIPTION | [A] PLANT In SERVICE Per Staff | [B] NonDepreciable or Retired PLANT | [C] Post Test Year Plant | [D] DEPRECIABLE PLANT (Col A - Col B + Col C) | [D] DEPRECIATION RATE | [E] DEPRECIATION EXPENSE (Col C x Col D) |
|---|---|---|---|---|---|---|---|
| 1 | 351 - Organization | $ - | $ - | $ - | $ - | 0.00% | $ - |
| 2 | 352 - Franchises | $ - | $ - | $ - | $ - | 0.00% | $ - |
| 3 | 353 - Land and Land Rights | $ 461,300 | $ 461,300 | $ - | $ (0) | 0.00% | $ - |
| 4 | 354 - Structures and Improvements | $ 1,239,905 | $ - | $ - | $ 1,239,905 | 3.33% | $ 41,289 |
| 5 | 355 - Power Generation Equipment | $ - | $ - | $ - | $ - | 5.00% | $ - |
| 6 | 360 - Collection Services - Force | $ 228,580 | $ - | $ - | $ 228,580 | 2.00% | $ 4,572 |
| 7 | 361 - Collection Services - Gravity | $ 3,614,545 | $ - | $ - | $ 3,614,545 | 2.00% | $ 72,291 |
| 8 | 362 - Special Collecting Structures | $ - | $ - | $ - | $ - | 2.00% | $ - |
| 9 | 363 - Services to Customers | $ 157,218 | $ - | $ - | $ 157,218 | 2.00% | $ 3,144 |
| 10 | 364 - Flow Measuring Devices | $ 39,829 | $ - | $ - | $ 39,829 | 10.00% | $ 3,983 |
| 11 | 365 - Flow Measuring Installations | $ 156,205 | $ - | $ - | $ 156,205 | 10.00% | $ 15,620 |
| 12 | 370 - Receiving Wells | $ 696,137 | $ - | $ - | $ 696,137 | 3.33% | $ 23,181 |
| 13 | 371 - Effluent Pumping Equipment | $ 453,558 | $ - | $ - | $ 453,558 | 12.50% | $ 56,695 |
| 14 | 380 - Treatment and Disposal Equipment | $ - | $ - | $ - | $ - | 5.00% | $ - |
| 15 | 381 - Plant Sewers | $ 123,289 | $ - | $ - | $ 123,289 | 5.00% | $ 6,164 |
| 16 | 382 - Outfall Sewer Lines | $ - | $ - | $ - | $ - | 3.33% | $ - |
| 17 | 389 - Other Plant and Miscellaneous Equip | $ 719,139 | $ - | $ 85,699 | $ 804,838 | 6.67% | $ 53,683 |
| 18 | 390 - Office Furniture and Equipment | $ 220,360 | $ - | $ - | $ 220,360 | 6.67% | $ 14,698 |
| 19 | 391 - Transportation Equipment | $ 87,811 | $ - | $ - | $ 87,811 | 20.00% | $ 17,562 |
| 20 | 393 - Tools, Shop and Garage Equipment | $ - | $ - | $ - | $ - | 5.00% | $ - |
| 21 | 394 - Laboratory Equipment | $ - | $ - | $ - | $ - | 10.00% | $ - |
| 22 | 395 - Power Operated Equipment | $ - | $ - | $ - | $ - | 5.00% | $ - |
| 23 | 398 - Other Tangible Equipment | $ 7,279 | $ - | $ - | $ 7,279 | 10.00% | $ 728 |
| 24 | Total Plant | $ 8,205,154 | $ 461,300 | $ 85,699 | $ 7,829,553 | | $ 272,322 |

| | | |
|---|---|---|
| 25 | Composite Depreciation Rate (Depr Exp / Depreciable Plant): | 3.48% |
| 26 | CIAC: | $ 5,540,903 |
| 27 | Amortization of CIAC (Line 25 x Line 26): | $ 192,719 |
| 28 | Depreciation Expense Before Amortization of CIAC: | $ 272,322 |
| 29 | Less Amortization of CIAC: | $ 192,719 |
| 30 | Test Year Depreciation Expense - Staff: | $ 79,602 |
| 31 | Depreciation Expense - Company: | $ 126,749 |
| 32 | **Staff's Total Adjustment:** | **$ (47,147)** |

References:
Column [A]: Schedule CSB-4
Column [B]: Staff Workpapers
Column [C]: Column [A] - Column [B]
Column [D]: Engineering Staff Report
Column [E]: Column [C] x Column [D]

Black Mountain Sewer Company
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Late Filed Surrebuttal Schedule CSB-18

## OPERATING INCOME ADJUSTMENT NO. 5 - NONRECURRING & OTHER

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Transportation Expense | $ 4,870 | $ (2,200) | $ 2,670 |
| 2 | Contractual Services, Professional | $ 171,683 | $ (3,228) | $ 168,455 |
| | | $ 176,553 | $ (5,428) | $ 171,125 |

References:

Column A: Company Data Request Response CSB 5.8 and 9.2
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-19

## OPERATING INCOME ADJUSTMENT NO. 6 - OPERATING LEASE

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | **Treatment Capacity Costs Per Dec. 59944** | $ 1,260,000 | $ - | $ 1,260,000 |
| 2 | Less Amount Funded by CIAC | $ (300,000) | $ - | $ (300,000) |
| 3 | Net Amount Funded by Debt | $ 960,000 | $ - | $ 960,000 |
| 4 | 2006 Principle | $ 38,448 | $ - | $ 38,448 |
| 5 | Income Tax Factor | 1.4805 | (0.4805) | 1.0000 |
| 6 | 2006 Principle Plus Taxes | $ 56,922 | $ (18,474) | $ 38,448 |
| 7 | Add: 2006 Interest | $ 67,952 | $ - | $ 67,952 |
| 8 | **Annual "Lease" Expense** | **$ 124,874** | **$ (18,474)** | **$ 106,400** |
| 9 | **Treatment Capacity Costs Per Dec. 60240** | $ 653,706 | $ - | $ 653,706 |
| 10 | Less Amount Funded by CIAC | $ (153,706) | $ - | $ (153,706) |
| 11 | Net Amount Funded by Debt | $ 500,000 | $ - | $ 500,000 |
| 12 | 2006 Principle | $ 19,411 | $ - | $ 19,411 |
| 13 | Income Tax Factor | 1.4805 | (0.4805) | 1.0000 |
| 14 | 2006 Principle Plus Taxes | $ 28,738 | $ (9,327) | $ 19,411 |
| 15 | Add: 2006 Interest | $ 36,010 | $ - | $ 36,010 |
| 16 | **Annual "Lease" Expense** | **$ 64,748** | **$ (9,327)** | **$ 55,421** |
| 17 | **Total Annual "Lease" Expense** | **$ 189,622** | **$ (27,801)** | **$ 161,821** |

References:

Column A: Company Schedule C-2, Page 4
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Black Mountain Sewer Company
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Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-20

## OPERATING INCOME ADJUSTMENT NO. 7 - FOOD AND BEVERAGES

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Contractual Services, Other | $ 226,595 | $ (478) | $ 226,117 |
| 2 | Material and Supplies Expense | 77,401 | (186) | 77,215 |
| 3 | **Total** | **$ 303,996** | **$ (664)** | **$ 303,332** |

References:

Column A: Company Schedule C-1
Column B: Testimony, CSB, Company Data Request Responses CSB 1.43 and 7.15
Column C: Column [A] + Column [B]

1

References:

Column A: Company Data Request Response CSB 1-3 and 2-9
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-21

## OPERATING INCOME ADJUSTMENT NO. 8 - PROPERTY TAX EXPENSE

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENT | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | 2004 Staff Adjusted Test Year Revenues | | | $ 1,205,452 |
| 2 | Weight Factor | | | $ 2 |
| 3 | Subtotal (Line 1 x Line 2) | | | $ 2,410,904 |
| 4 | Staff Recommended Revenue | | | $ 1,377,751 |
| 5 | Subtotal (Line 4 + Line 5) | | | $ 3,788,655 |
| 6 | Number of Years | | | $ 3 |
| 7 | Three Year Average (Line 5 / Line 6) | | | $ 1,262,885 |
| 8 | Department of Revenue Multiplier | | | 2 |
| 9 | Revenue Base Value (Line 7 x Line 8) | | | $ 2,525,770 |
| 10 | Plus: 10% of 2004 CWIP | | | $ - |
| 11 | Less: Net Book Value of Licensed Vehicles | | | $ 7,279 |
| 12 | Full Cash Value (Line 9 + Line 10 - Line 11) | | | $ 2,518,491 |
| 13 | Assessment Ratio | | | 0.24 |
| 14 | Assessed Value (Line 12 x Line 13) | | | $ 604,438 |
| 15 | Composite Property Tax Rate | | | 0.07573 |
| 16 | **Staff Proposed Property Tax Expense (Line 14 x Line 15)** | **$ 45,745** | **$ 26** | **$ 45,771** |

References:
Column A: Company Schedule C-1, Page 2
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-22

**OPERATING INCOME ADJUSTMENT NO. 9 - TEST YEAR INCOME TAXES**

| LINE NO. | DESCRIPTION | (A) | (B) |
|---|---|---|---|
| | *Calculation of Income Tax:* | Test Year | |
| 1 | Revenue (Schedule CSB-9, Line 9) | $ 1,205,452 | |
| 2 | Less: Operating Expenses - Excluding Income Taxes & Lease Expense | $ 937,606 | |
| 3 | Less: Synchronized Interest (L17) | $ 54,160 | |
| 4 | Arizona Taxable Income (L1- L2 - L3) | $ 213,685 | |
| 5 | Arizona State Income Tax Rate | 6.968% | |
| 6 | Arizona Income Tax (L4 x L5) | | $ 14,890 |
| 7 | Federal Taxable Income (L4 - L6) | $ 198,796 | |
| 8 | Federal Tax on First Income Bracket ($1 - $50,000) @ 15% | $ 7,500 | |
| 9 | Federal Tax on Second Income Bracket ($51,001 - $75,000) @ 25% | $ 6,250 | |
| 10 | Federal Tax on Third Income Bracket ($75,001 - $100,000) @ 34% | $ 8,500 | |
| 11 | Federal Tax on Fourth Income Bracket ($100,001 - $335,000) @ 39% | $ 38,530 | |
| 12 | Federal Tax on Fifth Income Bracket ($335,001 - $10,000,000) @ 34% | $ - | |
| 13 | Total Federal Income Tax | | $ 60,780 |
| 14 | Combined Federal and State Income Tax (L6 + L13) | | $ 75,670 |
| | *Calculation of Interest Synchronization:* | | |
| 15 | Rate Base (Schedule CSB-13, Col. (C), Line 16) | $ 1,347,272 | |
| 16 | Weighted Average Cost of Debt | 4.02% | |
| 17 | Synchronized Interest (L16 x L17) | $ 54,160 | |
| 18 | Income Tax - Per Staff | $ 75,670 | |
| 19 | Income Tax - Per Company | $ (6,544) | |
| 20 | **Staff Adjustment** | **$ 82,214** | |

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-23

## OPERATING INCOME ADJUSTMENT NO. 10 - ACC ASSESSMENT

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | ACC Assessment | $ 2,288 | $ (2,288) | $ - |

References:

Column A: Company Data Request Response CSB 1.30
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-24

## OPERATING INCOME ADJUSTMENT NO. 11 - RATE CASE EXPENSE

| LINE NO. | DESCRIPTION | [A] COMPANY AS FILED | [B] STAFF ADJUSTMENTS | [C] STAFF AS ADJUSTED |
|---|---|---|---|---|
| 1 | Additional Rate Case Expense | $ 30,000 | $ (25,200) | $ 4,800 |
| 2 | Number of Years Amortized | 4 | 4 | 4 |
| 3 | Additional Annual Rate Case Expense (L1 / L4) | $ 7,500 | $ (6,300) | $ 1,200 |

References:

Column A: Company Data Request Rebuttal Testimony
Column B: Testimony, CSB
Column C: Column [A] + Column [B]

Black Mountain Sewer Company
Docket No. SW-02361A-05-0657
Test Year Ended December 31, 2004

Late Filed Surrebuttal Schedule CSB-25

## RATE DESIGN

| | Direct Present Rates | Direct Company Proposed | Surrebuttal Staff Recommended |
|---|---|---|---|
| **Residential Service-Per Month** | $38.00 | $ 43.19 | $43.08 |
| **Commercial, Regular (c)** | $ 0.15236 | $ 0.01732 | $ 0.17274 |

| **Commercial - Special Rate** | Present Rates | | | Company Proposed | | | Staff Recommended | | |
|---|---|---|---|---|---|---|---|---|---|
| Name of Business | Gallons Per Day | Rate Per Gallon | Monthly Charge | Gallons Per Day | Rate Per Gallon | Monthly Charge | Gallons Per Day | Rate Per Gallon | Monthly Charge |
| BH Enterprises-West | 2,525 | $0.11685 | $295.05 | 2,525 | $0.13280 | $335.32 | 2,525 | $0.13248 | $334.51 |
| BH Enterprises-East | 1,400 | $0.11685 | $163.59 | 1,400 | $0.13280 | $185.92 | 1,400 | $0.13248 | $185.47 |
| Barb's Pet Grooming | 250 | $0.11685 | $29.21 | 250 | $0.13280 | $33.20 | 250 | $0.13248 | $33.12 |
| Boulder's Resort | 29,345 | $0.11843 | $3,475.33 | 29,345 | $0.13459 | $3,949.54 | 29,345 | $0.13427 | $3,940.19 |
| Carefree Dental | 1,625 | $0.11685 | $189.88 | 1,625 | $0.13280 | $215.80 | 1,625 | $0.13248 | $215.28 |
| Ridgecrest Realty | 450 | $0.11818 | $53.18 | 450 | $0.13431 | $60.44 | 450 | $0.13399 | $60.29 |
| Desert Forest | 7,000 | $0.13609 | $952.63 | 7,000 | $0.15467 | $1,082.69 | 7,000 | $0.15429 | $1,080.05 |
| Desert Hills Pharmacy | 800 | $0.14206 | $113.65 | 800 | $0.16145 | $129.16 | 800 | $0.16106 | $128.85 |
| El Pedregal | 15,787 | $0.11685 | $1,844.71 | 15,787 | $0.13280 | $2,096.51 | 15,787 | $0.13248 | $2,091.46 |
| Lemon Tree | 300 | $0.11400 | $43.20 | 300 | $0.12956 | $43.20 | 300 | $0.12925 | $43.20 |
| Body Shop | 1,000 | $0.14544 | $145.44 | 1,000 | $0.16529 | $165.29 | 1,000 | $0.16489 | $164.89 |
| Spanish Village | 4,985 | $0.11685 | $582.50 | 4,985 | $0.13280 | $662.01 | 4,985 | $0.13248 | $660.41 |
| Boulder's Club | 1,200 | $0.11685 | $140.22 | 1,200 | $0.13280 | $159.36 | 1,200 | $0.13248 | $158.98 |
| Anthony Vuitaggio | 300 | $0.12987 | $38.96 | 300 | $0.14760 | $44.28 | 300 | $0.14724 | $44.17 |

**Effluent Sales**
*Per thousand gallons* $0.374400

| **Service Charges:** | Present Rates | Company Proposed | Staff Recommended |
|---|---|---|---|
| Establishment | $ 25.00 | $ 25.00 | $ 25.00 |
| Re-establishment | $ 25.00 | $ 25.00 | $ 25.00 |
| Re-connection | No Charge | No Charge | No Charge |
| Minimum Deposit (Residential) | (a) | (a) | (a) |
| Minimum Deposit (Non-Residential) | (a) | (a) | (a) |
| Deposit Interest | N/A | N/A | (a) |
| NSF Check Charge | $ 10.00 | $ 10.00 | $ 10.00 |
| Deferred Paymnt Finance Charge | 1.50% | 1.50% | 1.50% |
| Late Charge | 1.50% | 1.50% | 1.50% |
| Main Extension Tariff **(b)** | Cost | Cost | Cost |
| Hook-Up Fee for New Service **(c)** | $ 6.47 | $ 6.47 | Discontinue |

**(a)** Per A.A.C. R14-2-603B: Residential - two times average bill, Non-residential - two and one-half times average bill
**(b)** Per A.A.C. R14-2-406B
**(c)** Per Gallon per Day. Wastewater flows are based on Engineering Bulletin 12, Table 1.
N/A Not included in current or proposed tariff.

# BLACK MOUNTAIN SEWER

FENNEMORE CRAIG, P.C.
Jay L. Shapiro
Patrick J. Black
3003 N. Central Ave.
Suite 2600
Phoenix, Arizona 85012
Attorneys for Black Mountain Sewer Company

**BEFORE THE ARIZONA CORPORATION COMMISSION**

| | |
|---|---|
| IN THE MATTER OF THE APPLICATION OF BLACK MOUNTAIN SEWER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASES IN ITS RATES AND CHARGES FOR UTILITY SERVICE BASED THEREON. | DOCKET NO: SW-02361A-05-_____ |

**DIRECT TESTIMONY OF**

**THOMAS J. BOURASSA**

EXHIBIT
A-1
admitted

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## 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. WHAT IS YOUR PROFESSION AND BACKGROUND?**

A. I am a Certified Public Accountant and am self-employed, providing consulting services to utility companies as well as general accounting services. I have a B.S. in Chemistry and Accounting from Northern Arizona University (1980) and an M.B.A. with an emphasis in Finance from the University of Phoenix (1991).

**Q. COULD YOU BRIEFLY SUMMARIZE YOUR PRIOR WORK AND REGULATORY EXPERIENCE?**

A. Yes. Prior to becoming a private consultant, I was employed by High-Tech Institute, Inc., and served as controller and chief financial officer. Prior to working for High-Tech Institute, I worked as a division controller for the Apollo Group, Inc. Before joining the Apollo Group, I was employed at Kozoman & Kermode, CPAs. In that position, I prepared compilations and other write-up work for water and wastewater utilities, as well as tax returns.

In my consulting practice, I have prepared and/or assisted in the preparation of various water and wastewater utility rate applications before the Arizona Corporation Commission ("Commission"), including Vail Water Company, E&T Water Company, Ponderosa Utility Company, Diablo Village Water Company, New River Utility Company, Far West Water & Sewer, Sedona Venture Water and Sewer, Bella Vista Water Company, Rio Verde Utilities, Gold Canyon Sewer Company, Green Valley Water Company, Beardsley Water Company, Livco Water and Sewer Company, Pine Water Company, Arizona-American Water Company, Chaparral City Water Company, Valley Utilities Water Company, and

Community Water of Green Valley.

**Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

A. I am testifying in this proceeding on behalf of the applicant, Black Mountain Sewer Company ("BMSC" or "the Company"). BMSC is seeking increases in its rates and charges for water utility service in its certificated service area, which is located in portions of Scottsdale and Carefree, in Maricopa County, Arizona. BMSC was previously named Boulders Carefree Sewer Corporation.

## II. OVERVIEW OF THE COMPANY'S REQUEST FOR RATE RELIEF.

**Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY?**

A. I will testify in support of the Company's proposed adjustments to its rates and charges for sewer utility service. I am sponsoring Schedules A through H, which are filed concurrently herewith in support of the Company's application. I was responsible for the preparation of these schedules based on my investigation and review of the relevant books and records for the Company. The Company has not prepared a cost of service study, so the G Schedules are omitted.

**Q. PLEASE SUMMARIZE THE COMPANY'S APPLICATION.**

A. The test year used by BMSC is the 12-month period ending December 31, 2004. The Company is requesting an 11.0 percent return on its fair value rate base ("FVRB"). The Company has also proposed certain pro forma adjustments to take into account known and measurable changes to rate base, expenses and revenues. These pro forma adjustments are consistent with normal ratemaking and are contemplated by the Commission's rules and regulations governing rate applications. *See* R14-2-103. These adjustments are necessary to obtain a normal or realistic relationship between revenues, expenses and rate base on a going-forward basis.

The Company's fair value rate base is $887,449. The increase in revenues

to provide for recovery of operating expenses and a 11.0 percent return on rate base is approximately $163,279, an increase of approximately 13.52 percent over the adjusted and annualized test year revenues.

**Q. WHY IS THE COMPANY FILING FOR RATE INCREASES AT THIS TIME?**

A. The Company's last rate increase was approved on December 26, 1996 (Decision No. 59944) using a test year ending June 30, 1994. In 2000, the Company, formerly known as Boulders Carefree Sewer Company, was acquired by Algonquin Water Resources of America ("Algonquin"). Algonquin is cognizant of the need to avoid long delays between rate filings and believes enough time has passed since the last rate case. It has been nearly 10 years since the Company's prior rate case, and since that case, the Company has made investments in plant, acquired additional wastewater treatment capacity from the City of Scottsdale, and various operating expenses have increased. The Company's current rate of return, based on the adjusted test year data, is a negative 1.6 percent. Consequently, rate increases are necessary to ensure that the Company has an opportunity to earn a reasonable return on the fair value of its utility plant and property devoted to public service.

## III. SUMMARY OF A, E AND F SCHEDULES.

**Q. MR. BOURASSA, LET'S TURN TO THE COMPANY'S SCHEDULES. PLEASE DESCRIBE THE SCHEDULES LABELED AS A, E, AND F.**

A. The A-1 Schedule is a summary of the rate base, operating income, current operating margin, required operating margin, operating income deficiency, and the increase in gross revenue. A 11.0 percent return on FVRB is requested. The increase in the revenue requirement is $163,279. Revenues at present and proposed and customer classifications are also shown on this schedule.

The A-2 Schedule is a summary of results of operations for the test year, prior years, and a projected year at present rates and proposed rates.

Schedule A-3 contains the Company's capital structure for the test year and the two prior years.

Schedule A-4 contains the plant construction, and plant in service for the test year and prior years. The projected plant additions are also shown on this schedule.

Schedule A-5 is the summary of the Company's changes in financial position (cash flow) for the prior two years, the test year at present rates, and a projected year at present and proposed rates.

The E Schedules are based on the Company's actual operating results, as reported by the Company in annual reports filed with the Commission. The E-1 Schedule contains the comparative balance sheet data the years 2002, 2003, and 2004.

Schedule E-2, page 1, contains the income statement for the years 2002, 2003, and 2004.

Schedule E-3 contains the statements of changes in the Company's financial position for the test year and the two prior years.

Schedule E-4 provides the changes in membership equity.

Schedule E-5 contains the Company's plant in service at the end of the test year, and one year prior to the end of the test year.

Schedule E-7 contains operating statistics for the years ended December 31, 2002, December 31, 2003, and December 31, 2004.

Schedule E-8 contains the taxes charged to operations.

The accountant's notes to the financial statements and the financial assumptions used in preparing the rate filing schedules are shown on Schedules E-

9 and F-4, respectively, in accordance with the Commission's standard filing requirements. The Company does not prepare audited financial statements.

Schedule F-1 contains the results of operations at the present rates (actual and adjusted), and at proposed rates.

Schedule F-2 contains the summary of changes in financial position (cash flow) for the prior two years, the test year at present rates, and a projected year at present and proposed rates.

Schedule F-4 shows the Company's projected construction requirements for 2005, 2006, and 2007.

Schedule F-4 contains the assumptions used in developing the adjustments and projections contained in the rate filing.

## IV. RATE BASE (B SCHEDULES).

**Q. WOULD YOU EXPLAIN THE RATE BASE SCHEDULES, WHICH ARE LABELED AS THE B SCHEDULES?**

A. Yes. I will start with Schedule B-5, which is the working capital allowance. Because BMSC is a small sewer utility, I used the "formula method" of computing the working capital allowance to reduce costs. The result is $130,508.

**Q. PLEASE CONTINUE.**

A. The Company did not file Schedules B-3 and B-4. To reduce costs, the Company is requesting that its original cost rate base ("OCRB") be used as its FVRB.

**Q. HAVE YOU PREPARED SCHEDULES SHOWING ADJUSTMENTS TO THE ORIGINAL COST RATE BASE?**

A. Yes. Schedule B-2 shows adjustments to the OCRB cost rate base proposed by the Company. Schedules B-2, pages 2 through 4, are the supporting schedules. These adjustments are, in summary:

Adjustment number 1 increases plant for revenue neutral post-test year

plant. Post-test year plant in the amount of $94,297 consists primarily of upgrades and improvements to the system. Specific plant additions are identified in direct testimony of Mr. Weber.

Adjustment number 2 increases accumulated depreciation to the re-computed amounts per the Company's plant schedules.

**Q. DO THE PLANT AND ACCUMULATED DEPRECIATION SHOWN ON B-2 REFLECT THE LAST COMMISSION RATE ORDER?**

A. Yes. The plant shown on Schedule B-2 started with the Commission-determined plant from the last rate case. Plant additions and retirements since the test year in that case have been added to and deducted from total plant shown on Schedule B-2. Pages 2a through 2q of the schedule, show the details for the accumulated depreciation through the end of the test year using half-year convention for depreciation.

**Q. PLEASE CONTINUE.**

A. Adjustment number 3, labeled as 3a and 3b, adjust contributions in aid of construction ("CIAC") for the amounts associated with the acquisition of wastewater treatment capacity from Scottsdale. The Scottsdale treatment capacity has been excluded from rate base in conformance with Decision No. 59944. Because the Company's right to use wastewater treatment capacity acquired from Scottsdale is excluded from rate base, any associated CIAC must also be excluded to prevent a mismatch between the Company's rate base and its regulatory capital structure and balance sheet. I will discuss this further later in my testimony.

**Q. HOW WAS THE PROPOSED "FAIR VALUE" RATE BASE SHOWN ON A-1 DETERMINED?**

A. As stated, the FVRB shown on Schedule A-1 is based on OCRB, with no adjustment for the current values of the Company's plant and property.

V. <u>INCOME STATEMENT (C SCHEDULES).</u>

**Q. PLEASE EXPLAIN THE ADJUSTMENTS YOU ARE PROPOSING TO THE INCOME STATEMENT AS SHOWN ON SCHEDULES C-1 AND C-2.**

A. The following is a summary of adjustments shown on Schedule C-1:

Adjustment 1 annualizes depreciation expense. The proposed depreciation rate for each component of utility plant is shown on Schedule C-2, page 2. The depreciation rates approved in the Company's prior rate case was 5.0 percent for all plant. The Company requests authority to use individual rates by plant account to more accurately reflect individual plant lives. The Commission has been moving away from the use of composite depreciation rates in favor of individual rates. Uniform rates are not always appropriate because they do not reflect a realistic expected life of the plant. The Company's proposed depreciation rates are published by the ACC Staff and are considered typical and customary.

Adjustment 2 increases the property taxes based on proposed revenues. The Company has recognized the recently passed Arizona legislation (H.B. 2779) now codified in A.R.S. § 42-15001, entitled "Assessed Valuation of Class One Property"). The law reduces the assessment ratio ½ percent (0.5%) for the next 10 years starting in 2006. The Company has proposed a two-year reduction in the assessment ratio or a reduction from 25 percent to 24 percent.

**Q. HOW DID YOU COMPUTE THE PROPERTY TAXES AT PROPOSED RATES?**

A. To determine full cash value, I used the method employed by the Arizona Department of Revenue - Centrally Valued Properties ("ADOR" or "the Department"). This method determines full cash value by using twice the average of three years of revenue, plus an addition for CWIP and a deduction for the book value of transportation equipment. In the instant case, I used two times the

adjusted revenues for 2004, and revenues at proposed rates. The assessed value (24 percent of full cash value) was then multiplied by the property tax rate to determined adjusted property tax expense.

**Q. IS THIS CONSISTENT WITH PRIOR COMMISSION DECISIONS?**

A. Yes. *E.g.*, *Rio Rico Utilities*, Decision No. 67279 at 8; *Arizona Water Company*, Decision No. 64282 at 12-13; *Bella Vista Water Company*, Decision No. 65350 at 16; *Arizona-American Water Company*, Decision No. 67093 at 9-10.

**Q. IS THIS SYNCHRONIZATION OF PROPERTY TAX EXPENSE WITH REVENUES PROPER RATE MAKING?**

A. Yes. Like income taxes, property taxes must be adjusted to ensure that the new rates are sufficient to produce the authorized return on rate base. For this reason, the Commission has repeatedly approved the use of proposed revenues to determine an appropriate level of property tax expense to be recovered through rates.

To eliminate issues, I used the methodology approved by the Commission in recent Arizona-American Water Company's recent rate case, Decision No. 67093 (June 30, 2004), where two years of adjusted test year revenues and one year of proposed revenues were used to determine full cash value. In that decision, the Commission concluded: "Staff calculated property taxes using its proposed adjusted test year revenues twice and its recommended revenues once to calculate a three year average of revenues. We agree with Staff that using only historical revenues to calculate property taxes to include in the cost of service fails to capture the effects of future revenue from new rates, and can result in an understatement or overstatement of property tax expense." Decision No. 67093 at 9-10.

**Q. MR. BOURASSA, ISN'T THERE A LAG FROM THE TIME NEW RATES CHARGED CUSTOMERS GO INTO EFFECT AND THE DATE ON**

**WHICH PROPERTY TAXES ARE ACTUALLY PAID?**

A. Yes. As an example, if new rates for the Company went into effect on January 1, 2006, property taxes based on these new rates would first appear on the property tax bill received in September 2007. However, the Company should be accruing property taxes to match the revenues collected. Thus, there is no mismatch between revenues and expenses. Moreover, the property taxes resulting from my calculation are based on only a portion of proposed revenues. To properly consider the future impact of the rate increases, I should have computed the proposed property taxes based solely on proposed revenues rather than averaging proposed and historic revenues. Consequently, this adjustment is conservative.

**Q. PLEASE CONTINUE WITH YOUR DESCRIPTION OF THE INCOME STATEMENT ADJUSTMENTS.**

A. Adjustment number 3 adjusts operating expenses for "lease" costs associated with the Scottsdale treatment capacity. These costs reflect the annual debt service on the long-term debt the Company incurred to finance the acquisition of wastewater treatment capacity from Scottsdale.

**Q. WHAT AMOUNT OF LONG-TERM DEBT IS FINANCING THE SCOTTSDALE TREATMENT CAPACITY?**

A. The Commission granted approval of long-term debt in the amount $960,000 in Decision No. 59944 (December 26, 1996) to acquire wastewater treatment capacity from Scottsdale. The Company paid a total of $1,260,000 for the right to utilize 210,000 gallons of treatment capacity, of which $960,000 was financed by debt and $300,000 was financed by CIAC. Another $500,000 of long-term debt was approved in Decision No. 60240 (June, 1997). The Company used those funds to acquire an additional 108,951 gallons of treatment capacity from Scottsdale for $653,706, of which $500,000 was financed by long-term debt and

$153,706 was financed by CIAC. Both loans have a 9.4% interest rate and a term of 20 years.

The principle balance of the long-term debt at December 31, 2004 was $1,184,732 (approximately $775,226 for the loan approved in Decision No. 59944 and $409,506 for the loan approved in Decision No. 60240).

**Q. DOES THE ANNUAL "LEASE" EXPENSE INCLUDE A GROSS UP FOR INCOME TAXES?**

A. Yes. This is necessary because the principle portion of the annual debt service is not a deductible expense for income tax purposes.

