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ARIZONA CORPORATION COMMISSION
REGULATORY CONTROL

MEMORANDUM

TO: Docket Control

FROM: Deborah R. Scott
Director
Utilities Division

DATE: March 23, 2001

RE: STAFF REPORT FOR CEDAR GROVE WATER APPLICATION FOR A PERMANENT RATE INCREASE & FINANCING (DOCKET NO. W-02597A-00-0960)

Attached is the Staff Report for Cedar Grove Water application for a permanent rate increase and financing. Staff recommends approval of the rates and charges presented in Schedule 4 of this Report. Staff further recommends that a hearing not be held in this matter.

DRS:ENZ:jbc

Originator: Elena N. Zestrijan

Attachment: Original and Eleven Copies

Arizona Corporation Commission

DOCKETED

MAR 23 2001

DOCKETED BY	
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**STAFF REPORT
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION**

**CEDAR GROVE WATER
DOCKET NO. W-02597A-00-0960**

**APPLICATION
FOR A
PERMANENT RATE INCREASE
AND
FINANCING**

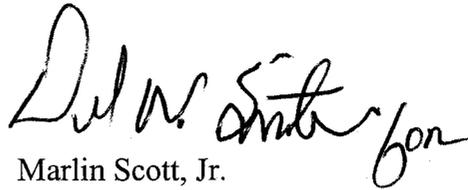
March 2001

STAFF ACKNOWLEDGMENT

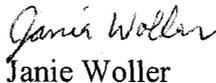
The Cedar Grove Water Docket No. W-02597A-00-0960 was the responsibility of the Staff members listed below. Elena Zestrijan was responsible for the review and analysis of the Company's application for a permanent rate increase and financing application, Staff's recommended revenue requirement, and rate base and rate design. Marlin Scott, Jr. was responsible for the engineering and technical analysis. Janie Woller was responsible for reviewing the Arizona Corporation Commission's records on the Company, determining compliance with Commission policies/rules and reviewing customer complaints filed with the Commission.



Elena Zestrijan
Auditor II



Marlin Scott, Jr.
Utilities Engineer



Janie Woller
Consumer Service Specialist

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FACT SHEET

Company:

Current Rates: Decision No. 56205, dated December 1, 1988
 Type of Ownership: "S" Corporation

Location: Apache County, approximately 12 miles East of Show Low, along State Highway 60 and a certified area covering approximately eight square-miles.

Rates:

Permanent rate increase and financing application filed: November 22, 2000.
 Current Test Year Ended: December 31, 1999

	<u>Current</u> <u>Rates</u>	<u>Company</u> <u>Proposed</u> <u>Rates</u>	<u>Staff</u> <u>Proposed</u> <u>Rates</u>
Monthly Minimum Charge			
5/8 X 3/4 – inch meter	\$16.00	\$22.50	\$18.75
3/4 - inch meter	\$24.00	\$34.00	\$28.15
1 – inch meter	\$40.00	\$56.00	\$46.90
1-1/2 – inch meter	\$80.00	\$110.00	\$93.75
2 – inch meter	\$128.00	\$180.00	\$150.00
3 – inch meter	\$240.00	\$340.00	\$281.25
4 – inch meter	\$400.00	\$560.00	\$468.75
6 – inch meter	\$800.00	\$1,120.00	\$937.50
Gallons in Minimum	-1,000 -	- 0	- 0-
Excess of minimum charge, Per 1,000 gallons:	\$1.95	\$2.75	\$2.50
Typical residential bill (Based on median usage of 2,683 gallons)	\$19.28	\$29.88	\$25.46

Customers:

Number of customers in the current Test Year (12/31/99): 116.

Current Test Year customers by meter size:

5/8 X 3/4 – inch	115
3/4 – inch	0
1 – inch	0
1 1/2 – inch	0
2 – inch	1
4 – inch	0
6 – inch	0
8 – inch	0

Seasonal customers: N/A

Customer notification mailed: November 21, 2000.

Number of customer complaints since rate application filed: 1

Percentage of complaints to customer base: .9%

Summary of Filing

Based on Test Year results, as adjusted by Staff, Cedar Grove Water, ("Cedar Grove" or "Company") realized an operating loss of \$4,824 on an Original Cost Rate Base ("OCRB") of \$54,827 for a negative rate of return of 8.80 percent (Schedule 1).

The Company's proposed rates would produce a revenue level of \$54,349. Operating loss of \$6,064, for a negative 3.14 percent rate of return on an OCRB of \$192,880. The Company's proposed rates would increase the typical residential bill with a median usage of 2,683 gallons, from \$19.28 to \$29.88 for an increase of \$10.60 or 55.0 percent (Schedule 5).

Staff proposed rates would produce revenues of \$47,073, an operating income of \$9,004 on an OCRB of \$54,827 resulting in a 16.42 percent rate of return. Staff's recommended rates would increase the typical residential bill with a median usage of 2,683 gallons, from \$19.28 to \$25.46 for an increase of \$6.18 or 32.0 percent.

In addition to the rate increase application, Cedar Grove requested additional rate relief from the Arizona Corporation Commission ("Commission") in order to cover the cost of Water Infrastructure Finance Authority ("WIFA") financing of \$120,000 for the installation of a new 250,000 gallons storage tank and interconnection between two systems. This interconnection and the addition of storage tank are necessary to meet Arizona Department of Environmental Quality ("ADEQ") requirements.

Cedar Grove is located approximately 12 miles east of Show Low, along State Highway 60 and covers a certificated area of approximately eight square-miles.

The Company operates three water systems, the North, South and Eagle Ridge Systems. For this rate proceeding, Cedar Grove is reporting plant information and documentation for the North and South Systems. (The Eagle Ridge System was completed and placed into operation after the 1999 Test Year).

During the Test Year ended December 31, 1999, Cedar Grove provided potable water service to a total of 116 metered customers. Of those 116 customers, 5/8 x 3/4 -inch meters served 115 customers and a 2-inch meter served 1 customer.