**Q. PLEASE CONTINUE.**

A. Adjustment 4 shows the rate case expense. The Company estimates rate case expense of $120,000 amortized over four years because it believes a four-year cycle for future rate cases is reasonable given this utility's circumstances.

**Q. DO YOU BELIEVE THIS IS A REASONABLE AMOUNT OF RATE CASE EXPENSE GIVEN THE REQUESTED INCREASE IN REVENUE?**

A. Yes. To begin with, the amount of rate case expense is not directly related to the level of rate case expense. Rate case expense is primarily driven by three factors: (1) the Commission's ratemaking process; (2) the length of time between rate cases; and (3) the number of parties, issues and complexity of the proceedings.

**Q. PLEASE DISCUSS THE FIRST OF THESE FACTORS?**

A. The Company cannot raise its rates except by filing for rate relief and the Commission dictates the process for obtaining rate relief. BMSC, with roughly 1900 customers, has to file the same schedules as a Class A (*i.e.,* APS, Arizona Water, SW Gas) utility with hundreds of thousands of customers. While a larger utility's filing would obviously be "larger", BMSC still faces essentially the same requirement of filing multiple copies of every document and notice requirements

as a larger utility. In addition to the filing and notice requirements imposed by the Commission, the Company must has to prepare three rounds of pre-filed testimony, participate in all of the procedural and evidentiary hearings and open meetings, and file closing briefs. To meet all of the requirements of obtaining rate relief, BMSC requires the assistance and expertise of a regulatory accountant and attorney. These are the primary source of rate case expense.

**Q. PLEASE DISCUSS THE SECOND FACTOR?**

A. The length of time between rate cases has a substantial impact on rate case expense. Every rate case involves reconciliation of plant accounts since the last rate case. Obviously, the longer it has been, the more difficult the reconciliation. Similarly, longer periods between the determination of operating expenses typically means more increases in expenses. This leads to larger increases which are always more controversial.

**Q. BUT MR. BOURASSA, DOESN'T THE UTILITY DECIDE WHEN TO FILE A RATE CASE?**

A. I would say it has a lot more control over the timing of filing for rate relief than it does over the other two factors. However, the Commission often restricts utilities from filing for a period of time, as it did in the Company's last rate case. In addition, in this case, there was an ownership change after the last rate case. The new owner inherited a utility that had been out for a number of years and then needed time to establish its own operating history.

**Q. THANK YOU. PLEASE DISCUSS THE THIRD FACTOR THAT YOU HAVE IDENTIFIED AS DRIVING RATE CASE EXPENSE.**

A. The number of parties has a substantial impact on rate case expense. Cases where RUCO is a party require more effort than cases in which the only adverse party is Staff. Customers and other interveners add to rate case expense and the

complexity of the proceedings. The number and complexity of disputed issues also influences total rate case expense, and those impacts cannot be known until the case proceeds.

**Q. IS THIS THE REASON YOU REFERRED TO THE RATE CASE EXPENSE AS AN ESTIMATE?**

A. Yes, it is an estimate based on my experience. But I can only consider the foreseeable. If things turn out more complicated than anticipated, if there are intervenes for example, the Company will modify its request to account for that increased expense. Conversely, if the case proceeds and rate case expense is lower than expected, we would make an appropriate adjustment downward.

**Q. SHOULDN'T THE COMPANY'S SHAREHOLDERS BEAR SOME OF THE BURDEN OF RATE CASE EXPENSE?**

A. As a practical matter, the utility always does. My estimate of $120,000 assumes BMSC will actually incur a higher amount of total rate case expense. I would also agree that if the utility does something improper, or advances positions in bad-faith, it should shoulder the burden of such actions. But, as I testified, the Commission dictates the process, not the utility and absent such circumstances, the utility must be allowed to recover its reasonably incurred rate case expense.

**Q. PLEASE CONTINUE WITH YOUR DISCUSSION OF THE INCOME STATEMENT ADJUSTMENTS?**

A. Adjustment 4 removes sales taxes from water revenues. A corresponding amount is removed from expense.

Adjustment 5 annualizes revenues to the year-end number of customers. The annualization was based on the number of customers at the end of the test year, compared to the actual number of customers during each month of the test year. Average revenues by month were computed for the test year. The average

revenues were then multiplied by the increase (or decrease) in number of customers for each month of the test year.

Adjustment 6, labeled as 6a, 6b, and 6c, removes other income and expenses to eliminate their effects on income taxes.

Adjustment 7 annualizes purchased wastewater treatment based on the additional gallons treated from annualizing revenues to the year-end number of customers.

Adjustment 8 annualizes chemicals expense based on the additional gallons treated from annualizing revenues to the year-end number of customers.

Adjustment 9 annualizes purchased power expense based on the additional gallons treated from annualizing revenues to the year-end number of customers.

Adjustment 10 increases purchased power reflecting the recent 4.21 percent increase in rates for power from APS (Decision No. 67744 (April 7, 2005).

## VI. COST OF CAPITAL (D SCHEDULES).

### A. Rate Of Return Summary

**Q. WOULD YOU PLEASE SUMMARIZE YOUR RECOMMENDED EQUITY RETURN?**

A. Yes. I am recommending a return on equity of 11.00 percent. My recommendation is based on cost of equity estimates using constant growth and multi-stage growth discounted cash flow ("DCF") models and is confirmed by a risk premium analysis, current and projected equity returns for the sample group of publicly traded utilities, and my review of the economic conditions expected to prevail during the period in which new rates will be in effect. While BMSC has debt, it has been excluded from the cost of capital. Therefore, the overall cost of capital is 11.0 percent.

The cost of equity for BMSC cannot be estimated directly because it is

extremely small and is not publicly traded. Therefore, there is no market data for BMSC. Consequently, I applied the DCF models to a sample of water utilities selected from the *Value Line Investment Survey*. I use water utilities as a proxy for wastewater utilities because there is no market data available for the wastewater industry. There are six water utilities in my sample: American States Water, Aqua America, California Water, Connecticut Water, Middlesex Water, and SJW Corp. I selected these water utilities because Staff has used them in recent water utility rate cases. To test my DCF results, I performed a risk premium analysis based on 10-year Treasury rates. Computations of common equity returns using DCF and risk premium approaches are shown on schedules D-4.9 through D-4.13.

My DCF analysis indicates that a return on equity ("ROE") in the range of 9.1 percent to 12.0 percent is appropriate. My risk premium analysis serves as a check of reasonableness for the DCF results. That analysis indicates a ROE in the range of 10.2 percent to 11.4 percent. A return on equity of 11.0% is within the ranges produced by both types of equity cost estimates, and is conservative when BMSC's extremely small size and other business risks are considered.

**Q. HAVE YOU PREPARED ANY SCHEDULES AND ATTACHMENTS TO ACCOMPANY YOUR TESTIMONY?**

A. Yes. The D-1 Schedule shows the common equity, relevant long-term debt and the weighted cost of capital. The Company has a total of $1,184,732 of long-term debt in its capital structure, which was borrowed to finance the acquisition of wastewater treatment capacity from Scottsdale. There is no other long-term debt.

**Q. WHY HAVE YOU EXLCUDED LONG-TERM DEBT RELATED TO SCOTTSDALE TREATMENT CAPACITY FROM THE COST OF CAPITAL?**

A. As I explained in discussing the Company's income statement adjustments, BMSC

is treating its annual payments on the long-term debt related to BMSC's lease of treatment capacity from Scottsdale as an operating expense, not a capital cost, to be consistent with the Commission's prior rate decision, Decision No. 59944. Under that decision, the Company's debt service (principle and interest) is treated as an expense, and the Company's right to use a portion of Scottsdale's wastewater treatment capacity is not included in rate base. Therefore, the Company's long-term debt is excluded from the D-1 Schedule, and is not used to determine the weighted cost of capital. Otherwise, there would be a significant mismatch between BMSC's capital structure and its rate base.

**Q. DOES THE DEBT HAVE AN IMPACT ON THE COST OF CAPITAL?**

A. Yes. The regulatory treatment approved in Decision No. 59944 does not alter the fact that over 45 percent of BMSC's capital structure consists of long-term debt, which must be repaid. Regardless of how this debt is treated from a regulatory accounting standpoint, the debt cannot be ignored when evaluating the cost of equity. As I will explain later, financial risk is a component of risk and impacts the cost of capital.

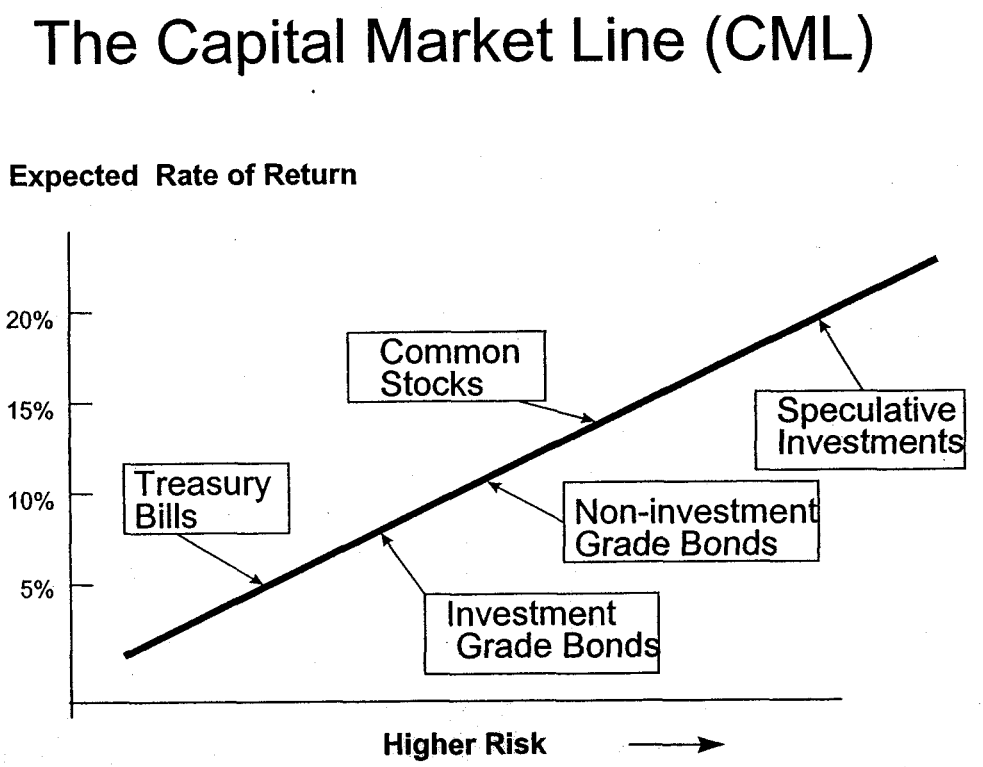
**B. <u>Overview of the Cost of Capital</u>**

**Q. PLEASE PROVIDE AN OVERVIEW OF THE COST OF CAPITAL.**

A. Put simply, the cost of capital is the rate of return that equity investors expect to receive. Investors can choose to invest in many types of assets. Each will have varying degrees of risk, ranging from relatively low risk assets such as Treasury securities to somewhat higher risk corporate bonds to even higher risk common stocks. As the level of risk increases, investors require higher returns on their invested capital.

**Q. CAN YOU ILLUSTRATE THE CAPITAL MARKET RISK-RETURN CONCEPT?**

A. Yes. The following graph depicts the risk-return relationship that has become widely known as the Capital Market Line ("CML"). The CML illustrates in a general way the risk-return relationship.




The CML can be viewed as a continuum of the available investment opportunities for investors. Investment risk increases as one moves upward and to the right along the CML. As the risk of an investment increases, the expected return on the investment also increases.

**Q. HOW DOES THE RISK-RETURN TRADE-OFF CONCEPT WORK IN THE CAPITAL MARKET?**

A. As already suggested by the CML, the allocation of capital in a free market

economy is based upon the relative risk of, and expected return from, an investment. In general, investors rank investment opportunities in the order of their relative risks. Investment alternatives in which the expected return is commensurate with the perceived risk become viable investment options. If all other factors remain equal, the greater the risk, the higher the rate of return investors will require to compensate investors for the possibility of loss of either the principal amount invested or the expected annual income from such investment.

Short-term Treasury bills provide a high degree of certainty and in nominal terms (after considering inflation) are considered virtually risk free. Long-term bonds and preferred stocks, having priority claims to assets and fixed income payments, are relatively low risk, but are not risk free. The market values of long-term bonds often fluctuate when government policies or other factors cause interest rates to change. Common stocks are higher and to the right on the CML continuum because they are exposed to more risk. Common stock risk includes the nature of the underlying business and financial strength of the issuing corporation as well as market-wide factors, such as general changes in capital costs.

The capital markets reflect investor expectations and requirements each day through market prices. Prices for stocks and bonds change to reflect investor expectations and the relative attractiveness of one investment versus another. While the example provided above seems straightforward, returns on common stocks are not directly observable in advance, in contrast to debt or preferred stocks with fixed payment terms, and therefore they must be estimated from market data. Estimating the cost of equity capital is a matter of informed judgment about the relative risk of the company in question and the expected rate of return characteristics of other alternative investments.

**Q. HOW IS THE COST OF CAPITAL FOR A PARTICULAR UTILITY**

**DETERMINED?**

A. The measurement of a utility's cost of capital is a complex topic. It requires an analysis of the factors influencing the cost of various types of capital, such as interest on long-term debt, dividends on preferred stock, and earnings on common equity. Each of these sources of funds has a cost. The unit cost of the various component sources of capital is an important input into the calculation of a utility's overall cost of capital.

The data for such an analysis comes from the capital market where the firm raises funds by issuing common stock, selling bonds, and by borrowing (both long- and short-term) from banks and other financial institutions. In the highly competitive capital markets, the cost of capital, whether the capital is in the form of debt or equity, is determined by two important factors:

1) The pure or real rate of interest, often called the risk-free rate of interest; and

2) The uncertainty or risk premium (the compensation the investor requires over and above the real or pure rate of interest for subjecting his capital to additional risk).

**Q. WOULD YOU DISCUSS THESE FACTORS IN GREATER DETAIL?**

A. The pure rate of interest essentially reflects both the time preference for, and the productivity of, capital. From the standpoint of the individual, it is the rate of interest required to induce the individual to forego present consumption and offer the funds thus saved to others for a specified length of time. Moreover, the pure rate of interest concept is based on the assumption that no uncertainty affects the investment undertaken by the individual, i.e., there is no doubt that the periodic interest payments will be made and the principal returned at the end of the time period. In reality, investments without risk do not exist. Every commitment of funds involves some degree of uncertainty. U.S. Government obligations,

however, may at times approach something like a risk free rate of interest. It must be pointed out, however, that U.S. Treasury obligations are only "risk free" in the sense that they are typically regarded as being free of default risk. Holders of these obligations still face the dangers of purchasing power loss (inflation risk) and the loss of capital values if real interest rates rise (interest rate risk).

Turning to the second factor affecting the cost of capital, it is generally accepted that the higher the degree of uncertainty, the higher the cost of capital. Investors are regarded as risk adverse and require that the rate of return increase as the risks (uncertainty) associated with an investment increase.

**Q. CAN YOU PROVIDE SOME PERSPECTIVE ON YOUR PREVIOUS DISCUSSION WITH RESPECT TO RETURNS ON COMMON STOCKS?**

A. Yes. Conceptually,

| Required Return for Common Stocks | = | Return on a risk-free asset | + | Risk Premuin |
|---|---|---|---|---|

where the risk premium investors require for common stocks will be higher than the risk premium they require for investment grade bonds. This relationship is depicted in the graph of the CML, above. As I will discuss in the next section, this concept is the basis of risk premium methods I used to estimate the cost of equity.

**Q. WHAT HAS BEEN THE RECENT EXPERIENCE IN THE U.S. CAPITAL MARKETS?**

A. In the past 10 years, inflation and capital market costs have generally declined. Interest rates have been lower than in previous decades. Inflation, as measured by the Consumer Price Index, has been at relatively low levels. The uneven pace of the economy kept consumer prices in check and resulted in low interest rates. Since the first quarter 2004, however, improving economic growth and concerns about inflation have led to fluctuating interest rates. The Federal Reserve began

raising interest rates in June 2004 to address these concerns.

The economic forecast data show clear expectations for continuing economic growth. Projected real GDP growth for 2005 and 2006 is 3.7 percent and 3.4 percent, respectively. Consistent with these economic projections, the unemployment rate is expected to be below 5.3 percent for 2005 and 2006, and interest rates are expected to increase. The Federal Reserve, confronted with above-trend growth, is expected to continue to raise the federal funds rate to 3.75 percent by the end of 2005. The 10-year Treasury bond is projected to increase from its current level of about 4.2 percent to 4.6 percent by the end of 2005. Further increases are projected for 2006 and 2007.

**Q. IS BMSC AFFECTED BY THESE SAME MARKET UNCERTAINTIES AND CONCERNS?**

A. Yes. To varying degrees, all the water utilities in the sample are affected.

**Q. IS THERE A RELATIONSHIP BETWEEN THE COST OF EQUITY AND INTEREST RATES?**

A. Yes. The cost of equity moves in the same direction as interest rates. Rising interest rates indicate the cost of equity is also rising. The upward trend in interest rates discussed above is an important factor in estimating the cost of capital.

**Q. WOULD YOU PLEASE DISCUSS IN MORE DETAIL THE IMPACT OF RISK ON CAPITAL COSTS?**

A. Certainly. With reference to specific utilities, risk is often discussed as consisting of two separate types of risk: business risk and financial risk.

Business risk, the basic risk associated with any business undertaking, is the uncertainty associated with the enterprise's day-to-day operations. In essence, it is a function of the normal day-to-day business environment, both locally and nationally. Business risks include the condition of the economy and capital

markets, the state of labor markets, regional stability, government regulation, technological obsolescence, and other similar factors that may impact demand for the business product and its cost of production. For example, one of the biggest risks BMSC faces is the ever-changing regulatory climate. Wastewater utilities are subject to strict regulation because of the health and risks associated with their operations. The environmental rules frequently change, usually resulting in additional requirements and increased costs.

The greater the degree of uncertainty regarding the various factors affecting a company's business, the greater the risk of an investment in the company and the greater the compensation required by the investor.

Financial risk, on the other hand, concerns the distribution of business risk to the various capital investors in the utility. As discussed earlier, permanent capital is normally divided into three categories: long-term debt, preferred stock, and common equity. Because common equity owners have only a residual claim on earnings after debt and preferred stockholders are paid, financial risk tends to be concentrated in that element of the firm's capital. Thus, a decision by management to raise additional capital by issuing additional debt concentrates even more of the financial risk of the utility in the common equity owners.

Although often discussed separately, the two types of risks are interrelated. Specifically, a common equity investor may seek to offset exposure to high financial risk by investing in a firm perceived to have a low degree of business risk. In other words, the total risk to an investor would be high if the enterprise was characterized as a high business risk with a large portion of its permanent capital financed with senior debt. To attract capital under these circumstances, the firm would have to offer higher rates of return to its common equity investors.

**Q. IS THERE A RELATIONSHIP BETWEEN A UTILITY'S CAPITAL**

**STRUCTURE AND ITS COST OF CAPITAL?**

**A.** Generally, when a firm engages in debt financing, it exposes itself to risks that, once debt becomes significant relative to the total capital structure, increase in a geometric fashion compared to the linear percentage increase in the debt ratio itself. This risk is illustrated by considering the effect of leverage on net earnings. For example, as leverage increases, the equity ratio falls. This creates two adverse effects on the investor. First, equity earnings decline rapidly and may even disappear. Second, the "cushion" of equity protection for debt falls. A decline in the protection afforded debt holders, or the possibility of a serious decline in debt protection, will act to increase the cost of debt financing. Therefore, one may conclude that each new financing, whether through debt or equity, impacts the marginal cost of future financing by any alternative method. For a firm already perceived as being over-leveraged, this additional borrowing would cause the marginal cost of both equity and debt to increase. On the other hand, if the same firm instead employed equity funding, this could actually reduce the real marginal cost of additional borrowing, even if the particular equity issuance occurred at a higher unit cost than an equivalent amount of debt.

The theoretical optimum ratio of debt to equity in the capital structure will vary considerably from one industry to another and, to a very significant extent, among companies within a given industry, based on the size of the company and its ability (or inability) to attract capital. A theoretically "balanced" capital structure is one that provides debt with adequate protection, yet contains enough leverage to produce equity earnings sufficient to attract new equity capital (but not so large a degree of leverage as to introduce earnings instability and render equity investment speculative). For smaller utilities, for example, financial leverage often has detrimental impacts with very slight increases in expenses. As a consequence,

smaller utilities like BMSC cannot support the same percentage of debt in their capital structure as a larger utility.

**Q. HAS THE U.S. SUPREME COURT SET FORTH ANY STANDARDS THAT APPLY TO EQUITY RETURNS?**

A. Yes. In 1923, the U.S. Supreme Court set forth the following criteria for determining whether a rate of return is reasonable in *Bluefield Water Works and Improvement Co. v. Public Service Commission of West Virginia*, 262 U.S. 679, 692-93 (1923):

> A public utility is entitled to such rates as will permit it to earn a return on the value of the property which it employs for the convenience of the public equal to that generally being made at the same time and in the same general part of the country on investments on other business undertaking which are attended by corresponding risks and uncertainties.... The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management to maintain and support its credit and enable it to raise money necessary for the proper discharge of its public duties. A rate of return may be reasonable at one time and become too high or too low by changes affecting opportunities for investment, the money market, and business conditions generally.

In *Federal Power Commission v. Hope Natural Gas*, 320 U.S. 591, 603 (1944), the Supreme Court stated the following regarding the return to owners of a company:

> [T]he return to the equity owner should be commensurate with returns on investments in other enterprises having corresponding risks. That return moreover, should be sufficient to assure confidence to the financial integrity of the enterprise so as to maintain its credit and to attract capital.

Taken together, these cases provide the foundation for later cases dealing with the issue of rate of return. In summary:

(1) The rate of return should be similar to the return in businesses with similar or comparable risks;

(2) The return should be sufficient to ensure the confidence in the financial

integrity of the utility;

(3) The return should be sufficient to maintain and support the utilities credit; and

(4) The return should enable the utility to attract capital necessary for the proper discharge of its duties.

Based on these principles, the fair rate of return should closely parallel investor opportunity costs as discussed above. If the utility earns its market cost of equity, neither its stockholders nor its customers should be disadvantaged.

**Q. HOW HAVE THESE CRITERIA BEEN APPLIED IN REGULATORY PROCEEDINGS?**

A. The application of the "reasonableness" criteria laid down in these Supreme Court cases has resulted in significant controversy. The typical method of computing the overall cost of capital is quite straightforward: it is the composite, weighted cost of the various classes of capital (debt, preferred stock, and common equity), used by the utility. The weighting is done by calculating the proportion that each class of capital bears to total capital. However, there is no consensus regarding the best method of measuring the cost of equity capital. The increasing regulatory emphasis on objectivity in determining of return has resulted in a proliferation of quasi-mechanical techniques and formulae for use in equity return determination. As will be discussed more fully below, however, none of the techniques introduced has been universally accepted.

**C. <u>Estimating the Cost of Equity Capital</u>**

**Q. WOULD YOU BRIEFLY DESCRIBE THE APPROACH YOU FOLLOWED IN YOUR COST OF CAPITAL STUDY?**

A. Estimating the cost of equity is a matter of informed judgment. The development of an appropriate rate of return for a regulated enterprise involves the determination

the level of risk associated with that enterprise and the determination of an appropriate return for that risk level. Practitioners employ various techniques that provide a link to actual capital market data and assist in defining the various relationships that underlie the equity cost estimation process.

As I have testified, BMSC is not publicly traded so the information required to directly estimate BMSC's cost of equity is not available. Accordingly, I used a sample of water utilities to provide means of developing an appropriate cost of equity for BMSC. Water utilities are used because there are no publicly traded companies that derive the bulk of their revenue from wastewater collection and treatment services. There are six water utilities included in my sample and include American States Water, Aqua America, California Water, Connecticut Water, Middlesex Water, and SJW Corp. All these companies are followed by the *Value Line Investment Survey*.

**Q. ARE THE WATER UTILITIES IN YOUR SAMPLE DIRECTLY COMPARABLE TO BMSC?**

A. No. Their primary source of revenues is from water services. However, they have enough similarity to provide a useful starting point for developing a cost of equity for BMSC. All of these companies are regulated utilities, and their primary source of revenues is from regulated services. While all of them primarily provide water service, some of the companies provide both water and wastewater services.

**Q. DOES THE MARKET DATA PROVIDED BY THE WATER UTILITY SAMPLE CAPTURE ALL OF THE MARKET RISKS BMSC MIGHT FACE IF IT WERE PUBLICLY TRADED?**

A. In my opinion, no. The market data for the sample water utilities do not include data for water or wastewater utilities primarily serving the Arizona market and thus primarily subject to Arizona rate regulation. Arizona rate regulation requires use

of historical test years and limited out of period adjustments. Further, BMSC faces the risk that unexpected changes in costs in the period in which new rates will be in effect will not be recovered without a costly and lengthy general rate case.

The water sample is heavily weighted with utilities doing business in California. American States, California Water, and SJW Corp. are based in California and receive the bulk of revenues from utility service in that state. These utilities are face less regulatory risk because the California Public Utilities Commission ("PUC") allows the use of future test years and balancing accounts for expenses such as purchased power and purchased water. Aqua America, the largest water utility in the group, has operations in more than 10 states. As a result, its systems are regulated by different state commissions and are less affected by unfavorable decisions and policies of a particular regulatory commission.

**Q. CAN YOU PROVIDE A GENERAL DESCRIPTION OF THE WATER UTILITIES IN YOUR SAMPLE?**

A. Certainly. Schedule D-4.1 lists the operating revenues and net plant for the six water utilities as reported by *AUS Utility Reports* (formerly *C.A. Turner Utility Reports*) and BMSC. In addition, below is a general description of each of the companies:

(1) American States primarily serves the California market though Southern California Water Company with over 250,000 California customers. It has one subsidiary serving the Arizona market with approximately 12,000 customers. Approximately 91 percent of American States revenues were derived from Southern California Water. Revenues for American States were over $228 million in 2004 and net plant was over $591 million at the end of 2004.

(2) Aqua America owns regulated utilities in Pennsylvania, Ohio, North Carolina, Illinois, Texas, New Jersey, Florida, Indiana, Maine, Missouri, New

York, and South Carolina, serving over 835,000 customers at the end of 2004. The Pennsylvania subsidiary provides over 50 percent of Aqua America's operating revenues. Revenues for Aqua America were over $442 million in 2004 and net plant was over $1.79 billion at the end of 2004.

(3) California Water Service Group owns subsidiaries in California, New Mexico, Washington, and Hawaii serving over 470,000 customers. The California operations account for over 95 percent of customers and over 96 percent of operating revenues. Revenues for California Water were over $315 million in 2004 and net plant was over $705 million at the end of 2004.

(4) Connecticut Water Services owns subsidiaries in Connecticut and Massachusetts serving over 87,000 customers. Revenues for Connecticut Water Service were over $53 million in 2004 and net plant was over $195 million at the end of 2004.

(5) Middlesex Water owns subsidiaries in New Jersey and Delaware serving over 84,000 customers and provides water service under contract to municipalities in central New Jersey to a population of over 267,000. Revenues for Middlesex Water were over $71 million in 2004 and net plant was over $235 million at the end of 2004.

(6) SJW Corp. owns San Jose Water which provides water service in an 138 square mile area in San Jose, California, and surrounding communities. Revenues for SJW Corp were over $166 million in 2004 and net plant was over $286 million at the end of 2004.

**Q. HOW DOES BMSC COMPARE TO THE SAMPLE WATER UTILITES?**

A. It is much smaller. At the end of the test year, BMSC had 1864 sewer utility customers. Its revenues totaled less than $1.2 million, and its original cost rate base was approximately $887,500. And BMSC is not diversified. It has a small

service territory in the northeastern Phoenix area with little growth potential, and no alternative sources of revenue.

**Q. IS BMSC COMPARABLE TO THE SAMPLE WATER UTILITIES?**

A. Certainly, a good argument can be made that BMSC is not comparable to the six publicly traded water utilities in the same group. Unfortunately, as I testified, the approaches commonly used to estimate a utility's cost of equity require market data, which is not available for small private businesses, like BMSC. As a result, much larger, public companies must be used as proxies. This is an important factor to keep in mind, since the criteria established by the Supreme Court in decisions such as *Bluefield Water Works* and *Hope Natural Gas* require the use of comparable companies, i.e., companies that would be viewed by investors as having similar risks.

**Q. YOU PREVIOUSLY DISCUSSED FINANCIAL RISK, WHICH IS RELATED TO A FIRM'S CAPITAL STRUCTURE. HOW DO THE CAPITAL STRUCTURES OF THE SAMPLE WATER UTILITIES COMPARE TO BMSC?**

A. Schedule D-4.2 shows the capital structure of BMSC contains approximately 45 percent debt and 55 percent equity compared to the average of the water utility sample of 48 percent debt and 52 percent equity. Consequently, there is little difference. However, because of its small size, limited customer base and other factors, the impact of BMSC's leverage is magnified, resulting in greater financial risk.

**Q. DO YOU HAVE ANY GENERAL CONCERNS WITH THE DATA AVILABLE TO MAKE COST OF EQUITY ESTIMATES FOR THE WATER UTILITIES?**

A. Yes. Schedule D-4.3 shows that common stock prices have increased significantly

during the past five years, and those increases have exceeded the average annual increases in dividends per share (DPS), earnings per share (EPS) and book value per share. *Value Line* (January 2004) suggests part of the reason for this is consolidation in the water utility industry. *Value Line* has advised investors to expect mergers and acquisitions to continue and stock prices from an acquisition to be as much as four times book value.

Irrespective of investor merger and acquisition expectations, stock price growth has exceeded book growth. Schedule D-4.4 shows that common stock prices have had annual average price increases during the past 10 years that have exceeded the average annual increases in dividends per share, earnings per share, and book value per share. In fact, the price and book growth over the past 10 years exceed analyst forecasts of growth used in my DCF methods of estimating the cost of equity.

**Q. ARE THERE OTHER DATA SHOWING THAT STOCK PRICES FOR THE WATER UTILITY STOCKS HAVE BEEN INCREASING?**

A. Yes. Schedule D-4.5 compares the average high/low stock prices for the three months April, May, and June 2005 to the spot price at July 22, 2005. In this short period of time, the average increase in prices was over $5.11 per share. This is an average of over 16 percent in just a few months.

**Q. WHAT IMPLICATIONS DOES THIS HAVE FOR ESTIMATING THE COST OF EQUITY USING THE SAMPLE WATER UTILITIES?**

A. If investors have bid up prices for utility stocks in anticipation of a merger or acquisition, the stock prices will reflect the investor's expected premium at acquisition. As I will discuss later, this distorts the results produced the DCF model and lowers the indicated equity cost.

**Q. WHAT METHODS AND CAPITAL MARKT DATA ARE USED TO**

**EVALUATE THE COST OF EQUITY CAPITAL?**

A. Techniques for estimating the cost of equity generally fall into three groups:

(1) comparable earnings methods,

(2) risk premium methods, and

(3) DCF methods.

The comparable earnings methods used to determine the cost of equity is a direct outgrowth of judicial opinions on the rate of return. The *Bluefield* decision suggests that opportunity cost, as defined in the economic literature, is the appropriate measure of the actual cost of common equity for a regulated utility. This approach involves direct observation of market returns, an assessment of the persistence of those returns, and an evaluation of the risk accepted by that return. The advantage of the comparable earnings approach is that it is easy to calculate and the amount of subjective judgment required is minimal. The basis for comparison is the book value of common equity, which less vulnerable to regulatory influences, in contrast to the market-based DCF model and the capital asset pricing model ("CAPM").

The second group of estimation techniques are risk premium methods, which begin with currently observable market returns, such as yields on government or corporate bonds, and add an incremental amount for the additional risk associated with common equity. The CAPM, for example, is a type of risk premium approach. Although the CAPM method is widely used in academic research, questionable assumptions that underlie the model have detracted from its practical application. Other risk premium methods, such as the bond-yield plus risk premium method, are less subjective than the CAPM and are easier to implement. The risk premium method does not require estimates of beta or market risk premiums, for example, or depend on what interest rate is chosen as the proxy

for the risk free rate.

**Q. CAN YOU ELABORATE?**

A. Yes. Despite more than 30 years of attempts to empirically validate the CAPM approach, there is no consensus on its legitimacy. There are a few hints that the model is incorrect. For starters, we all hold different portfolios. Therefore, it cannot be exactly true. Researchers have focused on the more interesting issue of whether rates of return depend upon beta (ß) and whether the elegant, linear form of the model holds for all types of stocks. What they have found is that real markets typically deviate broadly from the original version of the CAPM, which is sometimes called the Sharpe-Linter model. Some of the most forceful arguments against the CAPM are presented in a recent article written by Dr. Eugene Fama and Dr. Kenneth French.[1] Reviewing various empirical studies of the CAPM, these authors found that beta does a relatively poor job at explaining differences in the actual returns of portfolios of U.S. stocks. They noted that there are variables besides beta (ß) explain portfolio returns better, suggesting the CAPM, while theoretically interesting, is incomplete and has little practical use.

**Q. PLEASE CONTINUE.**

The final commonly used technique, the DCF method, is simply the sum of a stock's expected dividend yield and the expected long-term dividend (or price) growth rate. Dividend yields are readily available, but long-term growth estimates are more difficult to obtain. DCF constant growth models require very long-term growth estimates, and it can be argued that more explicit multi-stage models are preferred. The DCF model results are generally more consistent with actual capital market behavior. However, as I have stated, the DCF model does require judgment

[1] Eugene F. Fama and Kenneth R. French, "The Capital Asset Pricing Model: Theory and Evidence," *Journal of Economic Perspectives* (Summer 2004) 25-46.

in selecting appropriate growth rates.

In the final analysis ROE estimates are subjective and should be based on sound, informed judgment. I have applied several versions of the DCF and risk premium methods that I believe brackets the fair cost of equity capital for BMSC, without taking into account the additional risks BMSC possesses.

**Q. PLEASE EXPLAIN THE DCF METHOD OF ESTIMATING THE COST OF EQUITY.**

A. The DCF model is based on the concept that the current price of a share of stock is equal to the present value of future cash flows from the purchase of the stock. In its most general form:

(1) $P_0 = CF_1/(1+k) + CF_2/(1+k)^2 + \ldots + CF_n/(1+k)^n$

where k is the cost of equity; n is a very large number; $P_0$ is the current stock price; and, $CF_1$, $CF_2$,...$CF_n$ are all the expected future cash flows expected to be received in periods 1, 2, ....n. Equation (1) can be written to show that the current price ($P_0$) is also equal to

(2) $P_0 = CF_1/(1+k) + CF_2/(1+k)^2 + \ldots + P_t/(1+k)^t$

where $P_t$ is the price expected to be received at the end of the period t. If the future price ($P_t$) included a premium (an expected increase in the stock price), the price the investor would pay today in anticipation of receiving that premium would increase. This is a Market Price version of the DCF model. As with the general form of the DCF model in equation (1), in the Market Price approach the current stock price ($P_0$) is the present value of the expected cash inflows. The cash flows are comprised of dividends and the final selling price of the stock. The estimated cost of equity (k) is the rate of return investors expect if they bought the stock at today's price, held it, and received dividends through the transition period, and then sold it for price ($P_t$).

**Q. CAN YOU PROVIDE AN EXAMPLE TO ILLUSTRATE THE MARKET PRICE VERSION OF THE DCF MODEL?**

A. Yes. Assume an investor buys a share of common stock for $40. If the expected dividend during the coming year is $2.00, then the expected dividend yield is 5 percent ($2.00/$40 = 5.0 percent). If the stock price is also expected to increase to $43.00 after one year, this $3.00 expected gain adds an additional 7.5 percent to the expected total rate of return ($3.00/$40 = 7.5 percent). Thus, the investor buying the stock at $40 per share, expects a total return of 12.5 percent (5 percent dividend yield plus 7.5 percent price appreciation). The total return of 12.5 percent is the appropriate measure of the cost of capital because this is the rate of return that caused the investor to commit $40 of his capital by purchasing the stock.

I have provided a Market Price DCF model in Exhibit 1 to illustrate the Market Price DCF model approach further. The model computes the implied rate of return from a stream of cash flows. The first cash flow is negative and is the purchase price of the stock. I used the spot price at July 22, 2005 as reported by *Zack's Investment Research* as the initial purchase price. The next series of cash flows are the expected dividends for the next four years. The final cash flow is the dividend in year 5 plus the expected selling price of the stock. The selling price of the stock is based on the historical five-year annual average of price growth for each of the stocks. The average implied rate of return is 11.1 percent. Although this result is consistent with my other DCF results, I do not rely on this method, and have instead used it to evaluate the reasonableness of the results produced by the other versions of the DCF model I have used.

**Q. PLEASE CONTINUE WITH YOUR DESCRIPTION OF THE DCF MODEL.**

A. Under the assumption that future cash flows are expected to grow at a constant rate

("g"), equation (1) can be solved for k and rearranged into the simple form:

(3) $k = CF_1/P_0 + g$

where $CF_1/P_0$ is the expected dividend yield and g is the expected long term dividend (price) growth rate ("g"). The expected dividend yield is computed as the ratio of next period's expected dividend ("$CF_1$") divided by the current stock price ("$P_0$").

**Q. HOW IS THE FORMULA FOR THE MULTI-STAGE DCF MODEL DERIVED?**

Under the multi-stage growth DCF model, equation (1) is expanded to incorporate two or more growth rate periods and is written as:

(4) $P_0 = CF_0(1+g_1)/(1+k) + \ldots + CF_0(1+g_2)^n/(1+k)^n + CF_0(1+g_t)^{(t+1)}/k-g_t)$

where $g_1$, $g_2$, etc., represent growth rates for periods 1, 2, etc., and $g_t$ represents the growth rate from period t to infinity. This version of the DCF model assumes that cash flow growth will occur at different rates for one or more periods and ultimately reach a terminal growth stage that continues indefinitely.

**Q. LET'S TURN TO SPECIFIC INPUTS USED IN YOUR DCF MODELS. WHAT DATA HAVE YOU USED TO COMPUTE THE DIVIDEND YIELD ($CF_1/P_0$) IN YOUR MODELS?**

A. I used the spot price for each of stocks of the water utilities in the sample group on July 22, 2005, as reported by *Zacks Investment Research*. The dividend is the expected 2006 dividend.

**Q. EARLIER YOU TESTIFIED THAT STOCK PRICES HAVE BEEN INCREASING DUE TO POTENTIAL MERGERS AND ACQUISTIONS, HOW DOES THIS IMPACT THE DIVIDEND YIELD?**

A. The DCF model results will be negatively biased because the dividend yield ($CF_1/P_0$) is reduced by virtue of having a larger denominator, the stock price ($P_0$).

This impact is not by itself problematic, since the DCF model is intended to take into account changes in the stock price (upward or downward). Investors may have bid up the price of the stocks of the water utilities in the sample group because they expect increased growth in earnings and, as a result, increased dividend growth and appreciation in the price of the stock. However, if stock prices have been bid up in anticipation of a merger or an acquisition, then the DCF model estimate will not reflect true market conditions and understate the cost of equity.

**Q. WHAT MEASURES OF GROWTH ("g") HAVE YOU USED?**

A. I have used earnings growth forecasts, where available, from three different, widely-followed sources: *Zack's Investment Research, Standard & Poor Earning Guide*, and *Value Line Investment Survey*. Schedule D-4.6 reflects estimates of earnings growth.

I have also used forecasts of book returns, retention ratios, and growth in the number of common shares from *Value Line* to determine sustainable growth estimates, which I describe in more detail below. Schedules D-4.7 and D-4.8 show my calculations of sustainable growth.

For the multi-stage DCF, I employed a two-stage model with short-term and long-term growth rates. Staff normally uses two growth stages in its multi-stage DCF model, so I used that approach as well. I used analysts' forecasts of EPS growth for the near term and average long-term GDP growth for the long-term.

**Q. DID YOU USE THE ARITHMETIC MEAN OR THE GEOMETRIC MEAN FOR GDP GROWTH?**

A. The arithmetic mean. It is well established that if the cost of capital is estimated from historical data, an arithmetic average should be used.[2]

---

[2] Ibbotson Associates, *SBBI Valuation Edition 2005 Yearbook* 75-77; Richard A. Brealey and Stewart C. Myers, *Principles of Corporation Finance* (7th ed. 2003) 156-157.

**Q. WHY DID YOU USE FORECASTED GROWTH RATES IN YOUR MODELS?**

A. The DCF model requires estimates of growth that investors expect in the future. Accordingly, I used analysts' forecasts of growth. Logically, in estimating future growth, financial institutions and analysts have taken into account all relevant historical information on a company as well as other more recent information.[3] To the extent that past results provide useful indications of future growth prospects, analysts' forecasts would already incorporate that information. In addition, a stock's current price reflects known historic information on that company, including its past earnings history. Any further recognition of the past will double count what has already occurred. Therefore, forward-looking growth rates should be used.

**Q. WHY HAVE YOU NOT USED FORECASTS OF DIVIDEND GROWTH?**

A. The average annual forecast of dividend growth is very low. When forecasted dividend growth is used in the DCF model, it produces a cost of equity below the cost of debt.

**Q. HAVE YOU PREPARED CONSTANT GROWTH DCF MODELS USING HISTORICAL DPS AND EPS GROWTH RATES?**

A. Yes. Exhibits 2 and 3, attached hereto, reflect constant growth DCF results using five-year historical annual growth rates for DPS and EPS. The results are 5.3 percent and 5.7 percent, respectively. The current yield on a Moody's Baa investment grade bond is 6.0 percent. Forecasted Moody's Baa investment grade bonds for 2007-2009 is 7.3 percent.

**Q. YOU MENTIONED SUSTAINABLE GROWTH EARLIER. PLEASE**

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[3] See David A. Gordon, Myron J. Gordon and Lawrence I Gould, "Choice Among Methods of Estimating Share Yield," *Journal of Portfolio Management* (Spring 1989) 50-55.

**EXPLAIN WHAT SUSTAINABLE GROWTH IS?**

A. Sustainable growth is derived by combining the expected growth from future retained earnings and expected future growth from sales of common stock. The growth rate (g) becomes:

(5) $g = br + sv$

where b is the expected retention ratio; r is the expected return on common equity; s is the funds raised from the sale of stock as a fraction of existing common equity; and, v is fraction of funds raised from the sale of stock that accrues to shareholders.[4]

**Q. HOW DID YOU ESTIMATE "br" GROWTH?**

A. I used projected rates of return, dividends per share, and earnings per share found in *Value* Line to estimate "br" growth.

**Q. HOW DID YOU ESTIMATE "sv" GROWTH?**

A. I used *Value Line*'s projections of new issues of common stock to estimate "s" and reported books values and the spot price to estimate "v". All of the water utility stocks used in my sample are currently selling at prices above book value and thus have "sv" growth.

**Q. LET'S MOVE ON TO YOUR OTHER EQUITY COST ESTIMATION METHOD, MR. BOURASSA. PLEASE EXPLAIN YOUR RISK PREMIUM METHODOLOGY.**

A. Risk premium methods are based on the assumption that equity securities are riskier than debt. Since equity securities are riskier, investors require a higher rate of return. The risk premium between equity securities and debt can be directly estimated by comparing authorized and actual returns on equity with the current yields of investment grade bonds or other debt instruments:

[4] See Gordon Myron J., *The Cost of Capital to a Public Utility* (Michigan, 1974).

> The risk premium method of determining the cost of equity, sometimes referred to as the "stock-bond-yield spread method" or the "risk positioning method," or again the "bond-yield plus risk-premium" method, recognizes that common equity capital is more risky than debt from an investor's standpoint, and that investors require higher returns on stocks than on bonds to compensate for the additional risk. The general approach is relatively straightforward: First, determine the historical spread between the return on debt and the return on equity. Second, add this spread to the current debt yield to derive an estimate of current equity return requirements.
>
> The risk premium approach to estimating the cost of equity derives its usefulness from the simple fact that while equity return requirements cannot be readily quantified at any given time, the returns on bonds can be assessed precisely at every instant in time. If the magnitude of the risk premium between stocks and bonds is known, then this information can be used to produce the cost of common equity. This can be accomplished retrospectively using historical risk premiums or prospectively using expected risk premiums.

Roger A. Morin, *Regulatory Finance: Utilities' Cost of Capital* (1994) 269. As I have testified, there is no need to estimate betas or market risk premiums, as required in implementing the CAPM. It is a simpler and less subjective approach.

**Q. CAN YOU EXPLAIN YOUR BOND-YIELD PLUS RISK PREMIUM APPROACH?**

A. Yes. I have computed the average risk premium for the actual and authorized returns from 1995 to 2004 (10 years) when compared to the 10-year Treasury rate for the six water utilities in the sample group. I then add the average risk premium to the forecasted interest rates for 10-year Treasuries for 2007-2008.

**Q. WHY DO YOU USE PROJECTED INTEREST RATES FOR 2007-2008?**

A. I have used this period because it is the period in which BMSC's rates will be in effect.

**Q. WHY NOT USE CURRENT RATES FOR TREASURY SECURITIES?**

A. The goal is to determine the cost of capital for BMSC when new rates are in effect,

not the cost of capital 12 months before new rates are approved. Current interest rates are sometimes higher and sometimes lower than rates during future periods. However, interest rates have been close to 40 year lows in past few years, and are expected to increase.

**Q. ARE RISK PREMIUM ESTIMATES OF THE COST OF EQUITY CONSISTENT WITH OTHER CURRENT CAPITAL MARKET COSTS?**

A. Yes. The risk premium approach is founded on directly observable, market interest rates. This assures that the premium estimates of the cost of equity begin with a sound basis, are tied to current capital market costs.

**D. <u>Details of Cost of Equity Estimates</u>**

**Q. PLEASE DISCUSS YOUR ANALYSIS OF THE COST OF EQUITY FOR BMSC.**

A. In the first part of my analysis, I applied two versions of the constant growth DCF and a two-stage DCF models to the six water utilities in the sample group. The DCF analyses appear on schedules D-4.9, D-4.10, and D-4.11. The DCF models produce an indicated equity cost in the range of 9.1 percent to 12.0 percent.

In the second part of my analysis, I developed and reviewed cost of equity estimates based on the bond-yield plus risk premium method. The risk premium analysis based on actual and authorized returns on equity indicates an equity cost in the range of 10.4 percent to 11.1 percent.

In the third part of my analysis, I compared the actual and authorized returns reported in *AUS Utility Reports* to the results of my DCF and risk premium methods. The range of actual returns is from 9.1 percent to 11.8 percent. The range of authorized returns is from 9.9 percent to 12.7 percent.

Finally, I also considered *Value Line*'s most current forecasts of the composite equity return for the water utility industry. *Value Line*'s forecasts a

composite return of 11% for 2005, 11% for 2006, and 11.5% for the 2008-10 period.

Based on the DCF and risk premium results, and with consideration for current market, industry, and other factors, I believe a return on equity of 11.0 percent is appropriate. BMSC has a higher cost of equity than the water utility sample group due to its small size, leverage and other characteristics. Thus, an equity return of 11.0% is conservative for BMSC.

**Q. PLEASE DISCUSS YOUR CONSTANT GROWTH DCF MODELS.**

A. I computed the cost of equity using two constant growth models. The first, shown on schedule D-4.9, uses analyst's forecasts of earning per share growth. The average of the results is 10.6 percent.

The second constant growth DCF model, shown on schedule D-4.10, uses my computations of sustainable growth ("br + sv"). To compute sustainable growth I used analysts forecasts of the retention ratio and return of common equity to estimate "br" growth. I also used analysts' forecast of the growth in the number of common shares and the current market to book ratio to estimate "vs" growth. The current market to book ratio is based on the spot price and the book value at June 30, 2005. The average of the results is 11.2 percent.

**Q. PLEASE DISCUSS YOUR MULTISTAGE DCF MODEL.**

A. I use a two-stage growth DCF model. The average of the analysts' expected growth is used for the near-term and GDP growth for the long-term. Short-term growth is given a weight of .67. The average result of the two-stage DCF model, shown on schedule D-4.11, is 10.2 percent.

**Q. PLEASE DISCUSS YOUR RISK PREMIUM ANALYSIS?**

A. The first risk premium analysis, shown on schedule D-4.12, computes the average risk premium on the actual returns for the six water companies from 1995 to 2004

(10 years) when compared to the 10-year Treasury rates. The average risk premium is then added to the forecasted interest rates for 10-year Treasuries for 2007-2008. The result of the first risk premium analysis is 10.4 percent.

The second risk premium analysis, shown on schedule D-4.13, computes the average risk premium on the authorized returns for the six water companies from 1995 to 2004 (10 years) when compared to the 10-year Treasury rate. The average risk premium is then added to the forecasted interest rates for 10-year Treasuries for 2007-2008. The result of second risk premium analysis is 11.0 percent.

**Q. WHAT ARE THE ACTUAL AND AUTHORIZED RETURNS FOR THE SAMPLE WATER UTILITIES?**

A. Schedule D-4-14 shows the actual and authorized returns for the six water utilities. The average of the actual returns is 10.4 percent. The average of the authorized returns is 10.5 percent.

**Q. PLEASE SUMMARIZE YOUR RESULTS.**

A. The following table summarizes the results of the models I have used, and provides the comparable earnings data I used as I check on my estimates:

| DCF Analysis | Range | Midpoint |
|---|---|---|
| Constant Growth (earnings growth) | 9.1% - 12.0% | 10.6% |
| Constant Growth (sustainable growth) | 9.9% - 11.7% | 10.8% |
| Two-Stage Growth Model | 9.3% - 10.9% | 10.1% |
| Risk Premium Analysis | | |
| Actual Returns | 10.2% - 10.4% | 10.3% |
| Authorized Returns | 11.0% - 11.4% | 11.3% |
| Comparable Earnings | | |
| Actual Returns | 9.1% - 11.8% | 10.5% |
| Authorized Returns | 9.9% - 12.7% | 11.3% |

| | |
|---|---|
| Value Line Industry Composite (2005) | 11.0% |
| Value Line Industry Composite (2006) | 11.0% |
| Value Line Industry Composite (2008) | 11.5% |

At 11.0 percent, my recommended cost of equity is near the upper end of the range of estimates produced by the DCF and risk premium models, but nevertheless within the ranges of both sets of estimates. My recommendation represents a reasonable balance between the economic forecasts of higher interest rates during the period in which rates will be in effect, the reduced equity costs obtained from low dividend yields using the DCF model, and my judgment about BMSC's additional risks not captured by the market models, including the risk of rate regulation and the level of debt for BMSC.

## VII. RATE DESIGN (H SCHEDULES).

**Q. WHAT ARE THE COMPANY'S PRESENT RATES?**

A. The Company's present rates are:

| | |
|---|---|
| Residential Charge: | $38.00 |
| Commercial – Std. Rate (Per gallon)[5]: | $0.15236 |
| Commercial – Special Rate (Per gallon)[6]: | |
| B-H Enterprises (7518 Elbow Bend West) | $0.11685 |
| B-H Enterprises (7518 Elbow Bend East) | $0.11685 |
| Barb's Pet Grooming | $0.11685 |
| Boulders Resort | $0.118427 |

[5] Commercial wastewater flows are based on the average daily flows set forth in Engineering Bulletin No. 12, Table 1, published by the Arizona Department of Environmental Quality (June 1989).

[6] Wastewater flows are based on Engineering Bulletin No. 12, Table 1. A one-bedroom dwelling is assumed to generate 200 gallons per day, each additional bedroom is assumed to generate an additional 100 gallons per day.

| | |
|---|---|
| Carefree Dental | $0.11685 |
| Ridgecrest Realty | $0.11818 |
| Desert Forest | $0.13609 |
| Desert Hills Pharmacy | $0.14206 |
| El Pedegral | $0.11685 |
| Lemon Tree | $0.1440 |
| Body Shop | $0.14544 |
| Spanish Village | $0.11685 |
| Boulders Club | $0.11685 |
| Anthony Vuitaggio | $0.12987 |

In addition, the price for reclaimed (non-potable) water is $122.00 per acre-foot.

**Q. WHAT ARE THE PROPOSED RATES?**

A. The proposed rates are:

| | |
|---|---|
| Residential Charge: | $43.19 |
| Commercial – Std. Rate (Per gallon)[7]: | $0.17316 |
| Commercial – Special Rate (Per gallon)[8]: | |
| B-H Enterprises (7518 Elbow Bend West) | $0.13280 |
| B-H Enterprises (7518 Elbow Bend East) | $0.13280 |
| Barb's Pet Grooming | $0.13280 |
| Boulders Resort | $0.13459 |
| Carefree Dental | $0.13280 |
| Ridgecrest Realty | $0.13431 |

[7] Commercial wastewater flows are based on the average daily flows set forth in Engineering Bulletin No. 12, Table 1, published by the Arizona Department of Environmental Quality (June 1989).

[8] Wastewater flows are based on Engineering Bulletin No. 12, Table 1. A one-bedroom dwelling is assumed to generate 200 gallons per day, each additional bedroom is assumed to generate an additional 100 gallons per day.

| | |
|---|---|
| Desert Forest | $0.15467 |
| Desert Hills Pharmacy | $0.16145 |
| El Pedegral | $0.13280 |
| Lemon Tree | $0.12956 |
| Body Shop | $0.16529 |
| Spanish Village | $0.13280 |
| Boulders Club | $0.13280 |
| Anthony Vuitaggio | $0.14760 |

In addition, the price for reclaimed (non-potable) water is $138.65 per acre-foot.

**Q. ARE THERE ANY PROPOSED CHANGES TO THE COMPANY'S MISCELLANEOUS SERVICE CHARGES?**

A. No.

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

A. Yes.

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# BOURASSA EXHIBITS

# EXHIBIT

# 1

Exhibit 1
Witness: Bourassa

**Black Mountain Sewer Company**

**Discounted Cash Flow Analysis (Water)**
**Market Price**

| Line No. | | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | EXPECTED CASH FLOWS | | | | | | **Implied ROE = Internal** | **Implied ROE = Internal** |
| | Company | Next Year's Div | 2006 Div | Annual Change to 2006 | Recent Price | 5 Yr. Historical Avg. Annual Price Growth | Year 5 Price | Recent Price | Year 1 Div | Year 2 Div | Year 3 Div | Year 4 Div | Year 5 Div + Price | Rate of Return (Cols 7-12) | Rate of Return (Cols 7-12) |
| 1. | American States | $ 0.90 | $ 0.91 | $ 0.01 | $ 31.07 | 4.95% | $ 39.56 | $ (31.07) | $ 0.90 | $ 0.91 | $ 0.92 | $ 0.93 | $ 40.49 | 7.6% | 7.6% |
| 2. | Aqua America | 0.52 | 0.55 | 0.03 | 30.78 | 16.94% | 67.31 | (30.78) | 0.52 | 0.55 | 0.58 | 0.61 | 67.92 | 18.3% | 18.3% |
| 3. | California Water | 1.14 | 1.15 | 0.01 | 40.00 | 8.80% | 60.97 | (40.00) | 1.14 | 1.15 | 1.16 | 1.17 | 62.14 | 11.3% | 11.3% |
| 4. | Connecticut Water | 0.85 | 0.86 | 0.01 | 26.92 | 6.22% | 36.41 | (26.92) | 0.85 | 0.86 | 0.87 | 0.88 | 37.29 | 9.1% | 9.1% |
| 5. | Middlesex | 0.67 | 0.68 | 0.01 | 21.77 | 6.56% | 29.91 | (21.77) | 0.67 | 0.68 | 0.69 | 0.70 | 30.61 | 9.4% | 9.4% |
| 6. | SJW Corp. | 1.07 | 1.12 | 0.05 | 53.75 | 0.17% | 54.22 | (53.75) | 1.07 | 1.12 | 1.17 | 1.22 | 55.44 | 2.3% | N/A* |
| | GROUP AVERAGE | | | | | 7.27% | | | | | | | | 9.7% | 11.1% |
| | GROUP MEDIAN | | | | | 6.39% | | | | | | | | 9.2% | 9.4% |

* Excluded. Results lower than cost of debt.

Sources:
Value Line Investment Survey Dated July 29, 2005
Zacks Investment Research

# EXHIBIT

# 2

**Black Mountain Sewer Company**
**Discounted Cash Flow Analysis (Water)**
**Constant Growth DCF Model - Historical**
**Using 5 Year Historical Dividend Growth**

Exhibit 2
Witness: Bourassa

| Line No. | | Company | (1) Spot Price (Po) | (2) Next Year's Div (D1) | (3) Dividend Yield | (4) Historical Div. Growth | (5) Indicated Equity Cost k=Div Yld + G (Cols 1+4) |
|---|---|---|---|---|---|---|---|
| 1 | 1. | American States | 31.07 | 0.90 | 2.90% | 0.93% | 3.8% |
| 2 | 2. | Aqua America | 30.78 | 0.52 | 1.69% | 6.36% | 8.1% |
| 3 | 3. | California Water | 40.00 | 1.14 | 2.85% | 0.73% | 3.6% |
| 4 | 4. | Connecticut Water | 26.92 | 0.85 | 3.16% | 1.24% | 4.4% |
| 5 | 5. | Middlesex | 21.77 | 0.67 | 3.08% | 1.93% | 5.0% |
| 6 | 6. | SJW Corp. | 53.75 | 1.07 | 1.99% | 4.99% | 7.0% |
| 7 | | GROUP AVERAGE | | | | | 5.3% |
| 8 | | GROUP MEDIAN | | | | | 4.7% |
| 9 | | Current Baa interest rate | | | | | 6.0% |
| 10 | | Blue Chip Forecast Baa Corporate Bond Interest Rate 2007-2008 Top 10 | | | | | 8.7% |
| 11 | | Blue Chip Forecast Baa Corporate Bond Interest Rate 2007-2008 Bottom 10 | | | | | 6.2% |
| 12 | | Blue Chip Forecast Baa Corporate Bond Interest Rate 2007-2008 Average | | | | | 7.3% |

Sources:
Value Line data report on July 29, 2005
Zacks Investment Research data for July 22, 2005
Federal Reserve for July 22, 2005
Blue Chip Financial Forecast June 2005

# EXHIBIT

# 3

**Black Mountain Sewer Company**
**Discounted Cash Flow Analysis (Water)**
**Constant Growth DCF Model - Historical**
**Using 5 Year Historical EPS Growth**

Exhibit 3
Witness: Bourassa

| Line No. | | Company | (1) Spot Price (Po) | (2) Next Year's Div (D1) | (3) Dividend Yield | (4) Historical Div. Growth | (5) Indicated Equity Cost k=Div Yld + G (Cols 1+4) |
|---|---|---|---|---|---|---|---|
| 7 | 1. | American States | 31.07 | 0.90 | 2.90% | 1.02% | 3.9% |
| 8 | 2. | Aqua America | 30.78 | 0.52 | 1.69% | 8.73% | 10.4% |
| 9 | 3. | California Water | 40.00 | 1.14 | 2.85% | 1.56% | 4.4% |
| 10 | 4. | Connecticut Water | 26.92 | 0.85 | 3.16% | 2.43% | 5.6% |
| 11 | 5. | Middlesex | 21.77 | 0.67 | 3.08% | 2.07% | 5.1% |
| 12 | 6. | SJW Corp. | 53.75 | 1.07 | 1.99% | 2.55% | 4.5% |
| 15 | | GROUP AVERAGE | | | | | 5.7% |
| 16 | | GROUP MEDIAN | | | | | 4.8% |
| 18 | | Current Baa interest rate | | | | | 6.0% |
| 20 | | Blue Chip Forecast Baa Corporate Bond Interest Rate 2007-2008 Top 10 | | | | | 8.7% |
| 21 | | Blue Chip Forecast Baa Corporate Bond Interest Rate 2007-2008 Bottom 10 | | | | | 6.2% |
| 22 | | Blue Chip Forecast Baa Corporate Bond Interest Rate 2007-2008 Average | | | | | 7.3% |

Sources:
- Value Line data report on July 29, 2005
- Zacks Investment Research data for July 22, 2005
- Federal Reserve for July 22, 2005
- Blue Chip Financial Forecast June 2005

# BOURASSA SCHEDULES

# A
# SCHEDULES

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Computation of Increase in Gross Revenue
Requirements As Adjusted

Exhibit
Schedule A-1
Page 1
Witness: Bourassa

| Line No. | | | |
|---|---|---|---|
| 1 | Fair Value Rate Base | $ | 887,449 |
| 2 | | | |
| 3 | Adjusted Operating Income | | (14,233) |
| 4 | | | |
| 5 | Current Rate of Return | | -1.60% |
| 6 | | | |
| 7 | Required Operating Income | $ | 97,619 |
| 8 | | | |
| 9 | Required Rate of Return on Fair Value Rate Base | | 11.00% |
| 10 | | | |
| 11 | Operating Income Deficiency | $ | 111,852 |
| 12 | | | |
| 13 | Gross Revenue Conversion Factor | | 1.4598 |
| 14 | | | |
| 15 | Increase in Gross Revenue | | |
| 16 | Requirement | $ | 163,279 |

| | Customer Classification (Residential Commercial, Irrigation) | Present Rates | Proposed Rates | Dollar Increase | Percent Increase |
|---|---|---|---|---|---|
| 17 | | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |
| 21 | | | | | |
| 22 | Residential | $ 768,816 | $ 873,820 | $ 105,004 | 13.66% |
| 23 | Commercial (Standard Rate) | 312,725 | 355,418 | 42,693 | 13.65% |
| 24 | Commercial (Special Rate) | 81,967 | 93,155 | 11,188 | 13.65% |
| 25 | Effluent Sales | 14,498 | 16,477 | 1,979 | 13.65% |
| 26 | | | | | |
| 27 | Annualization | 17,328 | 19,695 | 2,367 | 13.66% |
| 28 | | | | - | 0.00% |
| 29 | **Subtotal** | $ 1,195,334 | $ 1,358,565 | $ 163,231 | 13.66% |
| 30 | | | | | |
| 31 | Other Wastewater Revenues | 16,472 | 16,472 | - | 0.00% |
| 32 | | | | - | 0.00% |
| 33 | | | | - | 0.00% |
| 34 | **Total of Water Revenues (a)** | $ 1,211,806 | $ 1,375,037 | $ 163,231 | 13.47% |
| 35 | | | | | |
| 36 | | | | | |
| 37 | | | | | |
| 38 | | | | | |
| 39 | | | | | |
| 40 | | | | | |
| 41 | SUPPORTING SCHEDULES: | | | | |
| 42 | B-1 | | | | |
| 43 | C-1 | | | | |
| 44 | C-3 | | | | |
| 45 | H-1 | | | | |
| 46 | | | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Summary of Results of Operations