Background

Cedar Grove originated in 1992 by purchasing the assets and transferring the Certificate of Convenience & Necessity ("CC&N") from Sunrise Vista Estates Water Company. Cedar Grove was organized as an Arizona "S" corporation. Since then, a CC&N extension has been granted and numerous plant facilities have been constructed (See Attachment A, Table A).

Decision No. 57990, dated August 26, 1992, approved the sale of Sunrise Vistas Estates Water Company to Cedar Grove. Cedar Grove acquired plant assets of \$66,705 for \$6,882. Accordingly, the Decision stated that "the Commission reserves the right to review any acquisition adjustments and expenses, as well as any other ratemaking matters, for ratemaking purposes in a future rate proceedings".

Staff considered the possibility of a negative acquisition adjustment to reflect the cost of the plant acquired. However, the Company was willing to make the necessary commitment to provide adequate service and technical expertise to provide reliable service.

Sunrise Vista Estates Water Company agreed that it was not knowledgeable or equipped to operate a water company and it would require hiring professionals to properly perform these duties. Consequently, Staff believes that an acquisition adjustment is not appropriate in this case.

Consumer Services

In reviewing Consumer Services records there has been one informal complaint filed against the Company in the past three years and no formal complaints. The informal complaint involved billing a customer for another person's account. Since the application was found sufficient, the Commission has received zero correspondence opposing the amount of the rate increase.

Cedar Grove's Back-flow tariff has been filed with Docket No. W-02597A-00-1034 and is awaiting approval. The customer bill is in accordance with R14-2-409B.2.

It is Staff's recommendation that this application be processed without a public comment due to the low level of consumer concern.

Engineering Analysis

Attachment A is the Engineering Report issued in response to the Company's application for a rate increase and financing.

A description of each system's operation and plant values utilized to determine Plant in Service in the Test Year are also found in Attachment A.

- On December 21, 2000, the Company submitted twenty-six (26) Main Extension Agreements ("MXA") for Commission's retroactive approval for projects on the South System. Although these MXAs were constructed from 1992 to 1999, Engineering Staff could not approve them because of insufficient source of production and storage capacity. The Company has submitted a WIFA financing application to address those problems.

On December 22, 2000 the Company provided information for three (3) MXAs on the North System. These MXAs were also constructed from 1992 to 1999. The Company stated that these MXAs would not be submitted for Commission approval until ADEQ's approvals have been obtained.

The Company failed to submit Certificates of Approval to Construct regarding the above mentioned MXA's. Consequently, Staff recommends that any rates approved in this proceeding be interim and subject to refund. These rates should become permanent if Cedar Grove obtains all required Approvals of Construction from ADEQ by December 31, 2001. If these Approvals are not obtained by then, the rate increase should be removed and refunded.

Staff further recommends that the Company comply with AAC R14-2-406.M regarding the timely filing and required Certificate of Approval to Construct that should accompany the line extension applications, for Commission approval.

Staff further recommends that the Commission adopt Staff's recommended Plant in Service as shown in Table A, as a guideline in evaluating Plant in Service for this rate proceeding.

Staff further recommends that the Commission approve water-testing cost of \$1,787 per year as shown in Table B, attachment A, of this Report

Staff further recommends that the Commission approves the depreciation rates as shown in Table D, attachment A, of this Report, be adopted.

Staff further recommends that the Commission approve the financing request in the amount of \$120,000 for the WIFA Loan.

Staff further recommends that the Company comply with the terms and conditions of the WIFA loan. In particular, any set-a-side amounts required to be implemented by WIFA. Based on Test Year data, Staff estimates that the set-a-side should be approximately \$8.90 per customer per month.

Compliance

Cedar Grove is current on its property tax payments and in its remittance of Sales and Use Tax.

ADEQ has stated that the Company is delivering water that does not exceed any maximum contaminant levels (MCL) and meets the Safe Drinking Water Act quality standards.

Rate Base

Staff's adjustments decreased the Company's proposed Rate Base of \$192,586 to \$54,827 (Schedule 2, Page 1).

Adjustment A decreased Plant in Service by \$256,580 to reflect plant values calculated by Staff Engineering.

Adjustment B decreased the Company's Accumulated Depreciation balance by \$82,753, based on Staff's adjustments to Plant in Service.

Adjustment C, decreased Advances in Aid of Construction ("AIAC") based on Staff's audited balance.

Adjustment D reduced working capital allowance by \$1,021 based on Staff's adjustments to operating expenses.

Plant and Equipment

A total of seven adjustments were made to Plant in Service, resulting in a decrease of \$240,532. These adjustments are shown in Schedule 2, Page 2. Staff added plant improvements considered used and useful from 1991 through the Test Year (1999) to the Company's 1990 plant values reported in its 1990 Annual Report of \$66,705. Staff further reduced Plant in Service to record retirements and unsubstantiated plant.

Accumulated Depreciation

Staff decreased Accumulated Depreciation by \$69,204 as reflected in Schedule 2, Page 3. Staff's balance, was derived by adding depreciation expense for the intervening years (1991 to 1999) to the ending accumulated depreciation balance of \$32,353 as shown in the Company's Annual Report in 1990.

Operating Revenue

Staff made no adjustment to the Company's Test Year Operating Revenue of \$37,271. (Schedule 3, Page 1).

Operating Expenses

Staff made 11 adjustments to Operating Expenses resulting in a net decrease of \$18,318.

Adjustment A, reclassified \$792 from Salaries and Wages to Repairs and Maintenance. Staff disallowed \$402 of unsubstantiated expense for a total adjustment decrease of \$1,194.

Adjustment B increased Repairs and Maintenance Expense by \$792 reclassified from Salaries/Wages.

Adjustment C decreased Office Supplies and Expense by of \$143 to reflect Staff's disallowance of unsubstantiated expenses.

Adjustment D, decreased Outside Services by \$4,195. Staff deferred Engineering Fees regarding construction work in progress in the amount of \$4,210. Staff recommends that the Company capitalized this cost as part of the overall cost of plant when placed in service. Staff increased expenses by \$15 as a result of audit findings.

Adjustment E decreases Water Testing Expense by \$873 to reflect the amount recommended by Staff Engineering of \$1,787.

Adjustment F records tank site rental expense in the amount of \$245. Staff also disallowed unsubstantiated expense in the amount of \$123.

Adjustment G reflects a \$750 decrease of unsubstantiated expense.

Adjustment H in the amount of \$783 reflects Staff's recommendation to allow \$2,349 for rate case expense amortized over three years.

Adjustment I, removes from Miscellaneous Expense \$359 of unsubstantiated expenses.

Adjustment J decreases Depreciation Expense by \$12,101 to reflect application of a depreciation rate of 5.00 percent to Staff proposed depreciable plant. At proposed rates Staff's recommended depreciation rates result in an expense level of \$9,854

Adjustment K, increased Property Taxes to reflect the most recent tax bill in the amount of \$1,947, not shown in the instant application.

Adjustment L on a pro-forma basis reflects interest expense of \$6,915 on the proposed WIFA loan.

Adjustment M reflects the cost of the Reserve Fund Deposit regarding the proposed WIFA loan.

Rate of Return

There are several methods to arrive at a fair and reasonable rate of return. Cost of capital studies, cash requirements analysis and debt service coverage ratios are the most common methodologies used. The Company is classified as a Class D water utility and as such is not required to file cost of capital studies to arrive at its proposed rate of return.

Staff based its recommended rate of return on the WIFA required Debt Service Coverage ("DSC") ratio of at least 1.20. This ratio means that for every dollar of debt the Company has \$1.20 to service the debt.

The Company is proposing an increase in revenues of approximately \$17,078 over the Test Year revenues or 45.8 percent. Staff is recommending an increase of approximately \$9,802 or 26.3 percent over Test Year revenues. This translates to a rate of return of 16.42 percent.

Staff's proposed rates produce a Debt Service Coverage ratio of 1.52, which exceeds WIFA's required ratio of at least 1.20.

Staff's recommended revenue level would provide a positive cash flow of \$3,213.

Rate Design

As shown on Schedule 4, Staff is recommending a one-tier rate design that would produce a steady revenue stream to the Company. Staff's proposed rate design parallels the current Company's rate structure. The Company's present rates include minimum 1,000 gallons, Staff agrees with Company to remove the 1,000 gallons from the monthly minimum charge.

Staff considered a multi-tiered rate structure, however, due to low usage and revenue stream required by the Company, Staff is recommending a one-tier rate structure at this time.

Other Matters

The Company is not using the National Association of Regulatory Utility Commissioners ("NARUC") system of accounts as adopted by this Commission.

Staff recommends that the Company implements and maintains its books and records in accordance with NARUC system of accounts and establishes a general ledger and other appropriate accounting and business records. Collections from customer's bills should be promptly recorded. Staff also recommends that all water sales be reported as revenue, not to be confused or traded for services received from consumers.

WIFA Financing Request

The Company's rate application includes a financing request for approval to obtain a \$120,000 loan from the WIFA. As of March 15, 2001, the Company's loan application was listed in the fundable range of WIFA's Project Priority List. Proceeds from the loan are needed to acquire a 250,000-gallon storage tank and interconnection between North and South Systems in order to meet ADEQ requirements. A breakdown of the loan amount and its projects are as follows:

a. Storage tank project:

1.	New 250,000 gallon storage tank from Brown Tank & Steel	\$84,200
2.	Sales tax at 5.5% on tank	\$4,631
3.	Tank site preparation	\$500
4.	Tank base – ABC base and compaction	\$750
5.	Connect tank to system, 20 feet of 6-inch main & altitude valve	\$4,000

6.	Sub-total:	\$94,081

b. Interconnection project:

7.	Boring across State Highway 60	\$10,000
8.	Materials, 1,500 feet of 6-inch PVC pipes & fittings	\$8,015
9.	Bedding materials	\$1,500
10.	Equipment rental	\$3,000
11.	Labor	\$8,000

12.	Sub -total:	\$30,515

c. TOTAL: \$124,596

These WIFA Loan projects will interconnect the North and South Systems and provide needed fire flow requirements to the South System and a second source production for each system. Once these projects are completed and placed into operation, the pending 26 MXAs for the South System will have the sufficient source production and storage capacities.

After review of these projects for the WIFA Loan in the amount of \$120,000, it is Staff Engineering's opinion that these projects and their costs are reasonable at a Company's estimated cost of \$124,596. Although the Company has submitted a WIFA Loan application of \$120,000, the Company acknowledged and will be responsible for the balance of \$4,596.

Staff further recommends that the Company comply with the terms and conditions of the WIFA loan. In particular, any set-a-side amounts required to be implemented by WIFA. Based on

Test Year data, Staff estimates that the set-a-side should be approximately \$8.90 per customer per month.

At the present time, the expected \$120,000 loan has an expected annual percentage rate of 6.00 percent over a period of 20 years. The projected initial Interest Rate Index is 8.34 percent; however, the actual rate ultimately approved by WIFA Board may differ from the projected initial rate. Based on the projected initial Interest Rate Index of 8.34 percent, the monthly principal, interest, and reserve fund payments equal \$1,032.50.

Staff's proposed rates will provide sufficient revenue to cover the debt service and the WIFA required reserve fund deposits.

Staff Recommendations

Staff recommends approval of its rates and charges as shown in Schedule 4.

Staff recommends approval of its rates and charges without a hearing.

It is Staff's recommendation that this application be processed without a public comment due to the low level of consumer concern.