Exhibit
Schedule A-2
Page 1
Witness: Bourassa

| Line No. | Description | Prior Years Ended 12/31/2002 | Prior Years Ended 12/31/2003 | Test Year Actual 12/31/2004 | Test Year Adjusted 12/31/2004 | Projected Year Present Rates 12/31/2005 | Projected Year Proposed Rates 12/31/2005 |
|---|---|---|---|---|---|---|---|
| 1 | Gross Revenues | $ 1,136,926 | $ 1,144,038 | $ 1,190,412 | $ 1,207,740 | $ 1,207,740 | $ 1,371,019 |
| 2 | | | | | | | |
| 3 | Revenue Deductions and | 857,715 | 928,518 | 930,102 | 1,221,973 | 1,221,973 | 1,273,399 |
| 4 | Operating Expenses | | | | | | |
| 5 | | | | | | | |
| 6 | Operating Income | $ 279,211 | $ 215,520 | $ 260,310 | $ (14,233) | $ (14,233) | $ 97,619 |
| 7 | | | | | | | |
| 8 | Other Income and | 2,770 | 24,000 | 24,000 | - | - | - |
| 9 | Deductions | | | | | | |
| 10 | | | | | | | |
| 11 | Interest Expense | (127,786) | (122,360) | (116,401) | - | - | - |
| 12 | | | | | | | |
| 13 | Net Income | $ 154,195 | $ 117,160 | $ 167,909 | $ (14,233) | $ (14,233) | $ 97,619 |
| 14 | | | | | | | |
| 15 | Earned Per Average | | | | | | |
| 16 | Common Share | 0.33 | 0.25 | 0.36 | (0.03) | (0.03) | 0.21 |
| 17 | | | | | | | |
| 18 | Dividends Per | | | | | | |
| 19 | Common Share | 0.22 | - | - | - | - | - |
| 20 | | | | | | | |
| 21 | Payout Ratio | 0.67 | - | - | - | - | - |
| 22 | | | | | | | |
| 23 | Return on Average | | | | | | |
| 24 | Invested Capital | 0.58% | 2.11% | 2.75% | -0.24% | -0.25% | 1.70% |
| 25 | | | | | | | |
| 26 | Return on Year End | | | | | | |
| 27 | Capital | 2.85% | 2.05% | 2.58% | -0.24% | -0.24% | 1.68% |
| 28 | | | | | | | |
| 29 | Return on Average | | | | | | |
| 30 | Common Equity | 19.46% | 11.15% | 12.53% | -1.14% | -1.00% | 6.63% |
| 31 | | | | | | | |
| 32 | Return on Year End | | | | | | |
| 33 | Common Equity | 18.26% | 9.32% | 11.79% | -1.15% | -1.01% | 6.42% |
| 34 | | | | | | | |
| 35 | Times Bond Interest Earned | | | | | | |
| 36 | Before Income Taxes | 3.01 | 2.66 | 2.24 | (0.18) | (0.18) | 1.25 |
| 37 | | | | | | | |
| 38 | Times Total Interest and | | | | | | |
| 39 | Preferred Dividends Earned | | | | | | |
| 40 | After Income Taxes | 2.21 | 1.96 | 2.44 | 2.51 | 2.51 | 0.86 |
| 41 | | | | | | | |
| 42 | | | | | | | |
| 43 | SUPPORTING SCHEDULES | | | | | | |
| 44 | C-1 | | | | | | |
| 45 | E-2 | | | | | | |
| 46 | F-1 | | | | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Summary of Capital Structure

Exhibit
Schedule A-3
Page 1
Witness: Bourassa

| Line No. | Description: | Prior Years Ended 12/31/2002 | Prior Years Ended 12/31/2003 | Test Year 12/31/2004 | Projected Year 12/31/2005 |
|---|---|---|---|---|---|
| 1 | | | | | |
| 2 | | | | | |
| 3 | Long-Term Debt | 1,329,161 | 1,258,423 | 1,184,733 | 1,132,046 |
| 4 | | | | | |
| 5 | Total Debt | $ 1,329,161 | $ 1,258,423 | $ 1,184,733 | $ 1,132,046 |
| 6 | | | | | |
| 7 | | | | | |
| 8 | Preferred Stock | - | - | - | - |
| 9 | | | | | |
| 10 | Common Equity **(1)(2)** | 844,290 | 1,256,627 | 1,423,568 | 1,521,187 |
| 11 | | | | | |
| 12 | | | | | |
| 13 | Total Capital & Debt | $ 2,173,451 | $ 2,515,050 | $ 2,608,301 | $ 2,653,233 |
| 14 | | | | | |
| 15 | | | | | |
| 16 | Capitalization Ratios: | | | | |
| 17 | | | | | |
| 18 | Long-Term Debt | 61.15% | 50.04% | 45.42% | 42.67% |
| 19 | | | | | |
| 20 | Total Debt | 61.15% | 50.04% | 45.42% | 42.67% |
| 21 | | | | | |
| 22 | | | | | |
| 23 | Preferred Stock | - | - | - | - |
| 24 | | | | | |
| 25 | Common Equity | 38.85% | 49.96% | 54.58% | 57.33% |
| 26 | | | | | |
| 27 | | | | | |
| 28 | Total Capital | 100.00% | 100.00% | 100.00% | 100.00% |
| 29 | | | | | |
| 30 | | | | | |
| 31 | Weighted Cost of | | | | |
| 32 | Senior Capital | 9.40% | 9.40% | 9.40% | 9.40% |
| 33 | | | | | |
| 34 | | | | | |
| 35 | | | | | |
| 36 | | | | | |
| 37 | | | | | |
| 38 | | | | | |
| 39 | SUPPORTING SCHEDULES: | | | | |
| 40 | E-1 | | | | |
| 41 | D-1 | | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Construction Expenditures
and Gross Utility Plant in Service

Exhibit
Schedule A-4
Page 1
Witness: Bourassa

| Line No. | | Construction Expenditures | Net Plant Placed in Service | Gross Utility Plant in Service |
|---|---|---|---|---|
| 1 | | | | |
| 2 | Prior Year Ended 12/31/2002 | 680,816 | 680,814 | 6,570,206 |
| 3 | | | | |
| 4 | Prior Year Ended 12/31/2003 | 857,924 | 857,924 | 7,428,130 |
| 5 | | | | |
| 6 | Test Year Ended 12/31/2004 | 1,046,123 | 942,318 | 8,370,448 |
| 7 | | | | |
| 8 | Projected Year Ended 12/31/2005 | 170,000 | 170,000 | 8,540,448 |
| 9 | | | | |
| 10 | | | | |
| 11 | | | | |
| 12 | | | | |
| 13 | SUPPORTING SCHEDULES: | | | |
| 14 | B-2 | | | |
| 15 | E-5 | | | |
| 16 | F-3 | | | |
| 17 | | | | |
| 18 | | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Summary Statements of Cash Flows

Exhibit
Schedule A-5
Page 1
Witness: Bourassa

| Line No. | | Prior Year Ended 12/31/2002 | Prior Year Ended 12/31/2003 | Test Year Ended 12/31/2004 | Projected Year Present Rates 12/31/2005 | Projected Year Proposed Rates 12/31/2005 |
|---|---|---|---|---|---|---|
| 5 | Cash Flows from Operating Activities | | | | | |
| 6 | Net Income | $ 206,760 | $ 114,989 | $ 168,841 | $ (14,233) | $ 97,619 |
| 7 | Adjustments to reconcile net income to net cash | | | | | |
| 8 | provided by operating activities: | | | | | |
| 9 | Depreciation and Amortization | 47,752 | 32,280 | 67,485 | 126,749 | 126,749 |
| 10 | Deferred Income Taxes | - | - | - | | |
| 11 | Other | - | - | - | | |
| 12 | Changes in Certain Assets and Liabilities: | - | - | - | | |
| 13 | Accounts Receivable | (2,172) | (2,377) | 12,049 | | |
| 14 | Unbilled Revenues | - | - | - | | |
| 15 | Materials and Supplies Inventory | - | - | - | | |
| 16 | Prepaid Expenses | 7,758 | (9,468) | 1,123 | | |
| 17 | Deferred Charges | - | - | - | | |
| 18 | Accounts Payable | (3,682) | 27,135 | (90,311) | | |
| 19 | Intercompany payable | (59,008) | (31,140) | (67,243) | | |
| 20 | Customer Deposits | 5,000 | (8,600) | (694) | | |
| 21 | Intercompany taxes receivable and taxes payable | 88,584 | 1,584 | (5,770) | | |
| 22 | Other assets and liabilities | 17,666 | 52,039 | (5,056) | | |
| 23 | | | | | | |
| 24 | Net Cash Flow provided by Operating Activities | $ 308,658 | $ 176,442 | $ 80,424 | $ 112,517 | $ 224,369 |
| 25 | Cash Flow From Investing Activities: | | | | | |
| 26 | Capital Expenditures | (680,816) | (857,924) | (1,046,123) | (170,000) | (170,000) |
| 27 | Plant Held for Future Use | - | - | - | | |
| 28 | Changes in debt reserve fund | - | - | - | | |
| 29 | Net Cash Flows from Investing Activities | $ (680,816) | $ (857,924) | $ (1,046,123) | $ (170,000) | $ (170,000) |
| 30 | Cash Flow From Financing Activities | | | | | |
| 31 | Change in Restricted Cash | - | - | - | | |
| 32 | Change in net amounts due to parent and affiliates | - | - | - | | |
| 33 | Receipt of advances for and contributions in aid of construction | 92,140 | 195,761 | 1,069,716 | - | - |
| 34 | Refunds for advances for construction | - | (24,304) | - | - | - |
| 35 | Repayments of Long-Term Debt | - | - | - | (52,687) | (52,687) |
| 36 | Dividends Paid | (103,099) | - | (1,900) | - | - |
| 37 | Deferred Financing Costs | - | - | - | | |
| 38 | Paid in Capital | - | 297,348 | - | | |
| 39 | Net Cash Flows Provided by Financing Activities | $ (10,959) | $ 468,805 | $ 1,067,816 | $ (52,687) | $ (52,687) |
| 40 | Increase(decrease) in Cash and Cash Equivalents | (383,117) | (212,677) | 102,117 | (110,170) | 1,682 |
| 41 | Cash and Cash Equivalents at Beginning of Year | 1,018,656 | 635,539 | 422,862 | 524,979 | 524,979 |
| 42 | Cash and Cash Equivalents at End of Year | $ 635,539 | $ 422,862 | $ 524,979 | $ 414,809 | $ 526,661 |
| 43 | SUPPORTING SCHEDULES: | | | | | |
| 44 | E-3 | | | | | |
| 45 | F-2 | | | | | |
| 46 | | | | | | |

# B
# SCHEDULES

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Summary of Rate Base

Exhibit
Schedule B-1
Page 1
Witness: Bourassa

| Line No. | | Original Cost Rate base | Fair Value Rate Base |
|---|---|---|---|
| 1 | | | |
| 2 | Gross Utility Plant in Service | $ 8,464,745 | $ 8,464,745 |
| 3 | Less: Accumulated Depreciation | 4,366,379 | 4,366,379 |
| 4 | | | |
| 5 | Net Utility Plant in Service | $ 4,098,366 | $ 4,098,366 |
| 6 | | | |
| 7 | Less: | | |
| 8 | Advances in Aid of | | |
| 9 | Construction | 1,315,900 | 1,315,900 |
| 10 | Contributions in Aid of | | |
| 11 | Construction | 5,346,615 | 5,346,615 |
| 12 | Accumulated Amortization of CIAC | (3,308,578) | (3,308,578) |
| 13 | | | |
| 14 | Customer Meter Deposits | (3,000) | (3,000) |
| 15 | Deferred Income Taxes & Credits | - | - |
| 16 | Deferred Assets | - | - |
| 17 | | | |
| 18 | | | |
| 19 | Plus: | | |
| 20 | Unamortized Finance | | |
| 21 | Charges | - | - |
| 22 | Prepaids | 9,512 | 9,512 |
| 23 | Deferred Assets | - | - |
| 24 | Allowance for Working Capital | 130,508 | 130,508 |
| 25 | | | |
| 26 | | | |
| 27 | Total Rate Base | $ 887,449 | $ 887,449 |
| 28 | | | |
| 29 | | | |
| 30 | | | |
| 31 | SUPPORTING SCHEDULES: | | |
| 32 | B-2 | | |
| 33 | B-3 | | |
| 34 | B-5 | | |
| 35 | E-1 | | |
| 36 | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Original Cost Rate Base Proforma Adjustments

Exhibit
Schedule B-2
Page 1
Witness: Bourassa

| Line No. | | Actual at End of Test Year | Proforma Adjustments Label | Proforma Adjustments Amount | Adjusted at end of Test Year |
|---|---|---|---|---|---|
| 1 | Gross Utility | | | | |
| 2 | Plant in Service | $ 8,370,448 | 1 | 94,297 | $ 8,464,745 |
| 3 | | | | | |
| 4 | **Less:** | | | | |
| 5 | Accumulated | | | | |
| 6 | Depreciation | 4,441,760 | 2 | (75,381) | 4,366,379 |
| 7 | | | | | |
| 8 | | | | | |
| 9 | Net Utility Plant | | | | |
| 10 | in Service | $ 3,928,688 | | | $ 4,098,366 |
| 11 | | | | | |
| 12 | **Less:** | | | | |
| 13 | Advances in Aid of | | | | |
| 14 | Construction | 1,315,900 | | | 1,315,900 |
| 15 | | | | | |
| 16 | Contributions in Aid of | | | | |
| 17 | Construction (CIAC) | 5,800,321 | 3a | (453,706) | 5,346,615 |
| 18 | | | | | |
| 19 | | | | | |
| 20 | Accumulated Amortization of CIAC | (3,486,218) | 3b | 177,640 | (3,308,578) |
| 21 | | | | | |
| 22 | | | | | |
| 23 | Customer Meter Deposits | (3,000) | | | (3,000) |
| 24 | Deferred Income Taxes | - | | | - |
| 25 | Investment Tax Credits | - | | | - |
| 26 | | - | | | - |
| 27 | | | | | |
| 28 | **Plus:** | | | | |
| 29 | Unamortized Finance | | | | |
| 30 | Charges | - | | | - |
| 31 | Prepaids | 9,512 | | | 9,512 |
| 32 | Deferred Assets | - | | | - |
| 33 | Allowance for Working Capital | | | 130,508 | 130,508 |
| 34 | | | | | |
| 35 | Total | $ 311,197 | | | $ 887,449 |
| 36 | | | | | |
| 37 | | | | | |
| 38 | | | | | |
| 39 | SUPPORTING SCHEDULES: | | | | RECAP SCHEDULES: |
| 40 | B-2, pages 1-7 | | | | B-1 |
| 41 | E-1 | | | | |
| 42 | | | | | |
| 43 | | | | | |
| 44 | | | | | |
| 45 | | | | | |
| 46 | | | | | |
| 47 | | | | | |
| 48 | | | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Original Cost Rate Base Proforma Adjustments
Adjustment 1

Exhibit
Schedule B-2
Page 2
Witness: Bourassa

| Line No. | | | |
|---|---|---|---|
| 1 | Post Test Year Plant | | |
| 2 | | | |
| 3 | 360 Collection Sewers Gravity | $ | 24,706 |
| 4 | 389 Other Plant and Misc Equipment | | 69,590 |
| 5 | | | |
| 6 | | | |
| 7 | Total | $ | 94,297 |
| 8 | | | |
| 9 | Increase (Decrease) to Plant-in-service | $ | 94,297 |
| 10 | | | |
| 11 | | | |
| 12 | | | |
| 13 | | | |
| 14 | | | |
| 15 | | | |
| 16 | | | |
| 17 | | | |
| 18 | | | |
| 19 | | | |
| 20 | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Original Cost Rate Base Proforma Adjustments
Adjustment 2

Exhibit
Schedule B-2
Page 3
Witness: Bourassa

| Line No. | | | |
|---|---|---|---|
| 1 | Accumulated Depreciation Adjustment | | |
| 2 | | | |
| 3 | Computed Balance | $ | 4,366,379 |
| 4 | Balance per Company Schedule E-1 | | 4,441,760 |
| 5 | Difference | $ | (75,381) |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |
| 11 | Increase (Decrease) to Accumulated Depreciation | $ | (75,381) |
| 12 | | | |
| 13 | | | |
| 14 | | | |
| 15 | SUPPORTING SCHEDULES | | |
| 16 | B-2, pages 3a-3q | | |
| 17 | | | |
| 18 | | | |
| 19 | | | |
| 20 | | | |

**Black Mountain Sewer Company**
Plant Additions and Retirements

Exhibit
Schedule B-2
Page 3a
Witness: Bourassa

| Account No. | Description | Deprec. Rate Thru Jun-94 | Deprec. Rate After Jun-94 | Staff Plant At 6/30/1994 | Allocated Staff Jun-94 Accum. Depr. (a) | 1994 Plant Additions | 1994 Plant Adjustments | 1994 Adjusted Plant Additions | 1994 Plant Retirements | 1994 Plant Balance | Jun-Dec 1994 Depr. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 351 | Organization | 0.00% | 0.00% | - | - | | | - | | - | - |
| 352 | Franchises | 0.00% | 0.00% | - | - | | | - | | - | - |
| 353 | Land and Land Rights | 0.00% | 0.00% | 7,854 | - | | | - | | 7,854 | - |
| 354 | Structures and Improvements | 5.00% | 5.00% | 979,430 | 350,623 | | | - | | 979,430 | 24,486 |
| 355 | Power Generation Equipment | 5.00% | 5.00% | - | - | | | - | | - | - |
| 360 | Collection Sewers - Force | 5.00% | 5.00% | 262,728 | 94,053 | | | - | | 262,728 | 6,568 |
| 361 | Collection Sewers - Gravity | 5.00% | 5.00% | 2,781,223 | 995,640 | | | - | | 2,781,223 | 69,531 |
| 362 | Special Collecting Structures | 5.00% | 5.00% | - | - | | | - | | - | - |
| 363 | Services to Customers | 5.00% | 5.00% | 143,379 | 51,328 | | | - | | 143,379 | 3,584 |
| 364 | Flow Measuring Devices | 5.00% | 5.00% | 23,168 | 8,294 | | | - | | 23,168 | 579 |
| 365 | Flow Measuring Installations | 5.00% | 5.00% | - | - | | | - | | - | - |
| 370 | Receiving Wells | 5.00% | 5.00% | - | - | | | - | | - | - |
| 371 | Eff;uent Pumping Equipment | 5.00% | 5.00% | 259,564 | 92,920 | | | - | | 259,564 | 6,489 |
| 380 | Treatment and Disposal Equipment | 5.00% | 5.00% | - | - | | | - | | - | - |
| 381 | Plant Sewers | 5.00% | 5.00% | 81,297 | 29,103 | | | - | | 81,297 | 2,032 |
| 382 | Outfall Sewer Lines | 5.00% | 5.00% | - | - | | | - | | - | - |
| 389 | Other Plant and Misc. Equipment | 5.00% | 5.00% | 26,283 | 9,409 | | | - | | 26,283 | 657 |
| 390 | Office Furniture and Equipment | 5.00% | 5.00% | - | - | | | - | | - | - |
| 391 | Transportation Equipment | 5.00% | 5.00% | - | - | | | - | | - | - |
| 393 | Tools, Shop and Garage Equipment. | 5.00% | 5.00% | - | - | | | - | | - | - |
| 394 | Laboratory Equipment | 5.00% | 5.00% | 2,066 | 740 | | | - | | 2,066 | 52 |
| 395 | Power Operated Equipment | 5.00% | 5.00% | - | - | | | - | | - | - |
| 398 | Other TangiblePlant | 5.00% | 5.00% | - | - | | | - | | - | - |
| | | | | | | | | | | | - |
| | | | | | | | | | | | - |
| | | | | - | - | - | | - | | - | - |
| | Plant Held for Future Use | | | - | - | - | | - | | - | - |
| | TOTAL WATER PLANT | | | 4,566,992 | 1,632,110 | - | - | - | - | 4,566,992 | 113,978 |

**Black Mountain Sewer Company**
Plant Additions and Retirements

Exhibit
Schedule B-2
Page 3b
Witness: Bourassa

| Account No. | Description | 1995 Plant Additions | 1995 Plant Adjustments | 1995 Adjusted Plant Additions | 1995 Plant Retirements | 1995 Plant Balance | 1995 Deprec. |
|---|---|---|---|---|---|---|---|
| 351 | Organization | | | - | | - | - |
| 352 | Franchises | | | - | | - | - |
| 353 | Land and Land Rights | | | - | | 7,854 | - |
| 354 | Structures and Improvements | | | - | | 979,430 | 48,972 |
| 355 | Power Generation Equipment | | | - | | - | - |
| 360 | Collection Sewers - Force | | | - | | 262,728 | 13,136 |
| 361 | Collection Sewers - Gravity | | | - | | 2,781,223 | 139,061 |
| 362 | Special Collecting Structures | | | - | | - | - |
| 363 | Services to Customers | | | - | | 143,379 | 7,169 |
| 364 | Flow Measuring Devices | | | - | | 23,168 | 1,158 |
| 365 | Flow Measuring Installations | | | - | | - | - |
| 370 | Receiving Wells | | | - | | - | - |
| 371 | Eff;uent Pumping Equipment | | | - | | 259,564 | 12,978 |
| 380 | Treatment and Disposal Equipment | | | - | | - | - |
| 381 | Plant Sewers | | | - | | 81,297 | 4,065 |
| 382 | Outfall Sewer Lines | | | - | | - | - |
| 389 | Other Plant and Misc. Equipment | | | - | | 26,283 | 1,314 |
| 390 | Office Furniture and Equipment | | | - | | - | - |
| 391 | Transportation Equipment | | | - | | - | - |
| 393 | Tools, Shop and Garage Equipment. | | | - | | - | - |
| 394 | Laboratory Equipment | | | - | | 2,066 | 103 |
| 395 | Power Operated Equipment | | | - | | - | - |
| 398 | Other TangiblePlant | | | - | | - | - |
| | | - | | - | | - | - |
| | Plant Held for Future Use | - | | - | | - | - |
| | TOTAL WATER PLANT | - | - | - | - | 4,566,992 | 227,957 |

**Black Mountain Sewer Company**
Plant Additions and Retirements

Exhibit
Schedule B-2
Page 3c
Witness: Bourassa

| Account No. | Description | 1996 Plant Additions | 1996 Plant Adjustments | 1996 Adjusted Plant Additions | 1996 Plant Retirements | 1996 Plant Balance | 1996 Deprec. |
|---|---|---|---|---|---|---|---|
| 351 | Organization | | | - | | - | - |
| 352 | Franchises | | | - | | - | - |
| 353 | Land and Land Rights | | | - | | 7,854 | - |
| 354 | Structures and Improvements | | | - | | 979,430 | 48,972 |
| 355 | Power Generation Equipment | | | - | | - | - |
| 360 | Collection Sewers - Force | | | - | | 262,728 | 13,136 |
| 361 | Collection Sewers - Gravity | | | - | | 2,781,223 | 139,061 |
| 362 | Special Collecting Structures | | | - | | - | - |
| 363 | Services to Customers | | | - | | 143,379 | 7,169 |
| 364 | Flow Measuring Devices | | | - | | 23,168 | 1,158 |
| 365 | Flow Measuring Installations | | | - | | - | - |
| 370 | Receiving Wells | | | - | | - | - |
| 371 | Eff;uent Pumping Equipment | | | - | | 259,564 | 12,978 |
| 380 | Treatment and Disposal Equipment | | | - | | - | - |
| 381 | Plant Sewers | | | - | | 81,297 | 4,065 |
| 382 | Outfall Sewer Lines | | | - | | - | - |
| 389 | Other Plant and Misc. Equipment | | | - | | 26,283 | 1,314 |
| 390 | Office Furniture and Equipment | | | - | | - | - |
| 391 | Transportation Equipment | | | - | | - | - |
| 393 | Tools, Shop and Garage Equipment. | | | - | | - | - |
| 394 | Laboratory Equipment | | | - | | 2,066 | 103 |
| 395 | Power Operated Equipment | | | - | | - | - |
| 398 | Other TangiblePlant | | | - | | - | - |
| | Plant Held for Future Use | - | | - | | - | - |
| | TOTAL WATER PLANT | - | - | - | - | 4,566,992 | 227,957 |

**Black Mountain Sewer Company**
Plant Additions and Retirements

Exhibit
Schedule B-2
Page 3d
Witness: Bourassa

| Account No. | Description | 1997 Plant Additions | 1997 Plant Adjustments | 1997 Adjusted Plant Additions | 1997 Plant Retirements | 1997 Plant Balance | 1997 Deprec. |
|---|---|---|---|---|---|---|---|
| 351 | Organization | | | - | | - | - |
| 352 | Franchises | | | - | | - | - |
| 353 | Land and Land Rights | | | - | | 7,854 | - |
| 354 | Structures and Improvements | 23,420 | | 23,420 | | 1,002,850 | 49,557 |
| 355 | Power Generation Equipment | | | - | | - | - |
| 360 | Collection Sewers - Force | 650 | | 650 | | 263,378 | 13,153 |
| 361 | Collection Sewers - Gravity | 24,753 | (942) | 23,811 | | 2,805,034 | 139,656 |
| 362 | Special Collecting Structures | | | - | | - | - |
| 363 | Services to Customers | | | - | | 143,379 | 7,169 |
| 364 | Flow Measuring Devices | | | - | | 23,168 | 1,158 |
| 365 | Flow Measuring Installations | | | - | | - | - |
| 370 | Receiving Wells | 201,187 | | 201,187 | | 201,187 | 5,030 |
| 371 | Eff;uent Pumping Equipment | | | - | | 259,564 | 12,978 |
| 380 | Treatment and Disposal Equipment | | | - | | - | - |
| 381 | Plant Sewers | | | - | | 81,297 | 4,065 |
| 382 | Outfall Sewer Lines | | | - | | - | - |
| 389 | Other Plant and Misc. Equipment | 3,240 | | 3,240 | | 29,523 | 1,395 |
| 390 | Office Furniture and Equipment | | | - | | - | - |
| 391 | Transportation Equipment | | | - | | - | - |
| 393 | Tools, Shop and Garage Equipment. | | | - | | - | - |
| 394 | Laboratory Equipment | | | - | | 2,066 | 103 |
| 395 | Power Operated Equipment | | | - | | - | - |
| 398 | Other TangiblePlant | | | - | | - | - |
| | | - | | - | | - | - |
| | Plant Held for Future Use | - | | - | | - | - |
| | TOTAL WATER PLANT | 253,250 | (942) | 252,308 | - | 4,819,300 | 234,265 |

**Black Mountain Sewer Company**
Plant Additions and Retirements

Exhibit
Schedule B-2
Page 3e
Witness: Bourassa

| Account No. | Description | 1998 Plant Additions | 1998 Plant Adjustments | 1998 Adjusted Plant Additions | 1998 Plant Retirements | 1998 Plant Balance | 1998 Deprec. |
|---|---|---|---|---|---|---|---|
| 351 | Organization | | | - | | - | - |
| 352 | Franchises | | | - | | - | - |
| 353 | Land and Land Rights | | | - | | 7,854 | - |
| 354 | Structures and Improvements | 5,512 | | 5,512 | | 1,008,362 | 50,280 |
| 355 | Power Generation Equipment | | | - | | - | - |
| 360 | Collection Sewers - Force | | | - | | 263,378 | 13,169 |
| 361 | Collection Sewers - Gravity | | | - | | 2,805,034 | 140,252 |
| 362 | Special Collecting Structures | | | - | | - | - |
| 363 | Services to Customers | | | - | | 143,379 | 7,169 |
| 364 | Flow Measuring Devices | | | - | | 23,168 | 1,158 |
| 365 | Flow Measuring Installations | | | - | | - | - |
| 370 | Receiving Wells | 128,296 | | 128,296 | | 329,483 | 13,267 |
| 371 | Eff;uent Pumping Equipment | 2,133 | | 2,133 | | 261,697 | 13,032 |
| 380 | Treatment and Disposal Equipment | | | - | | - | - |
| 381 | Plant Sewers | | | - | | 81,297 | 4,065 |
| 382 | Outfall Sewer Lines | | | - | | - | - |
| 389 | Other Plant and Misc. Equipment | | | - | | 29,523 | 1,476 |
| 390 | Office Furniture and Equipment | | | - | | - | - |
| 391 | Transportation Equipment | | | - | | - | - |
| 393 | Tools, Shop and Garage Equipment. | | | - | | - | - |
| 394 | Laboratory Equipment | | | - | | 2,066 | 103 |
| 395 | Power Operated Equipment | | | - | | - | - |
| 398 | Other TangiblePlant | | | - | | - | - |
| | | - | | - | | - | - |
| | Plant Held for Future Use | - | | - | | - | - |
| | TOTAL WATER PLANT | 135,941 | - | 135,941 | - | 4,955,241 | 243,971 |

**Black Mountain Sewer Company**
Plant Additions and Retirements

Exhibit
Schedule B-2
Page 3f
Witness: Bourassa

| Account No. | Description | 1999 Plant Additions | 1999 Plant Adjustments | 1999 Adjusted Plant Additions | 1999 Plant Retirements | 1999 Plant Balance | 1999 Deprec. |
|---|---|---|---|---|---|---|---|
| 351 | Organization | | | - | | - | - |
| 352 | Franchises | | | - | | - | - |
| 353 | Land and Land Rights | | | - | | 7,854 | - |
| 354 | Structures and Improvements | | | - | | 1,008,362 | 50,418 |
| 355 | Power Generation Equipment | | | - | | - | - |
| 360 | Collection Sewers - Force | 23,182 | | 23,182 | | 286,560 | 13,748 |
| 361 | Collection Sewers - Gravity | 5,081 | | 5,081 | | 2,810,115 | 140,379 |
| 362 | Special Collecting Structures | | | - | | - | - |
| 363 | Services to Customers | | | - | | 143,379 | 7,169 |
| 364 | Flow Measuring Devices | 4,737 | | 4,737 | | 27,905 | 1,277 |
| 365 | Flow Measuring Installations | | | - | | - | - |
| 370 | Receiving Wells | 121,889 | | 121,889 | | 451,372 | 19,521 |
| 371 | Eff;uent Pumping Equipment | 1,268 | | 1,268 | | 262,965 | 13,117 |
| 380 | Treatment and Disposal Equipment | | | - | | - | - |
| 381 | Plant Sewers | | | - | | 81,297 | 4,065 |
| 382 | Outfall Sewer Lines | | | - | | - | - |
| 389 | Other Plant and Misc. Equipment | | | - | | 29,523 | 1,476 |
| 390 | Office Furniture and Equipment | | | - | | - | - |
| 391 | Transportation Equipment | | | - | | - | - |
| 393 | Tools, Shop and Garage Equipment. | | | - | | - | - |
| 394 | Laboratory Equipment | 2,200 | | 2,200 | | 4,266 | 158 |
| 395 | Power Operated Equipment | | | - | | - | - |
| 398 | Other TangiblePlant | | | - | | - | - |
| | | - | | - | | - | - |
| | Plant Held for Future Use | - | | - | | - | - |
| | TOTAL WATER PLANT | 158,357 | - | 158,357 | - | 5,113,598 | 251,328 |

**Black Mountain Sewer Company**
Plant Additions and Retirements

Exhibit
Schedule B-2
Page 3g
Witness: Bourassa

| Account No. | Description | 2000 Plant Additions | 2000 Plant Adjustments | 2000 Adjusted Plant Additions | 2000 Plant Retirements | 2000 Plant Balance | 2000 Deprec. |
|---|---|---|---|---|---|---|---|
| 351 | Organization | | | - | | - | - |
| 352 | Franchises | | | - | | - | - |
| 353 | Land and Land Rights | - | | - | | 7,854 | - |
| 354 | Structures and Improvements | | | - | (5,511) | 1,002,851 | 50,280 |
| 355 | Power Generation Equipment | - | | - | | - | - |
| 360 | Collection Sewers - Force | | | - | (69,985) | 216,575 | 12,578 |
| 361 | Collection Sewers - Gravity | 1,200 | | 1,200 | | 2,811,315 | 140,536 |
| 362 | Special Collecting Structures | - | | - | | - | - |
| 363 | Services to Customers | | | - | | 143,379 | 7,169 |
| 364 | Flow Measuring Devices | 2,804 | | 2,804 | | 30,709 | 1,465 |
| 365 | Flow Measuring Installations | - | | - | | - | - |
| 370 | Receiving Wells | 186,570 | | 186,570 | | 637,942 | 27,233 |
| 371 | Eff;uent Pumping Equipment | 6,816 | | 6,816 | | 269,781 | 13,319 |
| 380 | Treatment and Disposal Equipment | - | | - | | - | - |
| 381 | Plant Sewers | - | | - | | 81,297 | 4,065 |
| 382 | Outfall Sewer Lines | - | | - | | - | - |
| 389 | Other Plant and Misc. Equipment | 10,034 | | 10,034 | | 39,557 | 1,727 |
| 390 | Office Furniture and Equipment | 1 | | 1 | | 1 | 0 |
| 391 | Transportation Equipment | - | | - | | - | - |
| 393 | Tools, Shop and Garage Equipment. | - | | - | | - | - |
| 394 | Laboratory Equipment | | | - | (2,066) | 2,200 | 162 |
| 395 | Power Operated Equipment | - | | - | | - | - |
| 398 | Other TangiblePlant | | | - | | - | - |
| | | - | | - | | - | - |
| | Plant Held for Future Use | - | | - | | - | - |
| | TOTAL WATER PLANT | 207,425 | - | 207,425 | (77,562) | 5,243,461 | 258,534 |

**Black Mountain Sewer Company**
Plant Additions and Retirements

Exhibit
Schedule B-2
Page 3h
Witness: Bourassa

| Account No. | Description | 2001 Plant Additions | 2001 Plant Adjustments | 2001 Adjusted Plant Additions | 2001 Plant Retirements | 2001 Plant Balance | 2001 Deprec. |
|---|---|---|---|---|---|---|---|
| 351 | Organization | - | | - | | - | - |
| 352 | Franchises | - | | - | | - | - |
| 353 | Land and Land Rights | 452,467 | | 452,467 | | 460,321 | - |
| 354 | Structures and Improvements | 44,888 | | 44,888 | | 1,047,739 | 51,265 |
| 355 | Power Generation Equipment | - | | - | | - | - |
| 360 | Collection Sewers - Force | 6,332 | | 6,332 | | 222,907 | 10,987 |
| 361 | Collection Sewers - Gravity | 3,054 | | 3,054 | | 2,814,369 | 140,642 |
| 362 | Special Collecting Structures | - | | - | | - | - |
| 363 | Services to Customers | 2,120 | | 2,120 | | 145,499 | 7,222 |
| 364 | Flow Measuring Devices | 96 | | 96 | | 30,805 | 1,538 |
| 365 | Flow Measuring Installations | - | | - | | - | - |
| 370 | Receiving Wells | 18,734 | | 18,734 | | 656,676 | 32,365 |
| 371 | Eff;uent Pumping Equipment | 9,361 | | 9,361 | | 279,142 | 13,723 |
| 380 | Treatment and Disposal Equipment | - | | - | | - | - |
| 381 | Plant Sewers | - | | - | | 81,297 | 4,065 |
| 382 | Outfall Sewer Lines | - | | - | | - | - |
| 389 | Other Plant and Misc. Equipment | 9,437 | | 9,437 | | 48,994 | 2,214 |
| 390 | Office Furniture and Equipment | 99,442 | | 99,442 | | 99,443 | 2,486 |
| 391 | Transportation Equipment | - | | - | | - | - |
| 393 | Tools, Shop and Garage Equipment. | - | | - | | - | - |
| 394 | Laboratory Equipment | - | | - | | 2,200 | 110 |
| 395 | Power Operated Equipment | - | | - | | - | - |
| 398 | Other TangiblePlant | - | | - | | - | - |
| | | - | | - | | - | - |
| | Plant Held for Future Use | - | | - | | | - |
| | TOTAL WATER PLANT | 645,931 | - | 645,931 | - | 5,889,392 | 266,617 |

**Black Mountain Sewer Company**
Plant Additions and Retirements

Exhibit
Schedule B-2
Page 3i
Witness: Bourassa

| Account No. | Description | 2002 Plant Additions | 2002 Plant Adjustments | 2002 Adjusted Plant Additions | 2002 Plant Retirements | 2002 Plant Balance | 2002 Deprec. |
|---|---|---|---|---|---|---|---|
| 351 | Organization | - | | - | | - | - |
| 352 | Franchises | - | | - | | - | - |
| 353 | Land and Land Rights | 1,125 | | 1,125 | | 461,446 | - |
| 354 | Structures and Improvements | 26,475 | | 26,475 | | 1,074,214 | 53,049 |
| 355 | Power Generation Equipment | 6,510 | | 6,510 | | 6,510 | 163 |
| 360 | Collection Sewers - Force | 1,969 | | 1,969 | | 224,876 | 11,195 |
| 361 | Collection Sewers - Gravity | 17,824 | | 17,824 | | 2,832,193 | 141,164 |
| 362 | Special Collecting Structures | - | | - | | - | - |
| 363 | Services to Customers | 12,837 | | 12,837 | | 158,336 | 7,596 |
| 364 | Flow Measuring Devices | 3,695 | | 3,695 | | 34,500 | 1,633 |
| 365 | Flow Measuring Installations | - | | - | | - | - |
| 370 | Receiving Wells | 2,925 | | 2,925 | | 659,601 | 32,907 |
| 371 | Eff;uent Pumping Equipment | 425 | | 425 | | 279,567 | 13,968 |
| 380 | Treatment and Disposal Equipment | - | | - | | - | - |
| 381 | Plant Sewers | 29,063 | | 29,063 | | 110,360 | 4,791 |
| 382 | Outfall Sewer Lines | - | | - | | - | - |
| 389 | Other Plant and Misc. Equipment | 439,771 | | 439,771 | | 488,765 | 13,444 |
| 390 | Office Furniture and Equipment | 115,628 | | 115,628 | | 215,071 | 7,863 |
| 391 | Transportation Equipment | 21,120 | | 21,120 | | 21,120 | 528 |
| 393 | Tools, Shop and Garage Equipment. | - | | - | | - | - |
| 394 | Laboratory Equipment | 1,447 | | 1,447 | | 3,647 | 146 |
| 395 | Power Operated Equipment | - | | - | | - | - |
| 398 | Other TangiblePlant | - | | - | | - | - |
| | Plant Held for Future Use | - | | - | | - | - |
| | TOTAL WATER PLANT | 680,814 | - | 680,814 | - | 6,570,206 | 288,446 |

**Black Mountain Sewer Company**
Plant Additions and Retirements

Exhibit
Schedule B-2
Page 3j
Witness: Bourassa

| Account No. | Description | 2003 Plant Additions | 2003 Plant Adjustments | 2003 Adjusted Plant Additions | 2003 Plant Retirements | 2003 Plant Balance | 2003 Deprec. |
|---|---|---|---|---|---|---|---|
| 351 | Organization | - | | - | | - | - |
| 352 | Franchises | - | | - | | - | - |
| 353 | Land and Land Rights | - | | - | | 461,446 | - |
| 354 | Structures and Improvements | 78,531 | | 78,531 | | 1,152,745 | 55,674 |
| 355 | Power Generation Equipment | 1,100 | | 1,100 | | 7,610 | 353 |
| 360 | Collection Sewers - Force | 3,166 | | 3,166 | | 228,042 | 11,323 |
| 361 | Collection Sewers - Gravity | 3,759 | | 3,759 | | 2,835,952 | 141,704 |
| 362 | Special Collecting Structures | - | | - | | - | - |
| 363 | Services to Customers | 14,204 | (13,738) | 466 | | 158,802 | 7,928 |
| 364 | Flow Measuring Devices | - | | - | | 34,500 | 1,725 |
| 365 | Flow Measuring Installations | - | | - | | - | - |
| 370 | Receiving Wells | 36,905 | | 36,905 | | 696,506 | 33,903 |
| 371 | Eff;uent Pumping Equipment | 138,888 | | 138,888 | | 418,455 | 17,451 |
| 380 | Treatment and Disposal Equipment | - | | - | | - | - |
| 381 | Plant Sewers | 166,349 | | 166,349 | | 276,709 | 9,677 |
| 382 | Outfall Sewer Lines | - | | - | | - | - |
| 389 | Other Plant and Misc. Equipment | 213,268 | | 213,268 | | 702,033 | 29,770 |
| 390 | Office Furniture and Equipment | 145,169 | | 145,169 | | 360,240 | 14,383 |
| 391 | Transportation Equipment | 66,691 | | 66,691 | | 87,811 | 2,723 |
| 393 | Tools, Shop and Garage Equipment. | - | | - | | - | - |
| 394 | Laboratory Equipment | 3,632 | | 3,632 | | 7,279 | 273 |
| 395 | Power Operated Equipment | - | | - | | - | - |
| 398 | Other TangiblePlant | - | | - | | - | - |
| | | - | | - | | - | - |
| | Plant Held for Future Use | - | | - | | - | - |
| | TOTAL WATER PLANT | 871,662 | (13,738) | 857,924 | - | 7,428,130 | 326,886 |

**Black Mountain Sewer Company**
Plant Additions and Retirements

Exhibit
Schedule B-2
Page 3k
Witness: Bourassa

| Account No. | Description | 2004 Plant Additions | 2004 Plant Adjustments | 2004 Adjusted Plant Additions | 2004 Plant Retirements | 2004 Plant Balance | 2004 Deprec. |
|---|---|---|---|---|---|---|---|
| 351 | Organization | - | | - | | - | - |
| 352 | Franchises | - | | - | | - | - |
| 353 | Land and Land Rights | - | | - | | 461,446 | - |
| 354 | Structures and Improvements | 92,547 | | 92,547 | | 1,245,292 | 59,951 |
| 355 | Power Generation Equipment | - | (7,610) | (7,610) | | - | 190 |
| 360 | Collection Sewers - Force | 743 | | 743 | | 228,785 | 11,421 |
| 361 | Collection Sewers - Gravity | 772,667 | | 772,667 | | 3,608,619 | 161,114 |
| 362 | Special Collecting Structures | - | | - | | - | - |
| 363 | Services to Customers | - | | - | | 158,802 | 7,940 |
| 364 | Flow Measuring Devices | 5,378 | | 5,378 | | 39,878 | 1,859 |
| 365 | Flow Measuring Installations | - | 158,358 | 158,358 | | 158,358 | 3,959 |
| 370 | Receiving Wells | - | | - | | 696,506 | 34,825 |
| 371 | Eff;uent Pumping Equipment | 33,250 | | 33,250 | | 451,705 | 21,754 |
| 380 | Treatment and Disposal Equipment | - | | - | | - | - |
| 381 | Plant Sewers | 3,300 | (158,358) | (155,058) | | 121,651 | 9,959 |
| 382 | Outfall Sewer Lines | - | | - | | - | - |
| 389 | Other Plant and Misc. Equipment | 29,161 | 7,610 | 36,771 | | 738,804 | 36,021 |
| 390 | Office Furniture and Equipment | 5,272 | | 5,272 | | 365,512 | 18,144 |
| 391 | Transportation Equipment | - | | - | | 87,811 | 4,391 |
| 393 | Tools, Shop and Garage Equipment. | - | | - | | - | - |
| 394 | Laboratory Equipment | - | | - | | 7,279 | 364 |
| 395 | Power Operated Equipment | - | | - | | - | - |
| 398 | Other TangiblePlant | - | | - | | - | - |
| | Plant Held for Future Use | | | - | | - | - |
| | TOTAL WATER PLANT | 942,318 | - | 942,318 | - | 8,370,448 | 371,892 |

**Black Mountain Sewer Company**
Plant Additions and Retirements

Exhibit
Schedule B-2
Page 3p
Witness: Bourassa

| Account No. | Description | Year End Accumulated Depreciation by Account Jun-94 1994 | Dec-94 1994 | Dec-95 1995 | Dec-96 1996 | Dec-97 1997 | Dec-98 1998 | Dec-99 1999 |
|---|---|---|---|---|---|---|---|---|
| 351 | Organization | - | - | - | - | - | - | - |
| 352 | Franchises | - | - | - | - | - | - | - |
| 353 | Land and Land Rights | - | - | - | - | - | - | - |
| 354 | Structures and Improvements | 350,623 | 375,108 | 424,080 | 473,051 | 522,609 | 572,889 | 623,307 |
| 355 | Power Generation Equipment | - | - | - | - | - | - | - |
| 360 | Collection Sewers - Force | 94,053 | 100,621 | 113,758 | 126,894 | 140,047 | 153,216 | 166,964 |
| 361 | Collection Sewers - Gravity | 995,640 | 1,065,171 | 1,204,232 | 1,343,293 | 1,482,950 | 1,623,201 | 1,763,580 |
| 362 | Special Collecting Structures | - | - | - | - | - | - | - |
| 363 | Services to Customers | 51,328 | 54,912 | 62,081 | 69,250 | 76,419 | 83,588 | 90,757 |
| 364 | Flow Measuring Devices | 8,294 | 8,873 | 10,031 | 11,190 | 12,348 | 13,507 | 14,783 |
| 365 | Flow Measuring Installations | - | - | - | - | - | - | - |
| 370 | Receiving Wells | - | - | - | - | 5,030 | 18,296 | 37,818 |
| 371 | Eff;uent Pumping Equipment | 92,920 | 99,410 | 112,388 | 125,366 | 138,344 | 151,376 | 164,492 |
| 380 | Treatment and Disposal Equipment | - | - | - | - | - | - | - |
| 381 | Plant Sewers | 29,103 | 31,136 | 35,201 | 39,265 | 43,330 | 47,395 | 51,460 |
| 382 | Outfall Sewer Lines | - | - | - | - | - | - | - |
| 389 | Other Plant and Misc. Equipment | 9,409 | 10,066 | 11,380 | 12,694 | 14,089 | 15,566 | 17,042 |
| 390 | Office Furniture and Equipment | - | - | - | - | - | - | - |
| 391 | Transportation Equipment | - | - | - | - | - | - | - |
| 393 | Tools, Shop and Garage Equipment. | - | - | - | - | - | - | - |
| 394 | Laboratory Equipment | 740 | 791 | 895 | 998 | 1,101 | 1,204 | 1,363 |
| 395 | Power Operated Equipment | - | - | - | - | - | - | - |
| 398 | Other TangiblePlant | - | - | - | - | - | - | - |
| | | - | - | - | - | - | - | - |
| | Plant Held for Future Use | - | - | - | - | - | - | - |
| | TOTAL WATER PLANT | 1,632,110 | 1,746,088 | 1,974,045 | 2,202,002 | 2,436,267 | 2,680,238 | 2,931,566 |

**Black Mountain Sewer Company**
Plant Additions and Retirements

*Exhibit*
Schedule B-2
Page 3q
Witness: Bourassa

| Account No. | Description | Dec-00 2000 | Dec-01 2001 | Dec-02 2002 | Dec-03 2003 | Dec-04 2004 |
|---|---|---|---|---|---|---|
| 351 | Organization | - | - | - | - | - |
| 352 | Franchises | - | - | - | - | - |
| 353 | Land and Land Rights | - | - | - | - | - |
| 354 | Structures and Improvements | 668,076 | 719,341 | 772,390 | 828,064 | 888,015 |
| 355 | Power Generation Equipment | - | - | 163 | 516 | 706 |
| 360 | Collection Sewers - Force | 109,557 | 120,545 | 131,739 | 143,062 | 154,483 |
| 361 | Collection Sewers - Gravity | 1,904,116 | 2,044,758 | 2,185,922 | 2,327,626 | 2,488,740 |
| 362 | Special Collecting Structures | - | - | - | - | - |
| 363 | Services to Customers | 97,926 | 105,148 | 112,744 | 120,672 | 128,612 |
| 364 | Flow Measuring Devices | 16,249 | 17,787 | 19,419 | 21,144 | 23,004 |
| 365 | Flow Measuring Installations | - | - | - | - | 3,959 |
| 370 | Receiving Wells | 65,051 | 97,416 | 130,323 | 164,226 | 199,051 |
| 371 | Eff;uent Pumping Equipment | 177,811 | 191,534 | 205,502 | 222,952 | 244,706 |
| 380 | Treatment and Disposal Equipment | - | - | - | - | - |
| 381 | Plant Sewers | 55,525 | 59,590 | 64,381 | 74,058 | 84,017 |
| 382 | Outfall Sewer Lines | - | - | - | - | - |
| 389 | Other Plant and Misc. Equipment | 18,769 | 20,983 | 34,427 | 64,196 | 100,217 |
| 390 | Office Furniture and Equipment | 0 | 2,486 | 10,349 | 24,732 | 42,876 |
| 391 | Transportation Equipment | - | - | 528 | 3,251 | 7,642 |
| 393 | Tools, Shop and Garage Equipment. | - | - | - | - | - |
| 394 | Laboratory Equipment | (542) | (432) | (285) | (12) | 352 |
| 395 | Power Operated Equipment | - | - | - | - | - |
| 398 | Other TangiblePlant | - | - | - | - | - |
| | | - | - | - | - | - |
| | Plant Held for Future Use | - | - | - | - | - |
| | TOTAL WATER PLANT | 3,112,538 | 3,379,155 | 3,667,600 | 3,994,487 | 4,366,379 |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Original Cost Rate Base Proforma Adjustments
Adjustment 3

Exhibit
Schedule B-2
Page 4
Witness: Bourassa

| Line No. | | | | | |
|---|---|---|---|---|---|
| 1 | Computation of CIAC Balances for Scottsdale Treatment Capacity (to be removed from rate base) | | | | |
| 2 | | | | | |
| 3 | Balance at 12/31/1996 per Decision 59944 | | | | $ 300,000 |
| 4 | Additions 1997 per Decision 60240 | | | | 153,706 |
| 5 | Balance at 12/31/1997 | | | | $ 453,706 |
| 6 | Additions 1998 | | | | - |
| 7 | Balance at 12/31/1998 | | | | $ 453,706 |
| 8 | Additions 1999 | | | | - |
| 9 | Balance at 12/31/1999 | | | | $ 453,706 |
| 10 | Additions 2000 | | | | - |
| 11 | Balance at 12/31/2000 | | | | $ 453,706 |
| 12 | Additions 2001 | | | | - |
| 13 | Balance at 12/31/2001 | | | | $ 453,706 |
| 14 | Additions 2002 | | | | - |
| 15 | Balance at 12/31/2002 | | | | $ 453,706 |
| 16 | Additions 2003 | | | | |
| 17 | Balance at 12/31/2003 | | | | $ 453,706 |
| 18 | Additions 2004 | | | | |
| 19 | Balance at 12/31/2004 | | | | $ 453,706 |
| 20 | | | | | |
| 21 | | | | | |
| 22 | Computation of Accumulated Amortization CIAC Balances (Half-year Convention) | | | | |
| 23 | | | | | |
| 24 | Balance at 12/31/1996 per Decision 59944 | | | | $ - |
| 25 | Amortization at composite rate | 5.00% | 1997 | | 18,843 |
| 26 | Balance at 12/31/1997 | | | | $ 18,843 |
| 27 | Amortization at composite rate | 5.00% | 1998 | | 22,685 |
| 28 | Balance at 12/31/1998 | | | | $ 41,528 |
| 29 | Amortization at composite rate | 5.00% | 1999 | | 22,685 |
| 30 | Balance at 12/31/1999 | | | | $ 64,213 |
| 31 | Amortization at composite rate | 5.00% | 2000 | | 22,685 |
| 32 | Balance at 12/31/1997 | | | | $ 86,899 |
| 33 | Amortization at composite rate | 5.00% | 2001 | | 22,685 |
| 34 | Balance at 12/31/1997 | | | | $ 109,584 |
| 35 | Amortization at composite rate | 5.00% | 2002 | | 22,685 |
| 36 | Balance at 12/31/2001 | | | | $ 132,269 |
| 37 | Amortization at composite rate | 5.00% | 2003 | | 22,685 |
| 38 | Balance at 12/31/2002 | | | | $ 154,954 |
| 39 | Amortization at composite rate | 5.00% | 2004 | | 22,685 |
| 40 | Balance at 12/31/2003 | | | | $ 177,640 |
| 41 | | | | | |
| 42 | Scottsdale Treatment Capacity CIAC at end of T.Y. | | | | $ 453,706 |
| 43 | Accumulated Amortization of CIAC at end of T.Y. | | | | 177,640 |
| 44 | Scottsdale Treatment Capacity CIAC, Net | | | | $ 276,066 |
| 45 | | | | Label | |
| 46 | Increase (decrease) in Scottsdale Treatment Capacity CIAC at end of T.Y. | | | 3a | (453,706) |
| 47 | Decrease (Increase) in Accumulated Amortization of CIAC at end of T.Y. | | | 3b | 177,640 |
| 48 | | | | | |
| 49 | | | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Computation of Working Capital

Exhibit
Schedule B-5
Page 1
Witness: Bourassa

| Line No. | | | |
|---|---|---|---|
| 1 | Cash Working Capital (1/8 of Allowance | | |
| 2 | Operation and Maintenance Expense) | $ | 123,714 |
| 3 | Pumping Power (1/24 of Pumping Power) | | 41 |
| 4 | Purchased Water (1/24 of Purchased Water) | | 6,753 |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | Total Working Capital Allowance | $ | 130,508 |
| 10 | | | |
| 11 | | | |
| 12 | Working Capital Requested | $ | 130,508 |
| 13 | | | |
| 14 | | | |
| 15 | SUPPORTING SCHEDULES: | RECAP SCHEDULES: | |
| 16 | E-1 | B-1 | |
| 17 | | | |

# C
# SCHEDULES

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Income Statement

Exhibit
Schedule C-1
Page 1
Witness: Bourassa

| Line No. | | Test Year Book Results | Label | Adjustment | Test Year Adjusted Results | Proposed Rate Increase | Adjusted with Rate Increase |
|---|---|---|---|---|---|---|---|
| 1 | **Revenues** | | | | | | |
| 2 | Flat Rate Revenues | $ 1,173,940 | 5 | $ 17,328 | $ 1,191,268 | $ 163,279 | $ 1,354,547 |
| 3 | Measured Revenues | - | | | - | | - |
| 4 | Other Wastewater Revenues | 16,472 | | | 16,472 | | 16,472 |
| 5 | | $ 1,190,412 | | $ 17,328 | $ 1,207,740 | $ 163,279 | $ 1,371,019 |
| 6 | **Operating Expenses** | | | | | | |
| 7 | Salaries and Wages | $ - | | | $ - | | $ - |
| 8 | Purchased Wastewater Treatment | 160,789 | 7 | 1,293 | 162,082 | | 162,082 |
| 9 | Sludge Removal Expense | 981 | | | 981 | | 981 |
| 10 | Purchased Power | 45,594 | 9/10 | 2,133 | 47,727 | | 47,727 |
| 11 | Fuel for Power Production | - | | | - | | - |
| 12 | Chemicals | 73,928 | 8 | 2,684 | 76,612 | | 76,612 |
| 13 | Materials and Supplies | 30,420 | | | 30,420 | | 30,420 |
| 14 | Contractual Services - Professional | 171,683 | | | 171,683 | | 171,683 |
| 15 | Contractual Services - Testing | 11,000 | | | 11,000 | | 11,000 |
| 16 | Contractual Services - Other | 226,595 | | | 226,595 | | 226,595 |
| 17 | Rents | 10,825 | | | 10,825 | | 10,825 |
| 18 | Transportation Expenses | 4,870 | | | 4,870 | | 4,870 |
| 19 | Insurance - General Liability | 16,204 | | | 16,204 | | 16,204 |
| 20 | Regulatory Commission Expense | - | 4 | 30,000 | 30,000 | | 30,000 |
| 21 | Miscellaneous Expense | 77,401 | | | 77,401 | | 77,401 |
| 22 | Scottsdale Capacity (Operating Lease) | - | 3 | 189,622 | 189,622 | | 189,622 |
| 23 | Depreciation | 67,484 | 1 | 59,265 | 126,749 | | 126,749 |
| 24 | Taxes Other Than Income | - | | | - | | - |
| 25 | Property Taxes | 32,328 | 2 | 13,417 | 45,745 | | 45,745 |
| 26 | Income Tax | - | 11 | (6,544) | (6,544) | 51,427 | 44,883 |
| 27 | | | | | - | | - |
| 28 | **Total Operating Expenses** | $ 930,102 | | $ 291,871 | $ 1,221,973 | $ 51,427 | $ 1,273,399 |
| 29 | **Operating Income** | $ 260,310 | | $ (274,543) | $ (14,233) | $ 111,852 | $ 97,619 |
| 30 | **Other Income (Expense)** | | | | | | |
| 31 | Interest Income | 932 | 6a | (932) | - | | - |
| 32 | Other income | 24,000 | 6b | (24,000) | - | | - |
| 33 | Interest Expense | (116,401) | 6c | 116,401 | - | | - |
| 34 | Other Expense | - | | | - | | - |
| 35 | | - | | | - | | - |
| 36 | **Total Other Income (Expense)** | $ (91,469) | | $ 91,469 | $ - | $ - | $ - |
| 37 | **Net Profit (Loss)** | $ 168,841 | | $ (183,074) | $ (14,233) | $ 111,852 | $ 97,619 |
| 38 | | | | | | | |
| 39 | SUPPORTING SCHEDULES: | | | | | RECAP SCHEDULES: | |
| 40 | C-2 | | | | | A-1 | |
| 41 | E-2 | | | | | | |
| 42 | | | | | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Adjustments to Revenues and Expenses

Exhibit
Schedule C-2
Page 1
Witness: Bourassa

Adjustments to Revenues and Expenses

| Line No. | | 1 Depreciation Expense | 2 Property Taxes | 3 Scottsdale Treatment Capacity | 4 Rate Case Expense | 5 Revenue Annualization | 6 Remove Other Exp./Income | Subtotal |
|---|---|---|---|---|---|---|---|---|
| 3 | Revenues | | | | | 17,328 | | 17,328 |
| 5 | Expenses | 59,265 | 13,417 | 189,622 | 30,000 | | | 292,304 |
| 8 | Operating Income | (59,265) | (13,417) | (189,622) | (30,000) | 17,328 | - | (274,976) |
| 10 | Interest | | | | | | | - |
| 11 | Expense | | | | | | 116,401 | 116,401 |
| 13 | Other Income / | | | | | | (24,932) | (24,932) |
| 14 | Expense | | | | | | | |
| 16 | Net Income | (59,265) | (13,417) | (189,622) | (30,000) | 17,328 | 91,469 | (183,507) |

Adjustments to Revenues and Expenses

| Line No. | | 7 Annualization Purchased WW Treatmen | 8 Annualization Chemicals | 9 Annualization Purchased Power | 10 Purchased Power Increase | 11 Income Taxes | 12 | Subtotal |
|---|---|---|---|---|---|---|---|---|
| 23 | Revenues | | | | | | | 17,328 |
| 25 | Expenses | 1,293 | 2,684 | 205 | 1,928 | (6,544) | | 291,871 |
| 28 | Operating Income | (1,293) | (2,684) | (205) | (1,928) | 6,544 | - | (274,543) |
| 30 | Interest | | | | | | | - |
| 31 | Expense | | | | | | | 116,401 |
| 33 | Other Income / | | | | | | | (24,932) |
| 34 | Expense | | | | | | | |
| 36 | Net Income | (1,293) | (2,684) | (205) | (1,928) | 6,544 | - | (183,074) |

Adjustments to Revenues and Expenses

| Line No. | | 13 | 14 | 15 | 16 | 17 | 18 | Total |
|---|---|---|---|---|---|---|---|---|
| 43 | Revenues | | | | | | | 17,328 |
| 45 | Expenses | | | | | | | 291,871 |
| 48 | Operating Income | - | - | - | - | - | - | (274,543) |
| 50 | Interest | | | | | | | |
| 51 | Expense | | | | | | | 116,401 |
| 53 | Other Income / | | | | | | | (24,932) |
| 54 | Expense | | | | | | | |
| 56 | Net Income | - | - | - | - | - | - | (183,074) |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Adjustments to Revenues and Expenses
Adjustment Number 1