Staff further recommends that any rates approved in this proceeding be interim and subject to refund. These rates should become permanent if Cedar Grove obtains all required approvals of construction from ADEQ by December 31, 2001. If these approvals are not obtained by then, the rate increase should be removed and refunded.

Staff further recommends that the Company comply with AAC R14-2-406.M regarding the timely filing and required Certificate of Approval to Construct that should accompany the line extension applications, for Commission approval.

Staff further recommends that the Commission adopt Staff's recommended Plant in Service as shown in Table A, as a guideline in evaluating Plant in Service for this rate proceeding.

Staff further recommends approval of the \$120,000 long-term debt from WIFA under the terms and conditions set forth by WIFA's Board of Directors at the time of the consummation of the loan.

Staff further recommends that the Company comply with the terms and conditions of the WIFA loan. In particular, any set-a-side amounts required to be implemented by WIFA. Based on Test Year data, Staff estimates that the set-a-side should be approximately \$8.90 per customer per month.

Staff further recommends that the Company implements and maintains its books and records in accordance with NARUC system of accounts and establish a general ledger and other appropriate accounting and business records. Collections from customer's bills should be promptly recorded. Staff also recommends that all water sales be reported as revenue, not to be confused or traded for services received from consumers.

Staff further recommends that in addition to the collection of its regular rates and charges, Cedar Grove shall collect from its customers their proportionate share of any Privilege, Sales or Use Tax as provided for in A.A.C. R14-2-409.D.

Cedar Grove Water

Docket No. W-02597A-00-0960

Test Year Ended December 31, 1999

Schedule 1

SUMMARY OF FILING

	-- Present Rates --		-- Proposed Rates --	
	Company as Filed	Staff as Adjusted	Company as Filed	Staff as Adjusted
Revenues:				
Metered Water Revenue	\$36,553	\$36,553	\$53,631	\$46,355
Unmetered Water Revenue	253	253	253	253
Other Water Revenues	465	465	465	465
Total Operating Revenue	\$37,271	\$37,271	\$54,349	\$47,073
Operating Expenses:				
Operation and Maintenance	\$34,382	\$26,217	\$34,382	\$26,217
Depreciation	25,981	13,880	25,981	9,854
Property & Other Taxes	0	1,947	0	1,947
Income Tax	50	50	50	50
Total Operating Expense	\$60,413	\$42,095	\$60,413	\$38,069
Operating Income/(Loss)	(\$23,142)	(\$4,824)	(\$6,064)	\$9,004
Rate Base O.C.L.D.	\$192,880	\$54,827	\$192,880	\$54,827
Rate of Return - O.C.L.D.	-12.00%	-8.80%	-3.14%	16.42%
Times Interest Earned Ratio (Pre-Tax)	N/A	-0.69	N/A	1.30
Debt Service Coverage Ratio (Pre-Tax)	N/A	0.74	N/A	1.52
Operating Margin	-62.09%	-12.94%	-11.16%	19.13%

- NOTES:
1. The times interest earned ratio (TIER) represents the ability of the Company to pay interest expenses before taxes.
 2. Operating Margin represents the proportion of funds available to pay interest and other below the line or non-ratemaking expenses.

RATE BASE

	----- Original Cost -----			Staff
	Company	Adjustment		
Plant in Service	\$520,622	(\$240,532)	A	\$280,090
Less:				
Accum. Depreciation	174,953	(69,204)	B	105,749
Net Plant	\$345,669	(\$171,328)		\$174,341
Less:				
Plant Advances	\$149,011	(\$34,296)	C	\$114,715
Meter Deposits	7,590	0		7,590
Total Advances	\$156,601	(\$34,296)		\$122,305
Contributions Gross	\$0	\$0		\$0
Less:				
Amortization of CIAC	0	0		0
Net CIAC	\$0	\$0		\$0
Total Deductions	\$156,601	(\$34,296)		\$122,305
Plus:				
1/24 Power	\$243	\$0		\$243
1/8 Operation & Maint.	3,569	(1,021)	D	2,548
Inventory	0	0		0
Prepayments	0	0		0
Total Additions	\$3,812	(\$1,021)		\$2,791
Rate Base	\$192,880	(\$138,053)		\$54,827

Explanation of Adjustment:

- A - See Schedule 2 page 2 of 3.
- B - See Schedule 2 page 3 of 3.
- C - Based on Staff's adjustments due to audit findings.
- D - Based on Staff's adjustments to Operating Expenses.

PLANT ADJUSTMENT

	Company Exhibit	Adjustment	Staff Adjusted
301 Organization	\$12,144	(\$11,144)	\$1,000
302 Franchises	1,500	(1,000)	500
303 Land & Land Rights	1,000	0	1,000
304 Structures & Improvements	10,500	(2,000)	8,500
307 Wells & Springs	20,700	(745)	19,955
311 Pumping Equipment	18,655	(750)	17,905
320 Water Treatment Equipment	0	0	0
330 Distribution Reservoirs & Star	12,800	0	12,800
331 Transmission & Distribution N	423,533	(223,993)	199,540
333 Services	15,084	0	15,084
334 Meters & Meter Installations	3,806	0	3,806
335 Hydrants	0	0	0
336 Backflow Prevention Devices	0	0	0
339 Other Plant and Misc. Equiprr	0	0	0
340 Office Furniture & Equipment	0	0	0
341 Transportation Equipment	0	0	0
343 Tools Shop & Garage Equiprr	350	(350)	0
344 Laboratory Equipment	0	0	0
345 Power Operated Equipment	0	0	0
346 Communication Equipment	0	0	0
347 Miscellaneous Equipment	0	0	0
348 Other Tangible Plant	550	(550)	0
105 C.W.I.P.	0	0	0
TOTALS	\$520,622	(\$240,532) A	\$280,090

Explanation of Adjustment:

A To reflect Staff Engineer's recommended Plant in Service.