Exhibit
Schedule C-2
Page 2
Witness: Bourassa

| Line No. | | | | | |
|---|---|---|---|---|---|
| 1 | Depreciation Expense | | | | |
| 2 | | | | | |
| 3 | **Account** | | | **Proposed** | **Depreciation** |
| 4 | **No.** | **Description** | **Original Cost** | **Rates** | **Expense** |
| 5 | 351 | Organization | - | 0.00% | - |
| 6 | 352 | Franchises | - | 0.00% | - |
| 7 | 353 | Land and Land Rights | 461,446 | 0.00% | - |
| 8 | 354 | Structures and Improvements | 1,245,292 | 3.33% | 41,468 |
| 9 | 355 | Power Generation Equipment | - | 5.00% | - |
| 10 | 360 | Collection Sewers - Force | 228,785 | 2.00% | 4,576 |
| 11 | 361 | Collection Sewers - Gravity | 3,608,619 | 2.00% | 72,172 |
| 12 | 362 | Special Collecting Structures | - | 2.00% | - |
| 13 | 363 | Services to Customers | 158,802 | 2.00% | 3,176 |
| 14 | 364 | Flow Measuring Devices | 39,878 | 10.00% | 3,988 |
| 15 | 365 | Flow Measuring Installations | 158,358 | 10.00% | 15,836 |
| 16 | 370 | Receiving Wells | 696,506 | 3.33% | 23,194 |
| 17 | 371 | Eff;uent Pumping Equipment | 451,705 | 12.50% | 56,463 |
| 18 | 380 | Treatment and Disposal Equipment | - | 5.00% | - |
| 19 | 381 | Plant Sewers | 121,651 | 5.00% | 6,083 |
| 20 | 382 | Outfall Sewer Lines | - | 3.33% | - |
| 21 | 389 | Other Plant and Misc. Equipment | 738,804 | 6.67% | 49,278 |
| 22 | 390 | Office Furniture and Equipment | 365,512 | 6.67% | 24,380 |
| 23 | 391 | Transportation Equipment | 87,811 | 20.00% | 17,562 |
| 24 | 393 | Tools, Shop and Garage Equipment. | - | 5.00% | - |
| 25 | 394 | Laboratory Equipment | 7,279 | 10.00% | 728 |
| 26 | 395 | Power Operated Equipment | - | 5.00% | - |
| 27 | 398 | Other TangiblePlant | - | 10.00% | - |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | TOTALS | $ 8,370,448 | | $ 318,903 |
| 31 | | | | | |
| 32 | **Post Test Year Plant per B-2** | | | | |
| 33 | 361 | Collection Sewers - Gravity | $ 24,706 | 2.00% | 494 |
| 34 | 389 | Other Plant and Misc. Equipment | 69,590 | 6.67% | 4,642 |
| 35 | | | | | - |
| 36 | Total PTY Plant | | $ 94,297 | | $ 5,136 |
| 37 | | | | | |
| 38 | Less: Amortization of Contributions - Balance End of TY (net of | | $ 4,892,909 | 4.0322% | $ (197,290) |
| 39 | CIAC amounts used for Scottsdale Capacity) | | | | |
| 40 | Total Depreciation Expense | | | | $ 126,749 |
| 41 | | | | | |
| 42 | Test Year Depreciation Expense | | | | 67,484 |
| 43 | | | | | |
| 44 | Increase (decrease) in Depreciation Expense | | | | 59,265 |
| 45 | | | | | |
| 46 | Adjustment to Revenues and/or Expenses | | | | $ 59,265 |
| 47 | | | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Adjustment to Revenues and Expenses
Adjustment Number 2

Exhibit
Schedule C-2
Page 3
Witness: Bourassa

| Line No. | | | |
|---|---|---|---|
| 1 | Adjust Property Taxes to Reflect Proposed Revenues: | | |
| 2 | | | |
| 3 | Adjusted Revenues in year ended 12/31/04 | $ | 1,207,740 |
| 4 | Adjusted Revenues in year ended 12/31/04 | | 1,207,740 |
| 5 | Proposed Revenues | | 1,371,019 |
| 6 | Average of three year's of revenue | $ | 1,262,166 |
| 7 | Average of three year's of revenue, times 2 | $ | 2,524,333 |
| 8 | Add: | | |
| 9 | Construction Work in Progess at 10% | $ | - |
| 10 | Deduct: | | |
| 11 | Book Value of Transportation Equipment | | 7,279 |
| 12 | | | |
| 13 | Full Cash Value | $ | 2,517,054 |
| 14 | Assessment Ratio | | 24% |
| 15 | Assessed Value | | 604,093 |
| 16 | Property Tax Rate | | 7.5725% |
| 17 | | | |
| 18 | Property Tax | | 45,745 |
| 19 | Tax on Parcels | | 0 |
| 20 | | | |
| 21 | Total Property Tax at Proposed Rates | $ | 45,745 |
| 22 | Property Taxes in the test year | | 32,328 |
| 23 | Change in Property Taxes | $ | 13,417 |
| 24 | | | |
| 25 | | | |
| 26 | Adjustment to Revenues and/or Expenses | $ | 13,417 |
| 27 | | | |
| 28 | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Adjustment to Revenues and Expenses
Adjustment Number 3

Exhibit
Schedule C-2
Page 4
Witness: Bourassa

| Line No. | | | | | |
|---|---|---|---|---|---|
| 1 | Calculation of Lease Costs on Scottsdale Treatment Capacity | | | | |
| 2 | | | | | |
| 3 | Treatment Capacity Costs per Decision 59944 | $ | 1,260,000 | | |
| 4 | Less Amount Funded by CIAC | | (300,000) | | |
| 5 | Net Amount Funded by Debt | $ | 960,000 | | |
| 6 | | | | | |
| 7 | Annual debt service (principle and interest) [20 yrs at interest rate of | | 9.40% | | |
| 8 | 2006 Principle | $ | 38,448 | | |
| 9 | Income Tax Factor | | 1.4805 | | |
| 10 | 2006 Principle Plus Taxes | $ | 56,922 | | |
| 11 | 2006 Interest | $ | 67,952 | | |
| 12 | Annual 'Lease Expense' | | | $ | 124,873 |
| 13 | | | | | |
| 14 | | | | | |
| 15 | Additional Scottsdale Capacity per Decision 60240 | $ | 653,706 | | |
| 16 | Less Amount Funded by CIAC | | (153,706) | | |
| 17 | Net Amount Funded by Debt | $ | 500,000 | | |
| 18 | | | | | |
| 18 | Annual debt service (principle and interest) [20 yrs at interest rate of | | 9.40% | | |
| 19 | 2006 Principle | $ | 19,411 | | |
| 19 | Income Tax Factor | | 1.4805 | | |
| 20 | 2006 Principle Plus Taxes | $ | 28,738 | | |
| 20 | 2006 Interest | $ | 36,010 | | |
| 21 | Annual 'Lease Expense' | | | $ | 64,748 |
| 22 | | | | | |
| 23 | Total Annual 'Lease Expense' | | | $ | 189,622 |
| 24 | | | | | |
| 25 | | | | | |
| 26 | | | | | |
| 27 | | | | | |
| 28 | Adjustment to Revenues and/or Expense | | | $ | 189,622 |
| 29 | | | | | |
| 30 | | | | | |
| 31 | | | | | |
| 32 | | | | | |
| 33 | | | | | |
| 34 | | | | | |
| 35 | | | | | |
| 36 | | | | | |
| 37 | | | | | |
| 38 | | | | | |
| 39 | | | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
ADJUSTMENTS TO REVENUES AND/OR EXPENSES
Adjustment Number 4

Exhibit
Schedule C-2
Page 5
Witness: Bourassa

| Line No. | | | |
|---|---|---|---|
| 1 | Rate Case Expense | | |
| 2 | | | |
| 3 | Estimated Rate Case Expense | $ | 120,000 |
| 4 | | | |
| 5 | Estimated Amortization Period in Years | | 4 |
| 6 | | | |
| 7 | Annual Rate Case Expense | $ | 30,000 |
| 8 | | | |
| 9 | Test Year Rate Case Expense | $ | - |
| 10 | | | |
| 11 | Increase(decrease) Rate Case Expense | $ | 30,000 |
| 12 | | | |
| 13 | Adjustment to Revenue and/or Expense | $ | 30,000 |
| 14 | | | |
| 15 | | | |
| 16 | | | |
| 17 | | | |
| 18 | | | |
| 19 | | | |
| 20 | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Adjustment to Revenues and Expenses
Adjustment Number 5

Exhibit
Schedule C-2
Page 6
Witness: Bourassa

| Line No. | | |
|---|---|---|
| 1 | Revenue Annualization | |
| 2 | | |
| 3 | | |
| 4 | Revenue Annualization | $ 17,328 |
| 5 | | |
| 6 | | |
| 7 | | |
| 8 | Total Revenue from Annualization | $ 17,328 |
| 9 | | |
| 10 | | |
| 11 | Adjustment to Revenue and/or Expense | $ 17,328 |
| 12 | | |
| 13 | SUPPORTING SCHEDULES | |
| 14 | C-2 pages X to X | |
| 15 | H-1 | |
| 16 | | |
| 17 | | |
| 18 | | |
| 19 | | |
| 20 | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Adjustment to Revenues and Expenses
Adjustment Number 6

Exhibit
Schedule C-2
Page 7
Witness: Bourassa

| Line No. | | | Adjustment Label |
|---|---|---|---|
| 1 | Remove Other Income and Expenses to Eliminate Effects on Income Taxes | | |
| 2 | | | |
| 3 | | | |
| 4 | Interest Income | $ (932) | 6a |
| 5 | Other income | (24,000) | 6b |
| 6 | Interest Expense | 116,401 | 6c |
| 7 | | | |
| 8 | Total | $ 91,469 | |
| 9 | | | |
| 10 | | | |
| 11 | Adjustment to Revenue and/or Expense | $ 91,469 | |
| 12 | | | |
| 13 | | | |
| 14 | | | |
| 15 | | | |
| 16 | | | |
| 17 | | | |
| 18 | | | |
| 19 | | | |
| 20 | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Adjustment to Revenues and Expenses
Adjustment Number 7

Exhibit
Schedule C-2
Page 8
Witness: Bourassa

| Line No. | | | |
|---|---|---|---|
| 1 | Annualize Purchased Wastewater Treatment | | |
| 2 | | | |
| 3 | Test Year Purchased Wastewater Treatment | $ | 160,789 |
| 4 | Gallons Treated By Scottsdale (in 1000's) | | 80,049 |
| 5 | Cost per 1,000 gallons | $ | 2.01 |
| 6 | | | |
| 7 | Additonal Wasterwater gallons (in 1,000's) from revenue annualization | | 1,368 |
| | Percent diverted to Scottsdale | | 47.07% |
| 8 | Additonal cost based on revenue annualization | | 644 |
| 9 | | | |
| 10 | Increase (decrease) in Purchased Wastewater Treatment | $ | 1,293 |
| 11 | | | |
| 12 | | | |
| 13 | | | |
| 14 | | | |
| 15 | Adjustment to Revenue and/or Expense | $ | 1,293 |
| 16 | | | |
| 17 | | | |
| 18 | | | |
| 19 | | | |
| 20 | | | |
| 21 | | | |
| 22 | | | |
| 23 | | | |
| 24 | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2001
Adjustment to Revenues and Expenses
Adjustment Number 8

Exhibit
Schedule C-2
Page 9
Witness: Bourassa

| Line No. | | | |
|---|---|---|---|
| 1 | | | |
| 2 | Annualize Chemicals Expense | | |
| 3 | | | |
| 4 | Test Year Chemicals | $ | 73,928 |
| 5 | Gallons Treated By BMSC (in 1000's) | | 37,678 |
| 6 | Cost per 1,000 gallons | $ | 1.96 |
| 7 | | | |
| 8 | Additonal Wasterwater gallons (in 1,000's) from revenue annualization | | 1,368 |
| 9 | | | |
| 10 | Additonal cost based on revenue annualization | | 2,684 |
| 11 | | | |
| 12 | Increase (decrease) in Chemicals Expense | $ | 2,684 |
| 13 | | | |
| 14 | | | |
| 15 | | | |
| 16 | | | |
| 17 | Adjustment to Revenue and/or Expense | $ | 2,684 |
| 18 | | | |
| 19 | | | |
| 20 | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Adjustment to Revenues and Expenses
Adjustment Number 9

Exhibit
Schedule C-2
Page 10
Witness: Bourassa

| Line No. | | | |
|---|---|---|---|
| 1 | | | |
| 2 | Annualize Purchased Power | | |
| 3 | | | |
| 4 | Test Year Purchased Power | $ | 45,594 |
| 5 | Total Flow Gallons (in 1000's) | | 117,727 |
| 6 | Cost per 1,000 gallons | $ | 0.39 |
| 7 | | | |
| 8 | Additonal Wasterwater gallons (in 1,000's) from revenue annualization | | 1,368 |
| 9 | | | |
| 10 | Additonal cost based on revenue annualization | | 530 |
| 11 | | | |
| 12 | Increase (decrease) in Purchased Power | $ | 205 |
| 13 | | | |
| 14 | | | |
| 15 | | | |
| 16 | | | |
| 17 | Adjustment to Revenue and/or Expense | $ | 205 |
| 18 | | | |
| 19 | | | |
| 20 | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Adjustment to Revenues and Expenses
Adjustment Number 10

Exhibit
Schedule C-2
Page 11
Witness: Bourassa

| Line No. | | |
|---|---|---|
| 1 | | |
| 2 | Purchased Power Increase APS | |
| 3 | | |
| 4 | Test Year Purchased Power | $ 45,594 |
| 5 | Plus IOncrease from Annualization | 205 |
| 6 | Total Test Year Adjusted Purchased Power | $ 45,799 |
| 7 | | |
| 8 | APS Increase as percent | 4.21% |
| 9 | | |
| 10 | | |
| 11 | Increase (decrease) in Purchased Power | $ 1,928 |
| 12 | | |
| 13 | | |
| 14 | | |
| 15 | | |
| 16 | Adjustment to Revenue and/or Expense | $ 1,928 |
| 17 | | |
| 18 | | |
| 19 | | |
| 20 | | |
| 21 | | |
| 22 | | |
| 23 | | |
| 24 | | |
| 25 | | |
| 26 | | |
| 27 | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Computation of Gross Revenue Conversion Factor

Exhibit
Schedule C-3
Page 1
Witness: Bourassa

| Line No. | Description | Percentage of Incremental Gross Revenues |
|---|---|---|
| 1 | Federal Income Taxes | 24.53% |
| 2 | | |
| 3 | State Income Taxes | 6.97% |
| 4 | | |
| 5 | Other Taxes and Expenses | 0.00% |
| 6 | | |
| 7 | | |
| 8 | Total Tax Percentage | 31.50% |
| 9 | | |
| 10 | Operating Income % = 100% - Tax Percentage | 68.50% |
| 11 | | |
| 12 | | |
| 13 | | |
| 14 | | |
| 15 | 1 = Gross Revenue Conversion Factor | |
| 16 | Operating Income % | 1.4598 |
| 17 | | |
| 18 | SUPPORTING SCHEDULES: | RECAP SCHEDULES: |
| 19 | | A-1 |
| 20 | | |

# D
# SCHEDULES

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Summary of Cost of Capital

Exhibit
Schedule D-1
Page 1
Witness: Bourassa

| Line No. | Item of Capital | End of Test Year Dollar Amount | Percent of Total | (e) Cost Rate | Weighted Cost | End of Projected Year Dollar Amount | Percent of Total | (e) Cost Rate | Weighted Cost |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Long-Term Debt **(1)** | - | 0.00% | | 0.00% | 1,132,046 | 41.49% | 0.00% | 0.00% |
| 2 | | | | | | | | | |
| 3 | Stockholder's Equity **(2)** | 1,498,949 | 100.00% | 11.00% | 11.00% | 1,596,569 | 58.51% | 11.00% | 6.44% |
| 4 | | | | | | | | | |
| 5 | Totals | 1,498,949 | 100.00% | | 11.00% | 2,728,615 | 100.00% | | 6.44% |
| 6 | | | | | | | | | |
| 7 | **(1) *Excluded long-term debt for Scottsdale Treatment Capacity*** | **$** | **1,184,732** | **.** | | | | | |
| 8 | **(2) Adjusted for correction to accummulated depreciation of** | **$** | **75,381** | **. See B-2 Page 3** | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | SUPPORTING SCHEDULES: | | | | | | | | |
| 12 | D-1 | | | | | | | | |
| 13 | D-3 | | | | | | | | |
| 14 | D-4 | | | | | | | | |
| 15 | E-1 | | | | | | | | |
| 16 | | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |
| 22 | | | | | | | | | |
| 23 | | | | | | | | | |
| 24 | | | | | | | | | |
| 25 | | | | | | | | | |
| 26 | | | | | | | | | |
| 27 | | | | | | | | | |
| 28 | | | | | | | | | |
| 29 | | | | | | | | | |
| 30 | | | | | | | | | |
| 31 | | | | | | | | | |

RECAP SCHEDULES:
A-3

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Cost of Long Term Debt

Exhibit
Schedule D-2
Page 1
Witness: Bourassa

| Line No. | Description of Debt | End of Test Year Amount Outstanding | End of Test Year Annual Interest | End of Test Year Interest Rate | End of Test Year Weighted Cost | End of Projected Year Amount Outstanding | End of Projected Year Annual Interest | End of Projected Year Interest Rate | End of Projected Year Weighted Cost |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Loan for Scottsdale Treatment Capacity | 775,226 | 74,518 | 9.40% | 6.15% | 740,215 | 71,388 | 9.40% | 6.15% |
| 2 | Loan for Scottsdale Treatment Capacity | 409,507 | 39,325 | 9.40% | 3.25% | 391,831 | 36,010 | 9.40% | 3.25% |
| 3 | | | - | | 0.00% | - | - | 0.00% | 0.00% |
| 4 | | | - | | 0.00% | - | - | 0.00% | 0.00% |
| 5 | | | | | | | | | |
| 6 | | | | | | | | | |
| 7 | | | | | | | | | |
| 8 | | | | | | | | | |
| 9 | | | | | | | | | |
| 10 | | | | | | | | | |
| 11 | | | | | | | | | |
| 12 | | | | | | | | | |
| 13 | Totals | $ 1,184,733 | $ 113,843 | | 9.40% | $ 1,132,046 | $ 107,398 | | 9.40% |
| 14 | | | | | | | | | |
| 15 | Supporting Schdules: | | | | | | | | |
| 16 | E-2 | | | | | | | | |
| 17 | | | | | | | | | |
| 18 | | | | | | | | | |
| 19 | | | | | | | | | |
| 20 | | | | | | | | | |
| 21 | | | | | | | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Cost of Preferred Stock

Exhibit
Schedule D-3
Page 1
Witness: Bourassa

| Line No. | Description of Issue | End of Test Year Shares Outstanding | End of Test Year Amount | End of Test Year Dividend Requirement | End of Projected Year Shares Outstanding | End of Projected Year Amount | End of Projected Year Dividend Requirement |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | NOT APPLICABLE, NO PREFERRED STOCK ISSUED OR OUTSTANDING | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |
| 10 | | | | | | | |
| 11 | | | | | | | |
| 12 | | | | | | | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | | | | | | |
| 16 | | | | | | | |
| 17 | SUPPORTING SCHEDULES: | | | RECAP SCHEDULES: | | | |
| 18 | (a) E-1 | | | (a) D-1 | | | |
| 19 | | | | | | | |
| 20 | | | | | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Cost of Common Equity

Exhibit
Schedule D-4
Page 1
Witness: Bouras

| Line No. | |
|---|---|
| 1 | |
| 2 | The Company is proposing a cost of common equity of 11.00%. |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |
| 17 | SUPPORTING SCHEDULES: RECAP SCHEDULES: |
| 18 | (a) E-1 (a) D-1 |
| 19 | |
| 20 | |

Black Mountain Sewer Company
Selected Characteristics of Water Utilities

Schedule D-4.1
Witness: Bourassa

| No. | | % Water Revenues | Operating Revenues (millions) | Net Plant (millions) | S&P Bond Rating | Moody's Bond Rating |
|---|---|---|---|---|---|---|
| 1 | | | | | | |
| 2 | | | | | | |
| 3 | | | | | | |
| 4 | 1. American States | 88% | $ 228.4 | $ 591.1 | A- | A2 |
| 5 | 2. Aqua America | 87% | $ 442.0 | $ 1,792.0 | AA- | NR |
| 6 | 3. California Water | 96% | $ 315.6 | $ 705.4 | NR | A2 |
| 7 | 4. Connecticut Water | 91% | $ 53.3 | $ 195.7 | AA- | NR |
| 8 | 5. Middlesex | 86% | $ 71.0 | $ 235.2 | A+ | NR |
| 9 | 6. SJW Corp. | 97% | $ 166.9 | $ 286.5 | NR | NR |
| 10 | | | | | | |
| 11 | Average | 91% | $ 212.9 | $ 634.3 | | |
| 12 | | | | | | |
| 13 | | | | | | |
| 14 | Source: AUS Utility Reports (August 2005) | | | | | |

Black Mountain Sewer Company
Capital Structures of Water Utilities December 2004

Schedule D-4.2
Witness: Bourassa

| No. | | Book Value | | Market Value | |
|---|---|---|---|---|---|
| 1 | | Long-Term | Common | Long-Term | Common |
| 2 | | Debt | Equity | Debt | Equity |
| 3 | | | | | |
| 4 | 1. American States | 47.7% | 52.3% | 30.5% | 69.5% |
| 5 | 2. Aqua America | 51.2% | 48.8% | 21.5% | 78.5% |
| 6 | 3. California Water | 48.6% | 51.4% | 27.3% | 72.7% |
| 7 | 4. Connecticut Water | 42.8% | 57.2% | 23.6% | 76.4% |
| 8 | 5. Middlesex | 53.8% | 46.2% | 31.7% | 68.3% |
| 9 | 6. SJW Corp. | 43.8% | 56.2% | 22.7% | 77.3% |
| 10 | | | | | |
| 11 | Average | 48.0% | 52.0% | 26.2% | 73.8% |
| 12 | | | | | |
| 13 | Black Mountian Sewer Company | 45.4% | 54.6% | N/A | N/A |
| 14 | | | | | |
| 15 | | | | | |
| 16 | Sources: | | | | |
| 17 | Zacks Investment Research | | | | |
| 18 | | | | | |
| 19 | | | | | |
| 20 | | | | | |

**Black Mountain Sewer Company**
**Comparisons of Past and Future Estimates of Growth**

Schedule D-4.3
Witness: Bourassa

| Line No. | | Company | Five-year historical average annual changes: Price | Book Value | DPS | EPS | Average Future Growth |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | | | | | | | |
| 6 | | | | | | | |
| 7 | 1. | American States | 4.95% | 4.55% | 0.93% | 1.02% | 7.67% |
| 8 | 2. | Aqua America | 16.94% | 10.13% | 6.36% | 8.73% | 10.33% |
| 9 | 3. | California Water | 8.80% | 2.89% | 0.73% | 1.56% | 7.83% |
| 10 | 4. | Connecticut Water | 6.22% | 4.66% | 1.24% | 2.43% | |
| 11 | 5. | Middlesex | 6.56% | 3.62% | 1.93% | 2.07% | 6.00% |
| 12 | 6. | SJW Corp. | 0.17% | 4.81% | 4.99% | 2.55% | |
| 13 | | | | | | | |
| 14 | | | | | | | |
| 15 | | GROUP AVERAGE | 7.27% | 5.11% | 2.69% | 3.06% | 7.96% |
| 16 | | GROUP MEDIAN | 6.39% | 4.61% | 1.58% | 2.25% | 7.75% |
| 17 | | | | | | | |
| 18 | Sources: | | | | | | |
| 19 | | Value Line data reported July 29, 2005 | | | | | |
| 20 | | Yahoo Finance | | | | | |
| 21 | | | | | | | |
| 22 | | | | | | | |

**Black Mountain Sewer Company**

Schedule D-4.4
Witness: Bourassa

**Comparisons of Past and Future Estimates of Growth**

| Line No. | | Company | Ten-year historical average annual changes: Price | Book Value | DPS | EPS | Average Future Growth |
|---|---|---|---|---|---|---|---|
| 1 | 1. | American States | 11.41% | 3.84% | 1.07% | 1.57% | 7.67% |
| 2 | 2. | Aqua America | 17.94% | 8.45% | 5.76% | 9.35% | 10.33% |
| 3 | 3. | California Water | 11.46% | 2.91% | 1.49% | 4.82% | 7.83% |
| 4 | 4. | Connecticut Water | 12.01% | 14.47% | 1.26% | 2.28% | |
| 5 | 5. | Middlesex | 11.34% | 14.95% | 2.31% | 4.38% | 6.00% |
| 6 | 6. | SJW Corp. | 12.45% | 16.09% | 4.11% | 0.63% | |
| 7 | | | | | | | |
| 8 | | GROUP AVERAGE | 12.77% | 10.12% | 2.67% | 3.84% | 7.96% |
| 9 | | GROUP MEDIAN | 11.73% | 11.46% | 1.90% | 3.33% | 7.75% |

Sources:
Value Line data reported July 29, 2005
Yahoo Finance

**Black Mountain Sewer Company**
**Stock Price Comparision**

Schedule D-4.5
Witness: Bourassa

| Line No. | | Company | MONTHLY AVG HIGH/LOW APR 05 | MAY-05 | JUN 05 | 3-MONTH AVERAGE | Spot Price At 07/22/2005 | Difference Spot Price to 3 MOTNH AVG. | Percent Increase |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 1. | American States (AWR) | $ 25.05 | $ 26.94 | $ 29.12 | $ 27.04 | $ 31.07 | $ 4.03 | 14.92% |
| 2 | 2. | Aqua America (WTR) | 26.23 | 27.10 | 29.23 | 27.52 | 30.78 | 3.26 | 11.85% |
| 3 | 3. | California Water (CWT) | 33.69 | 35.16 | 37.24 | 35.36 | 40.00 | 4.64 | 13.12% |
| 4 | 4. | Connecticut Water (CTWS) | 22.84 | 24.34 | 24.90 | 24.03 | 26.92 | 2.89 | 12.05% |
| 5 | 5. | Middlesex (MSEX) | 17.53 | 18.88 | 19.43 | 18.61 | 21.77 | 3.16 | 16.97% |
| 6 | 6. | SJW Corp. (SJW) | 36.46 | 39.96 | 46.72 | 41.05 | 53.75 | 12.70 | 30.94% |
| 7 | | | | | | | | | |
| 8 | | | | | | | | $ 5.11 | 16.64% |
| 9 | | | | | | | | | |

10 Sources:
11 Yahoo Finance web site
12 Zacks Investment Research
13
14
15

**Black Mountain Sewer Company**
**Analysts Forecasts of Earnings Per Share Growth**

Schedule D-4.6
Witness: Bourassa

| Line No. | | Company | (1) Zacks | (2) S&P | (3) Value Line | (4) Average Growth (G) (Cols 1-3) |
|---|---|---|---|---|---|---|
| | | | EPS GROWTH | | | |
| 7 | 1. | American States | 6.00% | 5.00% | 12.00% | 7.67% |
| 8 | 2. | Aqua America | 9.00% | 10.00% | 12.00% | 10.33% |
| 9 | 3. | California Water | 8.00% | 7.00% | 8.50% | 7.83% |
| 10 | 4. | Connecticut Water | | | | 7.96% |
| 11 | 5. | Middlesex | 6.00% | 6.00% | | 6.00% |
| 12 | 6. | SJW Corp. | | | | 7.96% |
| 15 | | GROUP AVERAGE | 7.25% | 7.00% | 10.83% | 7.96% |
| 16 | | GROUP MEDIAN | | | | 7.90% |

Sources:
Value Line Investment Survey Dated July 29, 2005
Zacks Investment Research Site Dated Jul 22, 2005
S&P Earnings Guide August 2005

**Black Mountain Sewer Company**
**Estimates of Sustainable Growth**

Schedule D-4.7
Witness: Bourassa

| Line No. | | Company | (1) Retention Ratio | (2) Rate of Return | (3) br Growth | (4) sv Growth | (5) Average Sustainable Growth (Cols 3+4) |
|---|---|---|---|---|---|---|---|
| 7 | 1. | American States | 0.54 | 12.00% | 6.51% | 2.04% | 8.55% |
| 8 | 2. | Aqua America | 0.59 | 12.50% | 7.34% | 0.77% | 8.11% |
| 9 | 3. | California Water | 0.42 | 11.00% | 4.66% | 4.16% | 8.82% |
| 10 | 4. | Connecticut Water | | | | | |
| 11 | 5. | Middlesex | | | | | |
| 12 | 6. | SJW Corp. | | | | | |
| 15 | | GROUP AVERAGE | 0.52 | 11.83% | 6.17% | 2.32% | 8.49% |
| 16 | | GROUP MEDIAN | 0.54 | 12.00% | 6.51% | 2.04% | 8.55% |

Sources:
Value Line data reported July 29, 2005

**Black Mountain Sewer Company**
**Estimates of sv Growth**

Schedule D-4.8
Witness: Bourassa

| Line No. | | Company | (1) Stock Financing Rate | (2) Current Market to Book Ratio | (3) v | (4) sv Growth |
|---|---|---|---|---|---|---|
| 7 | 1. | American States | 4.67% | 2.05 | 0.51 | 2.39% |
| 8 | 2. | Aqua America | 3.60% | 3.82 | 0.74 | 2.66% |
| 9 | 3. | California Water | 7.46% | 2.57 | 0.61 | 4.56% |
| 10 | 4. | Connecticut Water | | | | na |
| 11 | 5. | Middlesex | | | | na |
| 12 | 6. | SJW Corp. | | | | na |
| 15 | | GROUP AVERAGE | 5.25% | 2.81 | 0.62 | 3.20% |
| 16 | | GROUP MEDIAN | 4.67% | 2.57 | 0.61 | 2.66% |

Sources:
Value Line data reported July 29, 2005

**Black Mountain Sewer Company**
**Discounted Cash Flow Analysis (Water)**
**Constant Growth DCF Model**
**Using Projected EPS Growth**

Schedule D-4.9
Witness: Bourassa

| Line No. | | Company | (1) Spot Price (Po) | (2) Next Year's Div (D1) | (3) Dividend Yield | (4) (a) EPS Growth (g) | (5) Indicated Cost of Equity k=Div Yld + g (Cols 3+4) |
|---|---|---|---|---|---|---|---|
| 7 | 1. | American States | 31.07 | 0.90 | 2.90% | 7.67% | 10.6% |
| 8 | 2. | Aqua America | 30.78 | 0.52 | 1.69% | 10.33% | 12.0% |
| 9 | 3. | California Water | 40.00 | 1.14 | 2.85% | 7.83% | 10.7% |
| 10 | 4. | Connecticut Water | 26.92 | 0.85 | 3.16% | 7.96% | 11.1% |
| 11 | 5. | Middlesex | 21.77 | 0.67 | 3.08% | 6.00% | 9.1% |
| 12 | 6. | SJW Corp. | 53.75 | 1.07 | 1.99% | 7.96% | 10.0% |
| 15 | | GROUP AVERAGE | | | | | 10.6% |
| 16 | | GROUP MEDIAN | | | | | 10.6% |

(a) See Schedules D-4.5

Sources:
Zacks Investment Research
Value Line dated July 29, 2005

**Black Mountain Sewer Company**
**Discounted Cash Flow Analysis (Water)**
**Constant Growth DCF Model - Sustainable Growth**

Schedule D-4.10
Witness: Bourassa

| Line No. | | Company | (1) Spot Price (Po) | (2) Next Year's Div (D1) | (3) Dividend Yield | (4) Sustainable Growth(a) br | (5) vs | (6) br+sv Growth (g) | (7) Indicated Cost of Equity k=Div Yld + g (Cols 3+6) |
|---|---|---|---|---|---|---|---|---|---|
| 7 | 1. | American States | 31.07 | 0.91 | 2.93% | 6.51% | 2.04% | 8.55% | 11.5% |
| 8 | 2. | Aqua America | 30.78 | 0.55 | 1.79% | 7.34% | 0.77% | 8.11% | 9.9% |
| 9 | 3. | California Water | 40.00 | 1.15 | 2.88% | 4.66% | 4.16% | 8.82% | 11.7% |
| 10 | 4. | Connecticut Water | 26.92 | 0.86 | 3.19% | | | 8.49% | 11.7% |
| 11 | 5. | Middlesex | 21.77 | 0.68 | 3.12% | | | 8.49% | 11.6% |
| 12 | 6. | SJW Corp. | 53.75 | 1.12 | 2.08% | | | 8.49% | 10.6% |
| 15 | | GROUP AVERAGE | | | | | | | 11.2% |
| 16 | | GROUP MEDIAN | | | | | | | 11.5% |