ACCUMULATED DEPRECIATION ADJUSTMENT

	<u>Amount</u>
Accumulated Depreciation - Per Company	\$174,953
Accumulated Depreciation - Per Staff	105,749 A
Total Adjustment	<u>(\$69,204)</u>

Explanation of Adjustment:

A - Accumulated Depreciation based on original cost - System constructed in 1988, per Staff Engineer's Plant-in-Service evaluation.	\$	32,353
Plus:		
Depreceiation Expense 1991	3,293	
Depreceiation Expense 1992	4,245	
Depreceiation Expense 1993	4,248	
Depreceiation Expense 1994	4,934	
Depreceiation Expense 1995	5,940	
Depreceiation Expense 1996	9,959	
Depreceiation Expense 1997	13,254	
Depreceiation Expense 1998	13,643	
Depreceiation Expense 1999	<u>13,880</u>	73,396
Staff Balance as of December 31, 1999	\$	<u>105,749</u>

STATEMENT OF OPERATING INCOME

	Company Exhibit	Staff Adjustments	Staff Adjusted
Revenues:			
461 Metered Water Revenue	\$36,553	\$0	\$36,553
460 Unmetered Water Revenue	253	0	253
474 Other Water Revenues	465	0	465
Total Operating Revenue	\$37,271	\$0	\$37,271
Operating Expenses:			
601 Salaries and Wages	\$9,151	(\$1,194) A	\$7,957
610 Purchased Water	0	0	0
615 Purchased Power	5,831	0	5,831
618 Chemicals	0	0	0
620 Repairs and Maintenance	1,063	792 B	1,855
621 Office Supplies & Expense	2,880	(143) C	2,737
630 Outside Services	5,758	(4,195) D	1,563
635 Water Testing	2,660	(873) E	1,787
641 Rents	722	123 F	845
650 Transportation Expenses	2,309	(750) G	1,559
657 Insurance - General Liability	353	0	353
659 Insurance - Health and Life	0	0	0
666 Regulatory Commission Expense - Rate Case	2,349	(1,566) H	783
675 Miscellaneous Expense	1,306	(359) I	947
403 Depreciation Expense	25,981	(12,101) J	13,880
408 Taxes Other Than Income	0	0	0
408.11 Property Taxes	0	1,947 K	1,947
409 Income Tax	50	0	50
Total Operating Expenses	\$60,413	(\$18,318)	\$42,095

OPERATING INCOME/(LOSS)	(\$23,142)	\$18,318	(\$4,824)
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Other Income/(Expense):			
419 Interest and Dividend Income	\$19	\$0	\$19
421 Non-Utility Income	0	0	0
427 Interest Expense	0	6,915 L	6,915
4XX Reserve Fund Deposit	0	2,065 M	2,065
426 Miscellaneous Non-Utility Expense	0	0	0

Total Other Income/(Expense)	\$19	(\$4,850)	(\$8,961)
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NET INCOME/(LOSS)	(\$23,123)	\$13,468	(\$13,785)
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STAFF ADJUSTMENTS

A	- SALARIES AND WAGES - Per Company Per Staff	\$9,151 <u>7,957</u>	<u><u>(\$1,194)</u></u>
	To reclassify to Repairs and Maintenance of \$792. To disallow unsubstantiated expense of \$402.		
B	- REPAIRS AND MAINTENANCE - Per Company Per Staff	\$1,063 <u>1,855</u>	<u><u>\$792</u></u>
	To reclassify from Salaries/Wages		
C	- OFFICE SUPPLIES & EXPENSE - Per Company Per Staff	\$2,880 <u>2,737</u>	<u><u>(\$143)</u></u>
	To disallow unsubstantiated expense of \$143.		
D	- OUTSIDE SERVICES - Per Company Per Staff	\$5,758 <u>1,563</u>	<u><u>(\$4,195)</u></u>
	To defer Engineering Fees regarding construction work in progress of \$4,210. To increase by \$15 to reflect actual expense.		
E	- WATER TESTING - Per Company Per Staff	\$2,660 <u>1,787</u>	<u><u>(\$873)</u></u>
	To adjust to Staff Engineering evaluated water testing cost. (873)		
F	- RENTS - Per Company Per Staff	\$722 <u>845</u>	<u><u>\$123</u></u>
	To increase by \$245 to reflect actual expense. To disallow unsubstantiated expense of \$122.		
G	- TRANSPORTATION EXPENSE - Per Company Per Staff	\$2,309 <u>1,559</u>	<u><u>(\$750)</u></u>
	To disallow unsubstantiated expense of \$750.		

STAFF ADJUSTMENTS (Cont)

H - REGULATORY COMMISSION EXPENSE - RATE CASE			
	- Per Company	\$2,349	
	Per Staff	783	<u>(\$1,566)</u>

To record Rate Case Expense of \$2,349, amortized over three years.

I - MISCELLANEOUS EXPENSE - Per Company		\$1,306	
	Per Staff	947	<u>(\$359)</u>

To disallow unsubstantiated expense of \$359.

J - DEPRECIATION - Per Company		\$25,981	
	Per Staff	13,880	<u>(\$12,101)</u>

Explanation of Adjustment:

Depreciation Expense:

Plant in Service	\$280,090
Less: Non Depreciable Plant	2,500
Fully Depreciated Plant	0
Depreciable Plant	<u>\$277,590</u>
Times: Staff Proposed Depreciation Rate (1988 -1999)	5.00%
Credit to Accumulated Depreciation	<u>\$13,880</u>
Annual Depreciation Expense	<u>\$13,880</u>

Pro Forma Depreciation Expense is based on Staff Engineering recommendation (Table D).

K - PROPERTY TAXES - Per Company		\$0	
	Per Staff	1,947	<u>\$1,947</u>

To adjust to the most recent paid tax bill received by the Company in the amount of \$1,947.

L INTEREST EXPENSE - Per Company		\$0	
	Per Staff	6,915	<u>\$6,915</u>

To pro forma interest in the amount of \$6,915 for proposed WIFA loan.

M RESERVE/REPLACEMENT FUND DEPOSIT - Per Company		\$0	
	Per Staff	2,065	<u>\$2,065</u>

To pro forma reserve in the amount of \$2,065 for proposed WIFA loan.

Cedar Grove Water

Docket No. W-02597A-00-0960

Schedule 4

Test Year Ended December 31, 1999

RATE DESIGN

Monthly Usage Charge	Present	-Proposed Rates-	
	Rates	Company	Staff
5/8" x 3/4" Meter	\$16.00	\$22.50	\$18.75
3/4" Meter	24.00	34.00	28.15
1" Meter	40.00	56.00	46.90
1½" Meter	80.00	110.00	93.75
2" Meter	128.00	180.00	150.00
3" Meter	240.00	340.00	281.25
4" Meter	400.00	560.00	468.75
6" Meter	800.00	1,120.00	937.50
Bulk Haulers - per 1000 gallons	4.65	6.50	5.00
Flat Rate per stand pipe/fire hydrant - 6"	15.00	20.00	0.00
Gallons Included in Minimum	1,000	0	0
Excess of minimum, per 1,000 Gallons	1.95	2.75	2.50
Service Line and Meter Installation Charges			
5/8" x 3/4" Meter	\$150.00	\$210.00	\$210.00
3/4" Meter	175.00	245.00	245.00
1" Meter	250.00	350.00	350.00
1½" Meter	375.00	525.00	525.00
2" Meter	500.00	700.00	700.00
3" Meter	700.00	980.00	980.00
4" Meter	1,300.00	1,820.00	1,820.00
6" Meter	2,800.00	3,920.00	3,920.00
Service Charges			
Establishment	\$15.00	\$20.00	\$20.00
Establishment (After Hours)	24.00	50.00	35.00
Reconnection (Delinquent)	15.00	20.00	20.00
Meter Test (If Correct)	50.00	70.00	50.00
Deposit	*	*	*
Deposit Interest	*	*	*
Re-Establishment (Within 12 Months)	**	**	**
NSF Check	17.00	25.00	20.00
Deferred Payment - 1.5% of unpaid monthly balance.	18.00%	18.00%	18.00%
Meter Re-Read (If Correct)	15.00	20.00	15.00
Late Payment - 1.5% of unpaid monthly balance.	10.00	12.50	18.00%

* Per Commission Rules (R14-2-403.B)
 ** Months off system times the minimum (R14-2-403.D)
 *** 1.00% of Monthly Minimum for a Comparable Sized Meter Connection, but no less than \$5.00 per month.

Cedar Grove Water

Docket No. W-02597A-00-0960

Test Year Ended December 31, 1999

Schedule 5

TYPICAL BILL ANALYSIS

General Service 5/8 X 3/4 - Inch Meter

Average Number of Customers: 109

<u>Company Proposed</u>	<u>Gallons</u>	<u>Present Rates</u>	<u>Proposed Rates</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
Average Usage	4,535	\$22.89	\$34.97	\$12.08	52.8%
Median Usage	2,683	\$19.28	\$29.88	\$10.60	55.0%
<u>Staff Proposed</u>					
Average Usage	4,535	\$22.89	\$30.09	\$7.19	31.4%
Median Usage	2,683	\$19.28	\$25.46	\$6.18	32.0%

Present & Proposed Rates (Without Taxes)
General Service 5/8 X 3/4 - Inch Meter

<u>Gallons Consumption</u>	<u>Present Rates</u>	<u>Company Proposed Rates</u>	<u>% Increase</u>	<u>Staff Proposed Rates</u>	<u>% Increase</u>
0	\$16.00	\$22.50	40.6%	\$18.75	17.2%
1,000	16.00	25.25	57.8%	21.25	32.8%
2,000	17.95	28.00	56.0%	23.75	32.3%
3,000	19.90	30.75	54.5%	26.25	31.9%
4,000	21.85	33.50	53.3%	28.75	31.6%
5,000	23.80	36.25	52.3%	31.25	31.3%
6,000	25.75	39.00	51.5%	33.75	31.1%
7,000	27.70	41.75	50.7%	36.25	30.9%
8,000	29.65	44.50	50.1%	38.75	30.7%
9,000	31.60	47.25	49.5%	41.25	30.5%
10,000	33.55	50.00	49.0%	43.75	30.4%
15,000	43.30	63.75	47.2%	56.25	29.9%
20,000	53.05	77.50	46.1%	68.75	29.6%
25,000	62.80	91.25	45.3%	81.25	29.4%
50,000	111.55	160.00	43.4%	143.75	28.9%
75,000	160.30	228.75	42.7%	206.25	28.7%
100,000	209.05	297.50	42.3%	268.75	28.6%
125,000	257.80	366.25	42.1%	331.25	28.5%
150,000	306.55	435.00	41.9%	393.75	28.4%
175,000	355.30	503.75	41.8%	456.25	28.4%
200,000	404.05	572.50	41.7%	518.75	28.4%

TYPICAL BILL ANALYSIS
General Service 2 - Inch Meter

Average Number of Customers: 2

<u>Company Proposed</u>	<u>Gallons</u>	<u>Present Rates</u>	<u>Proposed Rates</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
Average Usage	39,034	\$202.17	\$287.34	\$85.18	42.1%
Median Usage	25,500	\$175.78	\$250.13	\$74.35	42.3%
<u>Staff Proposed</u>					
Average Usage	39,034	\$202.17	\$247.59	\$45.42	22.5%
Median Usage	25,500	\$175.78	\$213.75	\$37.98	21.6%