(a) See Schedule D-4.6 and D-4.7

Sources:
Value Line Investment Survey Dated July 29, 2005

**Black Mountain Sewer Company**
**Discounted Cash Flow Analysis (Water)**
**Two-Stage Growth - Projected**

Schedule D-4.11
Witness: Bourassa

| Line No. | | Company | (1) Spot Price($P_0$) | (2) Next Year's Div ($D_1$) | (3) Yield ($D_1/P_0$) | (4) Projected Growth Rates Near Term (a) | (5) Long Term (GDP) | (6) Average (b) | (7) Indicated Cost of Equity |
|---|---|---|---|---|---|---|---|---|---|
| 7 | 1. | American States | 31.07 | 0.90 | 2.90% | 7.67% | 6.80% | 7.38% | 10.3% |
| 8 | 2. | Aqua America | 30.78 | 0.52 | 1.69% | 10.33% | 6.80% | 9.17% | 10.9% |
| 9 | 3. | California Water | 40.00 | 1.14 | 2.85% | 7.83% | 6.80% | 7.49% | 10.3% |
| 10 | 4. | Connecticut Water | 26.92 | 0.85 | 3.16% | 7.96% | 6.80% | 7.58% | 10.7% |
| 11 | 5. | Middlesex | 21.77 | 0.67 | 3.08% | 6.00% | 6.80% | 6.26% | 9.3% |
| 12 | 6. | SJW Corp. | 53.75 | 1.07 | 1.99% | 7.96% | 6.80% | 7.58% | 9.6% |
| 15 | | GROUP AVERAGE | | | | | | | 10.2% |
| 16 | | GROUP MEDIAN | | | | | | | 10.3% |

(a) See Schedule D-4.5
(b) Near term growth given weighting of .67

**Black Mountain Sewer Company**
**Risk Premium Equity Cost Analysis**
**Average Equity Returns of Sample Water Companies**

Schedule D-4.12
Witness: Bourassa

| Line No. | | Actual Returns on Equity (a) | Annual Average 10 Year Treasury (b) | Risk Premium 10 Year Treasury |
|---|---|---|---|---|
| 1 | 2004 | 8.95% | 4.27% | 4.68% |
| 2 | 2003 | 8.75% | 4.01% | 4.74% |
| 3 | 2002 | 10.25% | 4.61% | 5.64% |
| 4 | 2001 | 10.05% | 5.02% | 5.03% |
| 5 | 2000 | 9.62% | 6.03% | 3.59% |
| 6 | 1999 | 11.20% | 5.65% | 5.55% |
| 7 | 1998 | 10.62% | 5.26% | 5.36% |
| 8 | 1997 | 11.52% | 6.35% | 5.17% |
| 9 | 1996 | 11.67% | 6.44% | 5.23% |
| 10 | 1995 | 10.93% | 6.57% | 4.36% |
| 11 | | | | |
| 12 | | | | |
| 13 | 10 Year Average Premium | | | 4.93% |
| 14 | 5 Year Average Premium | | | 4.74% |
| 15 | | | | |
| 16 | | | | |
| 17 | Forecasted Interest Rates for 2007-2008(c) | | | 5.45% |
| 18 | | | | |
| 19 | Projected Returns on Equity | | | |
| 20 | 10 Year Average | | | 10.4% |
| 21 | 5 Year Average | | | 10.2% |
| 22 | | | | |
| 23 | | | | |
| 24 | Sources: | | | |
| 25 | (a) Value Line data reported July 29, 2005 | | | |
| 26 | (b) Ibbotson Associates SBBI Valuation Edition 2005 Yearbook | | | |
| 27 | (c) Blue Chip Forecast Interest Rates - 10 year Treas. June, 2005 | | | |
| 28 | | | | |

**Black Mountain Sewer Company**
**Risk Premium Equity Cost Analysis**
**Authorized Equity Returns of Sample Water Companies**

Schedule D-4.13
Witness: Bourassa

| Line No. | | Authorized Returns on Equity (a) | Average Annual 10 Year Treasury (b) | Risk Premium 10 Year Treasury |
|---|---|---|---|---|
| 1 | 2004 | 10.40% | 4.27% | 6.13% |
| 2 | 2003 | 10.48% | 4.01% | 6.47% |
| 3 | 2002 | 10.62% | 4.61% | 6.01% |
| 4 | 2001 | 10.86% | 5.02% | 5.84% |
| 5 | 2000 | 11.12% | 6.03% | 5.09% |
| 6 | 1999 | 11.12% | 5.65% | 5.47% |
| 7 | 1998 | 11.06% | 5.26% | 5.80% |
| 8 | 1997 | 11.18% | 6.35% | 4.83% |
| 9 | 1996 | 11.58% | 6.44% | 5.14% |
| 10 | 1995 | 11.51% | 6.57% | 4.94% |
| 11 | | | | |
| 12 | | | | |
| 13 | 10 Year Average Premium | | | 5.57% |
| 14 | 5 Year Average Premium | | | 5.91% |
| 15 | | | | |
| 16 | | | | |
| 17 | Forecasted Interest Rates for 2007-2008(c) | | | 5.45% |
| 18 | | | | |
| 19 | Projected Returns on Equity | | | |
| 20 | 10 Year Average | | | 11.0% |
| 21 | 5 Year Average | | | 11.4% |
| 22 | | | | |
| 23 | | | | |
| 24 | Sources: | | | |
| 25 | (a) AUS Utility Reports, issues for December various years | | | |
| 26 | (b) Ibbotson Associates SBBI Valuation Edition 2005 Yearbook | | | |
| 27 | (c) Blue Chip Forecast Interest Rates - 10 year Treas. June, 2005 | | | |
| 28 | | | | |

Exhibit
Schedule D-4.14
Page 1
Witness: Bourassa

Test Year Ended December 31, 2004
Returns on Equity of Nationally Traded Water
Utilities as Reported in AUS Utility Reports
August 2005

| Line No. | | Authorized Rate of Return | Current Rate of Return |
|---|---|---|---|
| 1 | American States Water Co. | 10.0% | 9.1% |
| 2 | Aqua America | 10.1% | 11.7% |
| 3 | California Water | 9.7% | 9.6% |
| 4 | Connecticut Water Service | 12.7% | 10.9% |
| 5 | Middlesex Water Co. | 10.0% | 9.8% |
| 6 | SJW Corp. | 9.9% | 11.8% |
| 7 | | | |
| 8 | | | |
| 9 | Averages | 10.4% | 10.5% |
| 10 | | | |
| 11 | | | |
| 12 | | | |
| 13 | | | |
| 14 | | | |
| 15 | | | |

# E
# SCHEDULES

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Comparative Balance Sheets

Exhibit
Schedule E-1
Page 1
Witness: Bourassa

| Line No. | | Test Year Ended 12/31/2004 | Year Ended 12/31/2003 | Year Ended 12/31/2002 |
|---|---|---|---|---|
| 1 | **ASSETS** | | | |
| 2 | Plant In Service | $ 8,370,448 | $ 7,428,129 | $ 6,570,205 |
| 3 | | | | |
| 4 | Non-Utility Plant | - | - | - |
| 5 | Construction Work in Progress | 103,804 | - | - |
| 6 | Less: Accumulated Depreciation | (4,441,760) | (4,083,429) | (3,761,037) |
| 7 | Net Plant | $ 4,032,492 | $ 3,344,700 | $ 2,809,168 |
| 8 | | | | |
| 9 | Debt Reserve Fund | $ - | $ - | $ - |
| 10 | | | | |
| 11 | | | | |
| 12 | CURRENT ASSETS | | | |
| 13 | Cash and Equivalents | $ 524,979 | $ 422,862 | $ 635,539 |
| 14 | Restricted Cash | - | - | - |
| 15 | Accounts Receivable, Net | 17,009 | 29,058 | 26,681 |
| 16 | Unbilled Revenues | - | - | - |
| 17 | Materials and Supplies | - | - | - |
| 18 | Prepayments | 9,512 | 10,635 | 1,167 |
| 19 | Other Current Assets | 1,918,706 | 1,917,160 | 1,929,506 |
| 20 | Total Current Assets | $ 2,470,206 | $ 2,379,715 | $ 2,592,893 |
| 21 | | | | |
| 22 | Deferred Debits | $ - | $ - | $ - |
| 23 | | | | |
| 24 | Other Investments & Special Funds | $ - | $ - | $ - |
| 25 | | | | |
| 26 | TOTAL ASSETS | $ 6,502,698 | $ 5,724,415 | $ 5,402,061 |
| 27 | | | | |
| 28 | | | | |
| 29 | **LIABILITIES AND STOCKHOLDERS' EQUITY** | | | |
| 30 | | | | |
| 31 | Common Equity | $ 1,423,568 | $ 1,256,627 | $ 844,290 |
| 32 | | | | |
| 33 | Long-Term Debt | $ - | $ - | $ - |
| 34 | | | | |
| 35 | CURRENT LIABILITIES | | | |
| 36 | Accounts Payable | $ (2,126) | $ 88,185 | $ 61,050 |
| 37 | Current Portion of Long-Term Debt | - | - | - |
| 38 | Payables to Associated Companies | 1,257,904 | 1,325,147 | 1,356,287 |
| 39 | Customer Meter Deposits, Current | (3,000) | (2,306) | 6,294 |
| 40 | Accrued Taxes | 134,175 | 139,945 | 138,361 |
| 41 | Accrued Interest | - | - | - |
| 42 | Other Current Liabilities | 62,174 | 65,684 | 25,991 |
| 43 | Total Current Liabilities | $ 1,449,127 | $ 1,616,655 | $ 1,587,983 |
| 44 | DEFERRED CREDITS | | | |
| 45 | Customer Meter Deposits, less current | $ - | $ - | $ - |
| 46 | Advances in Aid of Construction | 1,315,900 | 244,258 | 268,562 |
| 47 | Accumulated Deferred Income Taxes | - | - | - |
| 48 | Contributions In Aid of Construction, Net | 5,800,321 | 5,802,247 | 5,606,185 |
| 49 | Accumulated Amortization of CIAC | (3,486,218) | (3,195,372) | (2,904,959) |
| 50 | Asset Retirement Obligations | - | - | - |
| 51 | Total Deferred Credits | $ 3,630,003 | $ 2,851,133 | $ 2,969,788 |
| 52 | | | | |
| 53 | Total Liabilities & Common Equity | $ 6,502,698 | $ 5,724,415 | $ 5,402,061 |
| 54 | | | | |
| 55 | SUPPORTING SCHEDULES: | | | |
| 56 | E-5 | | | |
| 57 | | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Comparative Income Statements

Exhibit
Schedule E-2
Page 1
Witness: Bourassa

| Line No. | | Test Year Ended 12/31/2004 | Prior Year Ended 12/31/2003 | Prior Year Ended 12/31/2002 |
|---|---|---|---|---|
| 1 | **Revenues** | | | |
| 2 | Flat Rate Revenues | $ 1,173,940 | $ 1,138,255 | $ 1,117,583 |
| 3 | Measured Revenues | - | - | - |
| 4 | Other Wastewater Revenues | 16,472 | 5,783 | 19,343 |
| 5 | **Total Revenues** | $ 1,190,412 | $ 1,144,038 | $ 1,136,926 |
| 6 | **Operating Expenses** | | | |
| 7 | Salaries and Wages | $ - | $ - | $ - |
| 8 | Purchased Wastewater Treatment | 160,789 | 175,796 | 167,528 |
| 9 | Sludge Removal Expense | 981 | 85 | - |
| 10 | Purchased Power | 45,594 | 44,839 | 49,486 |
| 11 | Fuel for Power Production | - | - | - |
| 12 | Chemicals | 73,928 | 25,468 | 11,443 |
| 13 | Materials and Supplies | 30,420 | 98,756 | 91,215 |
| 14 | Contractual Services - Professional | 171,683 | 219,187 | 164,642 |
| 15 | Contractual Services - Testing | 11,000 | 18,594 | 21,266 |
| 16 | Contractual Services - Other | 226,595 | 100,609 | 108,608 |
| 17 | Rents | 10,825 | 7,696 | 9,228 |
| 18 | Transportation Expenses | 4,870 | 2,525 | - |
| 19 | Insurance - General Liability | 16,204 | (50) | - |
| 20 | Regulatory Commission Expense | - | 21,272 | 14,725 |
| 21 | Miscellaneous Expense | 77,401 | - | 5,593 |
| 22 | Depreciation | 67,484 | 21,247 | 20,165 |
| 23 | Taxes Other Than Income | - | 32,280 | 47,752 |
| 24 | Property Taxes | 32,328 | 50,183 | 40,889 |
| 25 | Income Tax | - | 110,031 | 105,175 |
| 26 | | | | |
| 27 | **Total Operating Expenses** | $ 930,102 | $ 928,518 | $ 857,715 |
| 28 | **Operating Income** | $ 260,310 | $ 215,520 | $ 279,211 |
| 29 | **Other Income (Expense)** | | | |
| 30 | Interest Income | $ 932 | $ (2,171) | $ 52,565 |
| 31 | Other income | 24,000 | 24,000 | 2,770 |
| 32 | Interest Expense | (116,401) | (122,360) | (127,786) |
| 33 | Other Expense | - | - | - |
| 34 | | | | - |
| 35 | **Total Other Income (Expense)** | $ (91,469) | $ (100,531) | $ (72,451) |
| 36 | **Net Profit (Loss)** | $ 168,841 | $ 114,989 | $ 206,760 |
| 37 | | | | |
| 38 | | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Comparative Statements of Cash Flows

Exhibit
Schedule E-3
Page 1
Witness: Bourassa

| Line No. | | Test Year Ended 12/31/2004 | Prior Year Ended 12/31/2003 | Prior Year Ended 12/31/2002 |
|---|---|---|---|---|
| 1 | | | | |
| 2 | | | | |
| 3 | Cash Flows from Operating Activities | | | |
| 4 | Net Income | $ 168,841 | $ 114,989 | $ 206,760 |
| 5 | Adjustments to reconcile net income to net cash | | | |
| 6 | provided by operating activities: | | | |
| 7 | Depreciation and Amortization | 67,485 | 32,280 | 47,752 |
| 8 | Deferred Income Taxes | - | - | - |
| 9 | Other | - | - | - |
| 10 | Changes in Certain Assets and Liabilities: | | | |
| 11 | Accounts Receivable | 12,049 | (2,377) | (2,172) |
| 12 | Unbilled Revenues | - | - | - |
| 13 | Materials and Supplies Inventory | - | - | - |
| 14 | Prepaid Expenses | 1,123 | (9,468) | 7,758 |
| 15 | Deferred Charges | - | - | - |
| 16 | Accounts Payable | (90,311) | 27,135 | (3,682) |
| 17 | Intercompany payable | (67,243) | (31,140) | (59,008) |
| 18 | Customer Deposits | (694) | (8,600) | 5,000 |
| 19 | Intercompany taxes receivable and taxes payable | (5,770) | 1,584 | 88,584 |
| 20 | Other assets and liabilities | (5,056) | 52,039 | 17,666 |
| 21 | | | | |
| 22 | Net Cash Flow provided by Operating Activities | $ 80,424 | $ 176,442 | $ 308,658 |
| 23 | Cash Flow From Investing Activities: | | | |
| 24 | Capital Expenditures | (1,046,123) | (857,924) | (680,816) |
| 25 | Plant Held for Future Use | - | - | - |
| 26 | Changes in debt reserve fund | - | - | - |
| 27 | Net Cash Flows from Investing Activities | $ (1,046,123) | $ (857,924) | $ (680,816) |
| 28 | Cash Flow From Financing Activities | | | |
| 29 | Change in Restricted Cash | - | - | - |
| 30 | Change in net amounts due to parent and affiliates | - | - | - |
| 31 | Receipt of advances for and contributions in aid of construction | 1,069,716 | 195,761 | 92,140 |
| 32 | Refunds for advances for construction | - | (24,304) | - |
| 33 | Repayments of Long-Term Debt | - | - | - |
| 34 | Dividends Paid | (1,900) | - | (103,099) |
| 35 | Deferred Financing Costs | - | - | - |
| 36 | Paid in Capital | - | 297,348 | - |
| 37 | Net Cash Flows Provided by Financing Activities | $ 1,067,816 | $ 468,805 | $ (10,959) |
| 38 | Increase(decrease) in Cash and Cash Equivalents | 102,117 | (212,677) | (383,117) |
| 39 | Cash and Cash Equivalents at Beginning of Year | 422,862 | 635,539 | 1,018,656 |
| 40 | Cash and Cash Equivalents at End of Year | $ 524,979 | $ 422,862 | $ 635,539 |
| 41 | | | | |
| 42 | | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Statement of Changes in Stockholder's Equity

Exhibit
Schedule E-4
Page 1
Witness: Bourassa

| Line No. | | Common Stock | Additional Paid-In-Capital | Retained Earnings | Total |
|---|---|---|---|---|---|
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | Balance, December 31, 2001 | $ 1,000 | $ 1,301,007 | $ (561,378) | $ 740,629 |
| 5 | Addnl Paid In Capital | | - | - | - |
| 6 | Dividends | | | (103,099) | (103,099) |
| 7 | Net Income | | | 206,760 | 206,760 |
| 8 | | | | | |
| 9 | Balance, December 31, 2002 | $ 1,000 | $ 1,301,007 | $ (457,717) | $ 844,290 |
| 10 | Addnl Paid In Capital | | | 297,348 | 297,348 |
| 11 | Dividends | | | | - |
| 12 | Net Income | | | 114,989 | 114,989 |
| 13 | | | | | |
| 14 | Balance, December 31, 2003 | $ 1,000 | $ 1,301,007 | $ (45,380) | $ 1,256,627 |
| 15 | Addnl Paid In Capital | | | | - |
| 16 | Dividends | | | (1,900) | (1,900) |
| 17 | Net Income | | | 168,841 | 168,841 |
| 18 | | | | | |
| 19 | Balance, December 3, 2004 | $ 1,000 | $ 1,301,007 | $ 121,561 | $ 1,423,568 |
| 20 | | | | | |
| 21 | | | | | |
| 22 | | | | | |
| 23 | | | | | |
| 24 | | | | | |
| 25 | | | | | |
| 26 | SUPPORTING SCHEDULES: | | | RECAP SCHEDULES: | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Detail of Plant in Service

Exhibit
Schedule E-5
Page 1
Witness: Bourassa

| Line No. | Acct. No. | Plant Description | Plant Balance at 12/31/2003 | Plant Additions, Reclass-ications or or Retirements | Plant Balance at 12/31/2004 |
|---|---|---|---|---|---|
| 1 | | | | | |
| 2 | 351 | Organization | $ - | $ - | $ - |
| 3 | 352 | Franchises | - | - | - |
| 4 | 353 | Land and Land Rights | 461,446 | - | 461,446 |
| 5 | 354 | Structures and Improvements | 1,152,745 | 92,547 | 1,245,292 |
| 6 | 355 | Power Generation Equipment | 7,610 | (7,610) | - |
| 7 | 360 | Collection Sewers - Force | 228,042 | 743 | 228,785 |
| 8 | 361 | Collection Sewers - Gravity | 2,835,952 | 772,667 | 3,608,619 |
| 9 | 362 | Special Collecting Structures | - | - | - |
| 10 | 363 | Services to Customers | 158,802 | - | 158,802 |
| 11 | 364 | Flow Measuring Devices | 34,500 | 5,378 | 39,878 |
| 12 | 365 | Flow Measuring Installations | - | 158,358 | 158,358 |
| 13 | 370 | Receiving Wells | 696,506 | - | 696,506 |
| 14 | 371 | Effluent Pumping Equipment | 418,455 | 33,250 | 451,705 |
| 15 | 380 | Treatment and Disposal Equipment | - | - | - |
| 16 | 381 | Plant Sewers | 276,709 | (155,058) | 121,651 |
| 17 | 382 | Outfall Sewer Lines | - | - | - |
| 18 | 389 | Other Plant and Misc. Equipment | 702,033 | 36,771 | 738,804 |
| 19 | 390 | Office Furniture and Equipment | 360,240 | 5,272 | 365,512 |
| 20 | 391 | Transportation Equipment | 87,811 | - | 87,811 |
| 21 | 393 | Tools, Shop and Garage Equipment. | - | - | - |
| 22 | 394 | Laboratory Equipment | 7,279 | - | 7,279 |
| 23 | 395 | Power Operated Equipment | - | - | - |
| 24 | 398 | Other TangiblePlant | - | - | - |
| 25 | 344 | Laboratory Equipment | - | - | - |
| 26 | 345 | Power Operated Equipment | - | - | - |
| 27 | 346 | Communications Equipment | - | - | - |
| 28 | 347 | Miscellaneous Equipment | - | - | - |
| 29 | 348 | Other Tangible Plant | - | - | - |
| 30 | | Plant Held for Future Use | - | - | - |
| 31 | | | | | |
| 32 | | TOTAL WATER PLANT | $ 7,428,130 | $ 942,318 | $ 8,370,448 |
| 33 | | | | | |
| 34 | SUPPORTING SCHEDULES | | | RECAP SCHEDULES: | |
| 35 | | | | A-4 | |
| 36 | | | | E-1 | |
| 37 | | | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Operating Statistics

Exhibit
Schedule E-7
Page 1
Witness: Bouras

| Line No. | | Test Year Ended 12/31/2004 | Prior Year Ended 12/31/2003 | Prior Year Ended 12/31/2002 |
|---|---|---|---|---|
| 1 | WASTEWATER STATISTICS: | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | Sewer Revenues from Customer: | $ 1,190,412 | $ 1,144,038 | $ 1,136,926 |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | Year End Number of Customers | 1,923 | 1,794 | 1,429 |
| 11 | | | | |
| 12 | | | | |
| 13 | | | | |
| 14 | Annual Revenue per Year End Customer | $ 619.04 | $ 637.70 | $ 795.61 |
| 15 | | | | |
| 16 | | | | |
| 17 | | | | |
| 18 | | | | |
| 19 | | | | |
| 20 | | | | |
| 21 | | | | |
| 22 | | | | |
| 23 | | | | |
| 24 | | | | |
| 25 | | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Taxes Charged to Operations

Exhibit
Schedule E-8
Page 1
Witness: Bourassa

| Line No. | Description | Test Year Ended 12/31/2004 | Prior Year Ended 12/31/2003 | Prior Year Ended 12/31/2002 |
|---|---|---|---|---|
| 1 | Description | | | |
| 2 | | | | |
| 3 | Federal Income Taxes* | $ 44,506 | $ 94,347 | $ 83,433 |
| 4 | State Income Taxes* | 11,768 | 15,684 | 21,742 |
| 5 | Payroll Taxes | - | - | - |
| 6 | Property Taxes | 32,328 | 50,183 | 40,889 |
| 7 | | | | |
| 8 | Totals | $ 88,603 | $ 160,214 | $ 146,064 |
| 9 | | | | |
| 10 | | | | |
| 11 | *Computed | | | |
| 12 | | | | |
| 13 | | | | |
| 14 | | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Notes To Financial Statements

Exhibit
Schedule E-9
Page 1
Witness: Bourassa

The Company does not have outside auditors

# F
# SCHEDULES

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Projected Income Statements - Present & Proposed Rates

Exhibit
Schedule F-1
Page 1
Witness: Bourassa

| Line No. | | Test Year Actual Results | At Present Rates Year Ended 12/31/2005 | At Proposed Rates Year Ended 12/31/2005 |
|---|---|---|---|---|
| 1 | **Revenues** | | | |
| 2 | Flat Rate Revenues | $ 1,173,940 | $ 1,191,268 | $ 1,354,547 |
| 3 | Measured Revenues | - | - | - |
| 4 | Other Wastewater Revenues | 16,472 | 16,472 | 16,472 |
| 5 | | $ 1,190,412 | $ 1,207,740 | $ 1,371,019 |
| 6 | **Operating Expenses** | | | |
| 7 | Salaries and Wages | $ - | $ - | $ - |
| 8 | Purchased Wastewater Treatment | 160,789 | 162,082 | 162,082 |
| 9 | Sludge Removal Expense | 981 | 981 | 981 |
| 10 | Purchased Power | 45,594 | 47,727 | 47,727 |
| 11 | Fuel for Power Production | - | - | - |
| 12 | Chemicals | 73,928 | 76,612 | 76,612 |
| 13 | Materials and Supplies | 30,420 | 30,420 | 30,420 |
| 14 | Contractual Services - Professional | 171,683 | 171,683 | 171,683 |
| 15 | Contractual Services - Testing | 11,000 | 11,000 | 11,000 |
| 16 | Contractual Services - Other | 226,595 | 226,595 | 226,595 |
| 17 | Rents | 10,825 | 10,825 | 10,825 |
| 18 | Transportation Expenses | 4,870 | 4,870 | 4,870 |
| 19 | Insurance - General Liability | 16,204 | 16,204 | 16,204 |
| 20 | Regulatory Commission Expense | - | 30,000 | 30,000 |
| 21 | Miscellaneous Expense | 77,401 | 77,401 | 77,401 |
| | | - | 189,622 | 189,622 |
| 22 | Depreciation | 67,484 | 126,749 | 126,749 |
| 23 | Taxes Other Than Income | - | - | - |
| 24 | Property Taxes | 32,328 | 45,745 | 45,745 |
| 25 | Income Tax | - | (6,544) | 44,883 |
| 26 | | | | |
| 27 | **Total Operating Expenses** | $ 930,102 | $ 1,221,973 | $ 1,273,399 |
| 28 | **Operating Income** | $ 260,310 | $ (14,233) | $ 97,619 |
| 29 | **Other Income (Expense)** | | | |
| 30 | Interest Income | 932 | - | - |
| 31 | Other income | 24,000 | - | - |
| 32 | Interest Expense | (116,401) | - | - |
| 33 | Other Expense | - | - | - |
| 34 | Gain/Loss Sale of Fixed Assets | - | - | - |
| 35 | **Total Other Income (Expense)** | $ (91,469) | $ - | $ - |
| 36 | **Net Profit (Loss)** | $ 168,841 | $ (14,233) | $ 97,619 |
| 37 | | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Projected Statements of Changes in Financial Position
Present and Proposed Rates

Exhibit
Schedule F-2
Page 1
Witness: Bourassa

| Line No. | | Test Year Ended 12/31/2004 | At Present Rates Year Ended 12/31/2005 | At Proposed Rates Year Ended 12/31/2005 |
|---|---|---|---|---|
| 1 | | | | |
| 2 | | | | |
| 3 | | | | |
| 4 | | | | |
| 5 | Cash Flows from Operating Activities | | | |
| 6 | Net Income | $ 168,841 | $ (14,233) | $ 97,619 |
| 7 | Adjustments to reconcile net income to net cash | | | |
| 8 | provided by operating activities: | | | |
| 9 | Depreciation and Amortization | 67,485 | 30,000 | 30,000 |
| 10 | Deferred Income Taxes | - | | |
| 11 | Other | - | | |
| 12 | Changes in Certain Assets and Liabilities: | - | | |
| 13 | Accounts Receivable | 12,049 | | |
| 14 | Unbilled Revenues | - | | |
| 15 | Materials and Supplies Inventory | - | | |
| 16 | Prepaid Expenses | 1,123 | | |
| 17 | Deferred Charges | - | | |
| 18 | Accounts Payable | (90,311) | | |
| 19 | Intercompany payable | (67,243) | | |
| 20 | Customer Deposits | (694) | | |
| 21 | Intercompany taxes receivable and taxes payable | (5,770) | | |
| 22 | Other assets and liabilities | (5,056) | | |
| 23 | | | | |
| 24 | Net Cash Flow provided by Operating Activities | $ 80,424 | $ 15,767 | $ 127,619 |
| 25 | Cash Flow From Investing Activities: | | | |
| 26 | Capital Expenditures | (1,046,123) | (170,000) | (170,000) |
| 27 | Plant Held for Future Use | - | | |
| 28 | Changes in debt reserve fund | - | | |
| 29 | Net Cash Flows from Investing Activities | $ (1,046,123) | $ (170,000) | $ (170,000) |
| 30 | Cash Flow From Financing Activities | | | |
| 31 | Change in Restricted Cash | - | - | - |
| 32 | Change in net amounts due to parent and affiliates | - | - | - |
| 33 | Receipt of advances for and contributions in aid of construction | 1,069,716 | - | - |
| 34 | Refunds for advances for construction | - | - | - |
| 35 | Repayments of Long-Term Debt | - | - | - |
| 36 | Dividends Paid | (1,900) | - | - |
| 37 | Deferred Financing Costs | - | - | - |
| 38 | Paid in Capital | - | - | - |
| 39 | Net Cash Flows Provided by Financing Activities | $ 1,067,816 | $ - | $ - |
| 40 | Increase(decrease) in Cash and Cash Equivalents | 102,117 | (154,233) | (42,381) |
| 41 | Cash and Cash Equivalents at Beginning of Year | 422,862 | 524,979 | 524,979 |
| 42 | Cash and Cash Equivalents at End of Year | $ 524,979 | $ 370,746 | $ 482,598 |
| 43 | F-3 | | | |
| 44 | | | | |
| 45 | | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Projected Construction Requirements

Exhibit
Schedule F-3
Page 1
Witness: Bourassa

| Line No. | Account Number | Plant Asset: | 2005 | 2006 | 2007 |
|---|---|---|---|---|---|
| 1 | | | | | |
| 2 | Account | | | | |
| 3 | Number | Plant Asset: | 2005 | 2006 | 2007 |
| 4 | 352 | Franchises | $ - | $ - | $ - |
| 5 | 353 | Land and Land Rights | | | |
| 6 | 354 | Structures and Improvements | | | |
| 7 | 355 | Power Generation Equipment | | | |
| 8 | 360 | Collection Sewers - Force | | | |
| 9 | 361 | Collection Sewers - Gravity | 100,000 | 600,000 | |
| 10 | 362 | Special Collecting Structures | | 60,000 | 60,000 |
| 11 | 363 | Services to Customers | | | |
| 12 | 364 | Flow Measuring Devices | | | |
| 13 | 365 | Flow Measuring Installations | | 30,000 | |
| 14 | 370 | Receiving Wells | | | |
| 15 | 371 | Effluent Pumping Equipment | | - | |
| 16 | 380 | Treatment and Disposal Equipment | | 485,000 | 400,000 |
| 17 | 381 | Plant Sewers | | - | |
| 18 | 382 | Outfall Sewer Lines | | - | |
| 19 | 389 | Other Plant and Misc. Equipment | | - | |
| 20 | 390 | Office Furniture and Equipment | 60,000 | - | |
| 21 | 391 | Transportation Equipment | | 45,000 | |
| 22 | 393 | Tools, Shop and Garage Equipment. | | 70,000 | |
| 23 | 394 | Laboratory Equipment | 10,000 | - | |
| 24 | 395 | Power Operated Equipment | | - | |
| 25 | 398 | Other TangiblePlant | | 60,000 | 250,000 |
| 26 | | | | | |
| 27 | | | | | |
| 28 | | | | | |
| 29 | | | | | |
| 30 | | | | | |
| 31 | | | | | |
| 32 | | | | | |
| 33 | | | | | |
| 34 | | | | | |
| 35 | Total | | $ 170,000 | $ 1,350,000 | $ 710,000 |
| 36 | | | | | |
| 37 | | | | | |
| 38 | | | | | |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Assumptions Used in Rate Filing