Present & Proposed Rates (Without Taxes)
General Service 2 - Inch Meter

<u>Gallons Consumption</u>	<u>Present Rates</u>	<u>Company Proposed Rates</u>	<u>% Increase</u>	<u>Staff Proposed Rates</u>	<u>% Increase</u>
0	\$128.00	\$180.00	40.6%	\$150.00	17.2%
1,000	128.00	182.75	42.8%	152.50	19.1%
2,000	129.95	185.50	42.7%	155.00	19.3%
3,000	131.90	188.25	42.7%	157.50	19.4%
4,000	133.85	191.00	42.7%	160.00	19.5%
5,000	135.80	193.75	42.7%	162.50	19.7%
6,000	137.75	196.50	42.6%	165.00	19.8%
7,000	139.70	199.25	42.6%	167.50	19.9%
8,000	141.65	202.00	42.6%	170.00	20.0%
9,000	143.60	204.75	42.6%	172.50	20.1%
10,000	145.55	207.50	42.6%	175.00	20.2%
15,000	155.30	221.25	42.5%	187.50	20.7%
20,000	165.05	235.00	42.4%	200.00	21.2%
25,000	174.80	248.75	42.3%	212.50	21.6%
50,000	223.55	317.50	42.0%	275.00	23.0%
75,000	272.30	386.25	41.8%	337.50	23.9%
100,000	321.05	455.00	41.7%	400.00	24.6%
125,000	369.80	523.75	41.6%	462.50	25.1%
150,000	418.55	592.50	41.6%	525.00	25.4%
175,000	467.30	661.25	41.5%	587.50	25.7%
200,000	516.05	730.00	41.5%	650.00	26.0%

WIFA LOAN FINANCIAL ANALYSIS

Test Year Income Statement, Capital Structure and Pro Forma Based on Audit
Including Immediate Effects of the Proposed Debt

INCOME STATEMENT

	<u>December 31, 1999</u>	<u>Pro Forma</u>
Operating Revenue:	\$37,271	\$47,073
Operating Expenses:		
Purchased Water/Pumping Power	\$5,831	\$5,831
Admin. & General	22,519	15,185
Maintenance & Testing	6,032	5,201
Depreciation (d)	25,981	9,854
Property Taxes	0	1,947
Other taxes	50	50
Total Operating Expense	<u>\$60,413</u>	<u>\$38,069</u>
Pre-Tax Operating Income	(\$23,142)	\$9,004
Interest Income	\$19	\$19
Interest Expense (a)	<u>0</u>	<u>6,915</u>
Pre-Tax Net Income (b)	<u>(\$23,123)</u>	<u>\$2,108</u>
Principal Repayment (c)	0	3,410
Reserve Deposit (e)	0	2,065
TIER (Interest Coverage)		
[(a) + (b)] ÷ (a)	N/M	1.30
DSC		
[(a) + (b) + (d)] ÷ [(a) + (c) + (e)]	N/M	1.52

CAPITAL STRUCTURE

Short-term Debt	\$0	N/M	\$0	0.0%
Long-term Debt	\$0	N/M	\$120,000	71.6%
Common Equity	\$0	N/M	\$47,583	28.4%
Total Capital	\$0	N/M	\$167,583	100.0%

Cedar Grove Water

Docket No. W-02597A-00-0960

Test Year Ended December 31, 1999

Schedule 7

TERMS OF PROPOSED WIFA LOAN

Terms and Conditions

Loan Amount	\$120,000.00
Term (No. of Years)	20
Combined Interest & Fee Rate	
Interest Rate Index	8.34%
Subsidy Rate Index	70.00%
Combined Interest & Fee Rate	<u>5.84%</u>
Coverage Requirement	20.00%
Debt Service Reserve Requirement	\$10,324.98
Number of Years Debt Service Reserve Funded	5

Monthly Fixed payment to WIFA

Prior to Debt Service Reserve Requirement

Monthly Fixed Payments to WIFA	\$860.41
Monthly Debt Service Reserve Deposit	\$172.08
Total Monthly Fixed Payment	<u>\$1,032.50</u>

After Debt Service Reserve Requirement

Monthly Fixed Payments to WIFA	\$860.41
Monthly Debt Service Reserve Deposit	0.00
Total Monthly Fixed Payment	<u>\$860.41</u>

Annual Reserve Fund Deposit - Held Locally

Prior to Debt Service Reserve Requirement	\$0.00
After Debt Service Reserve Requirement	\$172.08

Annual Fiscal Impact

Year	Annual Debt Service	Reserve Fund Deposit	Reserve Fund Deposit	Total Annual Fiscal Impact
1	\$10,324.98	\$2,065.00	\$0.00	\$12,389.97
2	10,324.98	2,065.00	0.00	12,389.97
3	10,324.98	2,065.00	0.00	12,389.97
4	10,324.98	2,065.00	0.00	12,389.97
5	10,324.98	2,065.00	0.00	12,389.97
6	10,324.98	0.00	2,065.00	12,389.97
7	10,324.98	0.00	2,065.00	12,389.97
8	10,324.98	0.00	2,065.00	12,389.97
9	10,324.98	0.00	2,065.00	12,389.97
10	10,324.98	0.00	2,065.00	12,389.97
11	10,324.98	0.00	2,065.00	12,389.97
12	10,324.98	0.00	2,065.00	12,389.97
13	10,324.98	0.00	2,065.00	12,389.97
14	10,324.98	0.00	2,065.00	12,389.97
15	10,324.98	0.00	2,065.00	12,389.97
16	10,324.98	0.00	2,065.00	12,389.97
17	10,324.98	0.00	2,065.00	12,389.97
18	10,324.98	0.00	2,065.00	12,389.97
19	10,324.98	0.00	2,065.00	12,389.97
20	10,324.98	0.00	2,065.00	12,389.97
21	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00
	\$206,499.55	\$10,324.98	\$30,974.93	\$247,799.45

**ENGINEERING REPORT
FOR
CEDAR GROVE WATER
DOCKET NO. W-02597A-00-0960
(RATES & FINANCING)**

A. PURPOSE OF REPORT

This report was prepared in response to Cedar Grove Water's (CGW) submission of applications for a rate increase and financing. This report will provide a description of the water utility systems, evaluate their growth potentials, provide information on their status with other regulatory agencies, and evaluate the financing request. These water systems were field inspected on January 22, 2001, by Marlin Scott, Jr., Staff Utilities Engineer, accompanied by Mark Grapp, Owner of CGW.