Exhibit
Schedule F-4
Page 1
Witness: Bourassa

| Line No. | |
|---|---|
| 1 | Property Taxes were computed using the method used by the Arizona Department |
| 2 | of Revenue |
| 3 | |
| 4 | Projected construction expenditures are shown on Schedule A-4. |
| 5 | |
| 6 | Expense adjustments are shown on Schedule C2, and are explained in the testimony. |
| 7 | |
| 8 | Accumulated depreciation was computed using depreciation rates authorized |
| 9 | in prior Commission decision. |
| 10 | |
| 11 | Income taxes were computed using statutory state and federal income tax rates. |
| 12 | |
| 13 | |
| 14 | |
| 15 | |

# H
# SCHEDULES

**Black Mountain Sewer Company**
Revenue Summary
With Annualized Revenues to Year End Number of Customers
And Estimated Customer Growth
Test Year Ended December 31, 2004

Exhibit
Schedule H1
Witness: Bourassa

| Line No. | Customer Classification and/or Meter Size | Present Revenues | Proposed Revenues | Dollar Change | Percent Change | Percent of Present Sewer Revenues | Percent of Proposed Sewer Revenues |
|---|---|---|---|---|---|---|---|
| 1 | Residential | 768,816 | 873,820 | 105,004 | 13.66% | 64.32% | 64.32% |
| 2 | **Residential customer revenue** | | | | | | |
| 3 | **annualized to end of year, based on** | 17,328 | 19,695 | 2,367 | 13.66% | 1.45% | 1.45% |
| 4 | **year end number of customers** | | | | | | |
| 5 | | | | | | | |
| 6 | Commercial (Standard Rate) | 312,725 | 355,418 | 42,693 | 13.65% | 26.16% | 26.16% |
| 7 | Commercial (Special Rate) | 81,967 | 93,155 | 11,188 | 13.65% | 6.86% | 6.86% |
| 8 | Effluent Sales | 14,498 | 16,477 | 1,979 | 13.65% | 1.21% | 1.21% |
| 9 | Subtotals | 1,195,334 | 1,358,565 | 163,231 | 13.66% | 100.00% | 100.00% |
| 10 | Misc Revenues | 16,472 | 16,472 | | | | |
| 11 | Totals | 1,211,806 | 1,375,037 | 163,231 | 13.47% | 100.00% | 100.00% |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Analysis of Revenue by Detailed Class

Schedule H-2
Page 1
Witness: Bourassa

| Line No. | Customer Classification | Average Number of Customers at 3/31/2000 | Average Effluent | Revenues Present Rates | Revenues Proposed Rates | Proposed Increase Dollar Amount | Proposed Increase Percent Amount |
|---|---|---|---|---|---|---|---|
| 1 | Residential | 1,724 | N/A | $ 38.00 | $ 43.19 | $ 5.19 | 13.658% |
| 2 | Commercial (Standard Rate) | 130 | N/A | 0.15236 | 0.17316 | 0.02080 | 13.652% |
| 3 | Commercial (Special Rate) | | | | | | |
| 4 | B-H Enterprises (West) | - | N/A | $ 0.11685 | $ 0.13280 | $ 0.01595 | 13.650% |
| 5 | B-H Enterprises (East) | 1 | N/A | 0.11685 | 0.13280 | 0.01595 | 13.650% |
| 6 | Barb's Per Grooming | - | N/A | 0.11685 | 0.13280 | 0.01595 | 13.650% |
| 7 | Boulders Resort | 1 | N/A | 0.11843 | 0.13459 | 0.01616 | 13.648% |
| 8 | Carefree Dental | - | N/A | 0.11685 | 0.13280 | 0.01595 | 13.650% |
| 9 | Ridgecrest Realty | 1 | N/A | 0.11818 | 0.13431 | 0.01613 | 13.649% |
| 10 | Desert Forest | 1 | N/A | 0.13609 | 0.15467 | 0.01858 | 13.653% |
| 11 | Desert Hills Pharmacy | 1 | N/A | 0.14206 | 0.16145 | 0.01939 | 13.649% |
| 12 | El Pedregal | 1 | N/A | 0.11685 | 0.13280 | 0.01595 | 13.650% |
| 13 | Lemon Tree | 1 | N/A | 0.11400 | 0.12956 | 0.01556 | 13.649% |
| 14 | Body Shop | 1 | N/A | 0.14544 | 0.16529 | 0.01985 | 13.648% |
| 15 | Spanish Village | - | N/A | 0.11685 | 0.13280 | 0.01595 | 13.650% |
| 16 | Boulders Club | - | N/A | 0.11685 | 0.13280 | 0.01595 | 13.650% |
| 17 | Anthony Vuitaggio | 1 | N/A | 0.12987 | 0.14760 | 0.01773 | 13.652% |
| 18 | | | | | | | |
| 19 | Effluent | 1 | 3,226,904 | $ 0.37440 | $ 0.42551 | $ 0.05111 | 13.650% |
| 20 | | | | | | | |
| 21 | Total | 1,864 | | | | | |
| 22 | | | | | | | |
| 23 | | | | | | | |
| 24 | | | | | | | |
| 25 | | | | | | | |

**Black Mountain Sewer Company**
Present and Proposed Rates
Test Year Ended December 31, 2004

Exhibit
Schedule H3
Page 1
Witness: Bourassa

| Line No. | Customer Classification and Meter Size | | Present Rates | Present Rates | Proposed Rates | Proposed Rates | Percent Change |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | | | | | |
| 4 | | | | | | | |
| 5 | **Monthly Charge for:** | | | | | | |
| 6 | Residential | | | $ 38.00 | | $ 43.19 | 13.6579% |
| 7 | Commercial (Standard Rate), per gallon per day[1] | | | 0.15236 | | 0.17316 | 13.6519% |
| 8 | Effluent Sales (per 1,000 gallons) | | $122 per a.f. | 0.37440 | $138.65 per a.f. | 0.42551 | 13.6499% |
| 9 | | | | | | | |
| 10 | Commercial (Special Rate), per gallon per day[1] | | | | | | |
| 11 | | Gallons | Monthly | Rate per | Monthly | Rate per | Percent |
| 12 | Customer | Per Day[1] | Billing | Gallon | Billing | Gallon | Change |
| 13 | B-H Enterprises | 2,525 | $ 295.05 | 0.11685 | $ 335.32 | $ 0.13280 | 13.6500% |
| 14 | B-H Enterprises | 1,400 | $ 163.59 | 0.11685 | $ 185.92 | 0.13280 | 13.6500% |
| 15 | Barb's Per Grooming | 250 | $ 29.21 | 0.11685 | $ 33.20 | 0.13280 | 13.6500% |
| 16 | Boulders Resort | 29,345 | $ 3,475.23 | 0.11843 | $ 3,949.60 | 0.13459 | 13.6481% |
| 17 | Carefree Dental | 1,625 | $ 189.98 | 0.11685 | $ 215.91 | 0.13280 | 13.6500% |
| 18 | Ridgecrest Realty | 450 | $ 53.18 | 0.11818 | $ 60.44 | 0.13431 | 13.6487% |
| 19 | Desert Forest | 7,000 | $ 952.63 | 0.13609 | $ 1,082.66 | 0.15467 | 13.6527% |
| 20 | Desert Hills Pharmacy | 800 | $ 113.65 | 0.14206 | $ 129.16 | 0.16145 | 13.6492% |
| 21 | El Pedregal | 15,787 | $ 1,844.69 | 0.11685 | $ 2,096.49 | 0.13280 | 13.6500% |
| 22 | Lemon Tree | 300 | $ 43.20 | 0.11400 | $ 49.10 | 0.12956 | 13.6491% |
| 23 | Body Shop | 1,000 | $ 145.44 | 0.14544 | $ 165.29 | 0.16529 | 13.6482% |
| 24 | Spanish Village | 4,985 | $ 582.50 | 0.11685 | $ 662.01 | 0.13280 | 13.6500% |
| 25 | Boulders Club | 1,200 | $ 140.22 | 0.11685 | $ 159.36 | 0.13280 | 13.6500% |
| 26 | Anthony Vuitaggio | 300 | $ 38.96 | 0.12987 | $ 44.28 | 0.14760 | 13.6521% |
| 27 | | | | | | | |
| 28 | | | | | | | |
| 29 | | | | | | | |
| 30 | | | | | | | |
| 31 | [1] Commercial wastewater flows are based on the average daily flows set forth in Engineering Bulletin 12, Table 1 | | | | | | |
| 32 | published by the Arizona Department of Environmental Quality (June 1989) | | | | | | |

**Black Mountain Sewer Company**
Present and Proposed Rates
Test Year Ended December 31, 2004

Exhibit
Schedule H3
Page 2
Witness: Bourassa

| Line No. | Other Service Charges | Present Rates | Proposed Rates |
|---|---|---|---|
| 1 | Establishment | $ 25.00 | $ 25.00 |
| 2 | Re-Establishment | $ 25.00 | $ 25.00 |
| 3 | Reconnection | no charge | no charge |
| 4 | After hours service | $ 25.00 | $ 25.00 |
| 5 | Min Deposit Requirement (Residential) | (a) | (a) |
| 6 | Min Deposit Requirement (Non-Residential) | (a) | (a) |
| 7 | NSF Check | 10.00 | 10.00 |
| 8 | Deferred Payment finance charge, Per Month | 1.50% | 1.50% |
| 9 | Late Payment Charge, Per Month | 1.50% | 1.50% |
| 10 | | | |
| 11 | Main Extension Tariff, per Rule R14-2-406B | Cost | Cost |
| 12 | | | |
| 13 | Hook-Up Fee for New Service (per Gallon per Day)[2] | $ 6.47 | $ 6.47 |
| 14 | | | |
| 15 | (a) Residential - two times the average bill. Non-residential - two and one-half times the average bill. | | |
| 16 | (b) Minimum charge times number of full months disconnected. | | |
| 17 | (c) Actual cost of physical disconnection and reconnection (if same customer) and there shall be no | | |
| 18 | charge if there is no physical work performed. | | |
| 19 | | | |
| 20 | | | |
| 21 | | | |
| 22 | [2] Wastewater flows are based on Engineering Bulletin No. 12, Table 1. | | |
| 23 | | | |
| 24 | IN ADDITION TO THE COLLECTION OF REGULAR RATES, THE UTILITY WILL COLLECT FROM | | |
| 25 | ITS CUSTOMERS A PROPORTIONATE SHARE OF ANY PRIVILEGE, SALES, USE, AND FRANCHISE | | |
| 26 | TAX. PER COMMISSION RULE (14-2-409.D 5). | | |
| 27 | ALL ADVANCES AND/OR CONTRIBUTIONS ARE TO INCLUDE LABOR, MATERIALS, OVERHEADS, | | |
| 28 | AND ALL APPLICABLE TAXES, INCLUDING ALL GROSS-UP TAXES FOR INCOME TAXES. | | |
| 29 | COST TO INCLUDE LABOR, MATERIALS AND PARTS, OVERHEADS AND ALL APPLICABLE TAXES. | | |
| 30 | | | |
| 31 | | | |
| 32 | | | |
| 33 | | | |
| 34 | | | |

Black Mountain Sewer Company
Bill Comparison
Customer Classification
Residential

Exhibit
Schedule H4
Page 1
Witness: Bourassa

| Present Bill | Proposed Bill | Dollar Increase | Percent Increase |
|---|---|---|---|
| $ 38.00 | $ 43.19 | $ 5.19 | 13.66% |

Black Mountain Sewer Company
Bill Comparison
Customer Classification
Special Tariff - B-H Enterprises

Exhibit
Schedule H4
Page 2
Witness: Bourassa

| Present Bill | Proposed Bill | Dollar Increase | Percent Increase |
|---|---|---|---|
| $ 295.05 | $ 335.32 | $ 40.27 | 13.65% |

Black Mountain Sewer Company
Bill Comparison
Customer Classification
Special Tariff - B-H Enterprises

Exhibit
Schedule H4
Page 3
Witness: Bourassa

| Present Bill | Proposed Bill | Dollar Increase | Percent Increase |
|---|---|---|---|
| $ 163.59 | $ 185.92 | $ 22.33 | 13.65% |

Black Mountain Sewer Company
Bill Comparison
Customer Classification
Special Tariff - Barb's Pet Grooming

Exhibit
Schedule H4
Page 4
Witness: Bourassa

| Present Bill | Proposed Bill | Dollar Increase | Percent Increase |
|---|---|---|---|
| $ 29.21 | $ 33.20 | $ 3.99 | 13.66% |

Black Mountain Sewer Company
Bill Comparison
Customer Classification
Special Tariff - Boulders Resort

Exhibit
Schedule H4
Page 5
Witness: Bourassa

| Present Bill | Proposed Bill | Dollar Increase | Percent Increase |
|---|---|---|---|
| $ 3,475.23 | $ 3,949.60 | $ 474.37 | 13.65% |

Black Mountain Sewer Company
Bill Comparison
Customer Classification
Special Tariff - Carefree Dental

Exhibit
Schedule H4
Page 6
Witness: Bourassa

| Present Bill | Proposed Bill | Dollar Increase | Percent Increase |
|---|---|---|---|
| $ 189.98 | $ 215.91 | $ 25.93 | 13.65% |

Black Mountain Sewer Company
Bill Comparison
Customer Classification
Special Tariff - Ridgecrest Realty

Exhibit
Schedule H4
Page 7
Witness: Bourassa

| Present Bill | Proposed Bill | Dollar Increase | Percent Increase |
|---|---|---|---|
| $ 53.18 | $ 60.44 | $ 7.26 | 13.65% |

Black Mountain Sewer Company
Bill Comparison
Customer Classification
Special Tariff - Desert Forest

Exhibit
Schedule H4
Page 8
Witness: Bourassa

| Present Bill | Proposed Bill | Dollar Increase | Percent Increase |
|---|---|---|---|
| $ 952.63 | $ 1,082.66 | $ 130.03 | 13.65% |

Black Mountain Sewer Company
Bill Comparison
Customer Classification
Special Tariff - Desert Hills Pharmacy

Exhibit
Schedule H4
Page 9
Witness: Bourassa

| Present Bill | Proposed Bill | Dollar Increase | Percent Increase |
|---|---|---|---|
| $ 113.65 | $ 129.16 | $ 15.51 | 13.65% |

Black Mountain Sewer Company
Bill Comparison
Customer Classification
Special Tariff - El Pedregal

Exhibit
Schedule H4
Page 10
Witness: Bourassa

| Present Bill | Proposed Bill | Dollar Increase | Percent Increase |
|---|---|---|---|
| $ 1,844.69 | $ 2,096.49 | $ 251.80 | 13.65% |

Black Mountain Sewer Company
Bill Comparison
Customer Classification
Special Tariff - Lemon Tree

Exhibit
Schedule H4
Page 11
Witness: Bourassa

| Present Bill | Proposed Bill | Dollar Increase | Percent Increase |
|---|---|---|---|
| $ 43.20 | $ 49.10 | $ 5.90 | 13.66% |

Black Mountain Sewer Company
Bill Comparison
Customer Classification
Special Tariff - Body Shop

Exhibit
Schedule H4
Page 12
Witness: Bourassa

| Present Bill | Proposed Bill | Dollar Increase | Percent Increase |
|---|---|---|---|
| $ 145.44 | $ 165.29 | $ 19.85 | 13.65% |

Black Mountain Sewer Company
Bill Comparison
Customer Classification
Special Tariff - Spanish Village

Exhibit
Schedule H4
Page 13
Witness: Bourassa

| Present Bill | Proposed Bill | Dollar Increase | Percent Increase |
|---|---|---|---|
| $ 582.50 | $ 662.01 | $ 79.51 | 13.65% |

Black Mountain Sewer Company
Bill Comparison
Customer Classification
Special Tariff - Boulders Club

Exhibit
Schedule H4
Page 14
Witness: Bourassa

| Present Bill | Proposed Bill | Dollar Increase | Percent Increase |
|---|---|---|---|
| $ 140.22 | $ 159.36 | $ 19.14 | 13.65% |

Black Mountain Sewer Company
Bill Comparison
Customer Classification
Special Tariff - Anthony Vuitaggio

Exhibit
Schedule H4
Page 15
Witness: Bourassa

| Present Bill | Proposed Bill | Dollar Increase | Percent Increase |
|---|---|---|---|
| $ 38.96 | $ 44.28 | $ 5.32 | 13.66% |

Black Mountain Sewer Company
Bill Comparison
Customer Classification
Commercial

Exhibit
Schedule H4
Page 16
Witness: Bourassa

| | Present Bill | Proposed Bill | Dollar Increase | Percent Increase |
|---|---|---|---|---|
| - | $ - | $ - | $ - | 0.00% |
| 10,000 | 1,523.60 | 1,731.60 | 208.00 | 13.65% |
| 20,000 | 3,047.20 | 3,463.20 | 416.00 | 13.65% |
| 30,000 | 4,570.80 | 5,194.80 | 624.00 | 13.65% |
| 40,000 | 6,094.40 | 6,926.40 | 832.00 | 13.65% |
| 50,000 | 7,618.00 | 8,658.00 | 1,040.00 | 13.65% |
| 60,000 | 9,141.60 | 10,389.60 | 1,248.00 | 13.65% |
| 70,000 | 10,665.20 | 12,121.20 | 1,456.00 | 13.65% |
| 80,000 | 12,188.80 | 13,852.80 | 1,664.00 | 13.65% |
| 90,000 | 13,712.40 | 15,584.40 | 1,872.00 | 13.65% |
| 100,000 | 15,236.00 | 17,316.00 | 2,080.00 | 13.65% |
| 110,000 | 16,759.60 | 19,047.60 | 2,288.00 | 13.65% |
| 120,000 | 18,283.20 | 20,779.20 | 2,496.00 | 13.65% |
| 130,000 | 19,806.80 | 22,510.80 | 2,704.00 | 13.65% |

**Present Rates:**
Charge Per Gallon $0.152360

**Proposed Rates:**
Charge Per Gallon $0.173160

Black Mountain Sewer Company
Bill Comparison
Customer Classification
Effluent Sales

Exhibit
Schedule H4
Page 17
Witness: Bourassa

| MidPoint Usage | Present Bill | Proposed Bill | Dollar Increase | Percent Increase |
|---|---|---|---|---|
| 3,226,904.0 | 1,208.17 | 1,373.08 | 165 | 13.65% |
| Average Usage | | | | |
| 3,226,904 | $ 1,208.17 | $ 1,373.08 | $ 164.91 | 13.65% |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Customer Classification
Residential

Exhibit
Schedule H5
Page 1
Witness: Bourassa

| Month<br>Jan-04 | Feb-04 | Mar-04 | Apr-04 | May-04 | Jun-04 | Jul-04 | Aug-04 | Sep-04 | Oct-04 | Nov-04 | Dec-04 | Total<br>Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1,625 | 1,650 | 1,652 | 1,675 | 1,667 | 1,693 | 1,677 | 1,702 | 1,719 | 1,714 | 1,734 | 1,724 | 20,232 |
| | | | | | | | | | | | | - |
| 1,625 | 1,650 | 1,652 | 1,675 | 1,667 | 1,693 | 1,677 | 1,702 | 1,719 | 1,714 | 1,734 | 1,724 | 20,232 |

| | |
|---|---|
| Average Usage | N/A |
| Median Usage | N/A |
| Average # Customers | 1,686 |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Customer Classification
Special Tariff - B-H Enterprises

Exhibit
Schedule H5
Page 2
Witness: Bourassa

| Month<br>Jan-04 | Feb-04 | Mar-04 | Apr-04 | May-04 | Jun-04 | Jul-04 | Aug-04 | Sep-04 | Oct-04 | Nov-04 | Dec-04 | Total<br>Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | | | | | | | Average Usage | | | N/A |
| | | | | | | | | | Median Usage | | | N/A |
| | | | | | | | | | Average # Customers | | | - |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Customer Classification
Special Tariff - B-H Enterprises

Exhibit
Schedule H5
Page 3
Witness: Bourassa

| Month | Jan-04 | Feb-04 | Mar-04 | Apr-04 | May-04 | Jun-04 | Jul-04 | Aug-04 | Sep-04 | Oct-04 | Nov-04 | Dec-04 | Total Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |

| | |
|---|---|
| Average Usage | N/A |
| Median Usage | N/A |
| Average # Customers | 1 |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Customer Classification
Special Tariff - Barb's Pet Grooming

Exhibit
Schedule H5
Page 4
Witness: Bourassa

| Month<br>Jan-04 | Feb-04 | Mar-04 | Apr-04 | May-04 | Jun-04 | Jul-04 | Aug-04 | Sep-04 | Oct-04 | Nov-04 | Dec-04 | Total<br>Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - |

| | |
|---|---|
| Average Usage | N/A |
| Median Usage | N/A |
| Average # Customers | - |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Customer Classification
Special Tariff - Boulders Resort

Exhibit
Schedule H5
Page 5
Witness: Bourassa

| Month | Jan-04 | Feb-04 | Mar-04 | Apr-04 | May-04 | Jun-04 | Jul-04 | Aug-04 | Sep-04 | Oct-04 | Nov-04 | Dec-04 | Total Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| | | | | | | | | | | | | | - |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |

| | |
|---|---|
| Average Usage | N/A |
| Median Usage | N/A |
| Average # Customers | 1 |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Customer Classification
Special Tariff - Carefree Dental

Exhibit
Schedule H5
Page 6
Witness: Bourassa

| Month<br>Jan-04 | Feb-04 | Mar-04 | Apr-04 | May-04 | Jun-04 | Jul-04 | Aug-04 | Sep-04 | Oct-04 | Nov-04 | Dec-04 | Total<br>Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | | | | | | | Average Usage | | | N/A |
| | | | | | | | | | Median Usage | | | N/A |
| | | | | | | | | | Average # Customers | | | - |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Customer Classification
Special Tariff - Ridgecrest Realty

Exhibit
Schedule H5
Page 7
Witness: Bourassa

| Month<br>Jan-04 | Feb-04 | Mar-04 | Apr-04 | May-04 | Jun-04 | Jul-04 | Aug-04 | Sep-04 | Oct-04 | Nov-04 | Dec-04 | Total<br>Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |

| | |
|---|---|
| Average Usage | N/A |
| Median Usage | N/A |
| Average # Customers | 1 |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Customer Classification
Special Tariff - Desert Forest

Exhibit
Schedule H5
Page 8
Witness: Bourassa

| Month<br>Jan-04 | Feb-04 | Mar-04 | Apr-04 | May-04 | Jun-04 | Jul-04 | Aug-04 | Sep-04 | Oct-04 | Nov-04 | Dec-04 | Total<br>Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |

| | |
|---|---|
| Average Usage | N/A |
| Median Usage | N/A |
| Average # Customers | 1 |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Customer Classification
Special Tariff - Desert Hills Pharmacy

Exhibit
Schedule H5
Page 9
Witness: Bourassa

| Month<br>Jan-04 | Feb-04 | Mar-04 | Apr-04 | May-04 | Jun-04 | Jul-04 | Aug-04 | Sep-04 | Oct-04 | Nov-04 | Dec-04 | Total<br>Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |

| | |
|---|---|
| Average Usage | N/A |
| Median Usage | N/A |
| Average # Customers | 1 |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Customer Classification
Special Tariff - El Pedregal

Exhibit
Schedule H5
Page 10
Witness: Bourassa

| Month<br>Jan-04 | Feb-04 | Mar-04 | Apr-04 | May-04 | Jun-04 | Jul-04 | Aug-04 | Sep-04 | Oct-04 | Nov-04 | Dec-04 | Total<br>Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |

| | |
|---|---|
| Average Usage | N/A |
| Median Usage | N/A |
| Average # Customers | 1 |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Customer Classification
Special Tariff - Lemon Tree

Exhibit
Schedule H5
Page 11
Witness: Bourassa

| Month<br>Jan-04 | Feb-04 | Mar-04 | Apr-04 | May-04 | Jun-04 | Jul-04 | Aug-04 | Sep-04 | Oct-04 | Nov-04 | Dec-04 | Total<br>Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |

| | |
|---|---|
| Average Usage | N/A |
| Median Usage | N/A |
| Average # Customers | 1 |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Customer Classification
Special Tariff - Body Shop

Exhibit
Schedule H5
Page 12
Witness: Bourassa

| Month | Jan-04 | Feb-04 | Mar-04 | Apr-04 | May-04 | Jun-04 | Jul-04 | Aug-04 | Sep-04 | Oct-04 | Nov-04 | Dec-04 | Total Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |

| | |
|---|---|
| Average Usage | N/A |
| Median Usage | N/A |
| Average # Customers | 1 |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Customer Classification
Special Tariff - Spanish Village

Exhibit
Schedule H5
Page 13
Witness: Bourassa

| Month<br>Jan-04 | Feb-04 | Mar-04 | Apr-04 | May-04 | Jun-04 | Jul-04 | Aug-04 | Sep-04 | Oct-04 | Nov-04 | Dec-04 | Total<br>Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | | | | | | | Average Usage | | | N/A |
| | | | | | | | | | Median Usage | | | N/A |
| | | | | | | | | | Average # Customers | | | - |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Customer Classification
Special Tariff - Boulders Club

Exhibit
Schedule H5
Page 14
Witness: Bourassa

| Month<br>Jan-04 | Feb-04 | Mar-04 | Apr-04 | May-04 | Jun-04 | Jul-04 | Aug-04 | Sep-04 | Oct-04 | Nov-04 | Dec-04 | Total<br>Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | - |
| - | - | - | - | - | - | - | - | - | - | - | - | - |

| | |
|---|---|
| Average Usage | N/A |
| Median Usage | N/A |
| Average # Customers | - |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Customer Classification
Special Tariff - Anthony Vuitaggio

Exhibit
Schedule H5
Page 15
Witness: Bourassa

| Month<br>Jan-04 | Feb-04 | Mar-04 | Apr-04 | May-04 | Jun-04 | Jul-04 | Aug-04 | Sep-04 | Oct-04 | Nov-04 | Dec-04 | Total<br>Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |

| | |
|---|---|
| Average Usage | N/A |
| Median Usage | N/A |
| Average # Customers | 1 |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Customer Classification
Commercial

Exhibit
Schedule H5
Page 16
Witness: Bourassa

| Usage From: | Usage To: | Month Jan-04 | Feb-04 | Mar-04 | Apr-04 | May-04 | Jun-04 | Jul-04 | Aug-04 | Sep-04 | Oct-04 | Nov-04 | Dec-04 | Total Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 50 | 50 | 12 | 12 | 12 | 12 | 12 | 16 | 12 | 12 | 12 | 12 | 12 | 10 | 146 |
| 52 | 52 | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 |
| 55 | 55 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 61 | 61 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 75 | 75 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 77 | 77 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 98 | 98 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 100 | 100 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 24 |
| 105 | 105 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 60 |
| 125 | 125 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 24 |
| 132 | 132 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 135 | 135 | - | - | 1 | - | - | - | - | - | - | - | - | - | 1 |
| 140 | 140 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 141 | 141 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 150 | 150 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 6 | 6 | 6 | 6 | 64 |
| 158 | 158 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 166 | 166 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 200 | 200 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 96 |
| 203 | 203 | 1 | 1 | - | - | - | - | - | - | - | - | - | - | 2 |
| 233 | 233 | - | - | 1 | - | - | 1 | - | - | - | - | - | - | 2 |
| 241 | 241 | 20 | 20 | 1 | 1 | - | 1 | - | 19 | 21 | - | 5 | - | 88 |
| 250 | 250 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 38 |
| 256 | 256 | - | - | - | - | - | - | - | 1 | 1 | 1 | 1 | 1 | 5 |
| 258 | 258 | - | - | 18 | - | 19 | - | 28 | - | - | 27 | - | 20 | 112 |
| 279 | 279 | - | - | - | 1 | - | - | - | - | - | - | - | - | 1 |
| 289 | 289 | - | - | - | - | 1 | - | 2 | 1 | - | - | - | - | 4 |
| 307 | 307 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 36 |
| 369 | 369 | 1 | 1 | 1 | - | - | - | - | - | - | - | - | - | 3 |
| 400 | 400 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 24 |
| 450 | 450 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 16 |
| 479 | 479 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 36 |
| 500 | 500 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 5 | 5 | 40 |
| 506 | 506 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 600 | 600 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 33 |
| 675 | 675 | - | - | - | - | - | - | - | - | - | - | - | 1 | 1 |
| 700 | 700 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 750 | 750 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 800 | 800 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 24 |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Customer Classification
Commercial

Exhibit
Schedule H5
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Witness: Bourassa

| | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 842 | 842 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 900 | 900 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 19 |
| 1,000 | 1,000 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 1,140 | 1,140 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 19 |
| 1,150 | 1,150 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 1,178 | 1,178 | - | - | 1 | - | 2 | - | 2 | 1 | - | - | - | - | 6 |
| 1,347 | 1,347 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 1,422 | 1,422 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 1,425 | 1,425 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 1,500 | 1,500 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 24 |
| 1,527 | 1,527 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 36 |
| 1,560 | 1,560 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 20 |
| 1,620 | 1,620 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 1,750 | 1,750 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 1,800 | 1,800 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 1,850 | 1,850 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 2,000 | 2,000 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 36 |
| 2,025 | 2,025 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 2,288 | 2,288 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 2,590 | 2,590 | 1 | 1 | 1 | - | - | - | - | - | - | - | - | - | 3 |
| 2,600 | 2,600 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 2,744 | 2,744 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 2,993 | 2,993 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 3,000 | 3,000 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 3,700 | 3,700 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 4,500 | 4,500 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 6,950 | 6,950 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 7,530 | 7,530 | - | - | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 9 |
| 8,231 | 8,231 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 8,851 | 8,851 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 17,025 | 17,025 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| 44,490 | 44,490 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| | | | | | | | | | | | | | | - |
| Totals | | 124 | 124 | 125 | 105 | 125 | 111 | 137 | 127 | 128 | 134 | 115 | 130 | 1,485 |

| | |
|---|---|
| Average Usage | 570 |
| *Median Usage* | 105 |
| Average # Customers | 124 |

**Black Mountain Sewer Company**
Test Year Ended December 31, 2004
Customer Classification
Effluent Sales

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Witness: Bourassa

| Usage From: | Usage To: | Month Jan-04 | Feb-04 | Mar-04 | Apr-04 | May-04 | Jun-04 | Jul-04 | Aug-04 | Sep-04 | Oct-04 | Nov-04 | Dec-04 | Total Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Over 50,000 gallons | | | | | | | | | | | | | | |
| 3,226,904 | 3,226,904 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |
| Totals | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 12 |

| | |
|---|---|
| Average Usage | 3,226,904 |
| Median Usage | - |
| Average # Customers | 1 |