B. LOCATION OF CGW

CGW is located approximately 12 miles east of Show Low, along State Highway 60 and covers a certificated area of approximately eight square-miles.

C. DESCRIPTION OF WATER SYSTEMS

CGW operates three independent water systems, the North, South and Eagle Ridge Systems. For this rate proceeding, CGW is reporting plant information and documentation for the North and South Systems. (The Eagle Ridge System was completed and placed into operation after the test year 1999.) Brief descriptions of each system's operation are as follows, with detailed plant facilities listed in Section F – Evaluation of CGW's Plants-in-Service.

1. North System, PWS #01-049 – This system was the old Sunrise Vista Estates Water system (constructed in 1988) that was transferred to CGW in August 1992. This system has a well, North Well, having a 6-inch casing to a depth of 860 feet and equipped with a 5-horsepower (Hp) submersible pump with a flowrate of 12 gallons per minute (GPM) through a 1-inch meter. This well, along with a 1-1/2-Hp booster pump, pumps into the distribution system, to a 10,000 gallon pressure tank and a 15,000 gallon storage tank. The well and control panels are enclosed by a 12-foot by 12-foot building.

The distribution system consists of 2,010 feet of 2-inch and 21,159 feet of 6-inch Polyvinyl Chloride (PVC) mains serving 36 metered customers and a standpipe structure located at the 10,000 gallon pressure tank site.

2. South System, PWS #01-058 – This system was constructed in 1993 with a well, South Well, having a 6-inch casing to a depth of 440 feet and equipped with a 5-Hp submersible

pump with a flowrate of 32 GPM through a 1-1/2-inch meter. This well pumps into two storage tanks (10,000 gallon and 12,500 gallon), through five booster pumps (four 2-Hp and one 5-Hp), and into a 1,000 gallon pressure tank before distribution into the system. The well and control panels are enclosed by a 6-foot by 6-foot building and the booster system is enclosed by a 20-foot by 30-foot pump/storage building.

The distribution system consists of 1,370 feet of 2-inch PVC main, 21,146 feet of 6-inch PVC main and two booster stations serving 80 metered customers.

- [Description of this system is only for record keeping purpose since CGW acknowledged this system was placed into operation after the test year 1999.]
Eagle Ridge System, PWS #01-065 – This system was placed into operation in February 2000. This system has a well, Eagle Ridge Well, having a 6-inch casing to a depth of 544 feet and equipped with a 7-1/2-Hp submersible pump with a flowrate of 56 GPM. This well pumps into a 50,000 gallon storage tank, through a 7-1/2-Hp booster pump, and into a 2,000 gallon pressure tank before distribution into the system. The well, control panels and booster system are enclosed by a 24-foot by 24-foot building.

The distribution system consists of 4-inch and 6-inch PVC mains (quantities not reported) serving eight metered customers, as of December 2000.

D. WATER USE

Figure 1 shows the water consumption data combined from the North and South systems during the test year. The actual consumption was used to produce the peak water use figure. A high usage of 293 gallons per day (GPD) per connection and a low of 93 GPD per connection were experienced, for an annual average usage of 175 GPD per connection.

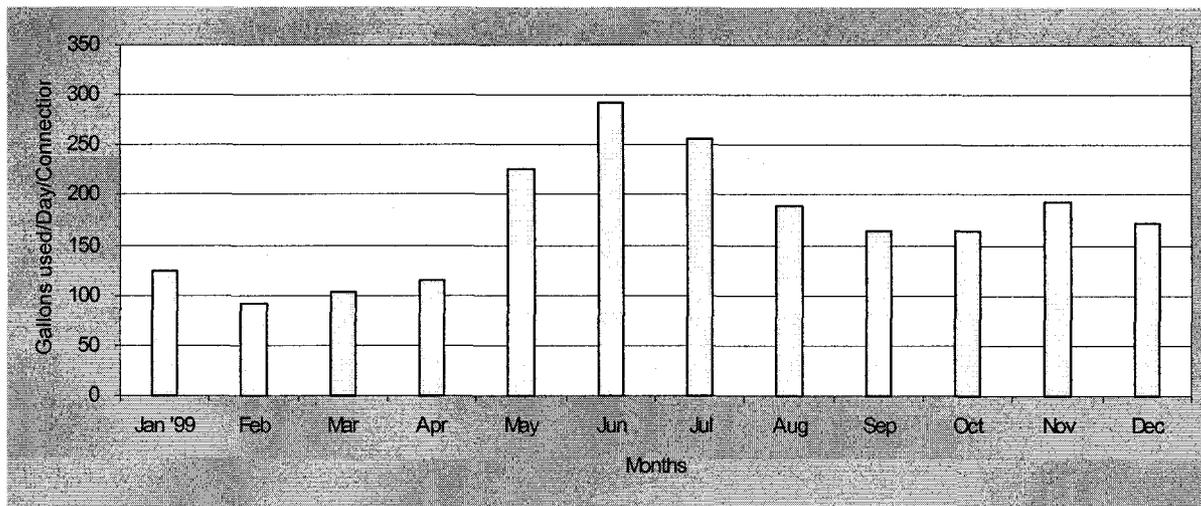


Figure 1. Water Use

E. GROWTH PROJECTIONS

Figure 2 shows the customer growth as a combined system using linear regression analysis. The number of service connections was obtained from annual reports submitted to the Commission. During the test year 1999, CGW had a total of 116 customers and it is projected that CGW could have approximately 200 customers by 2004.

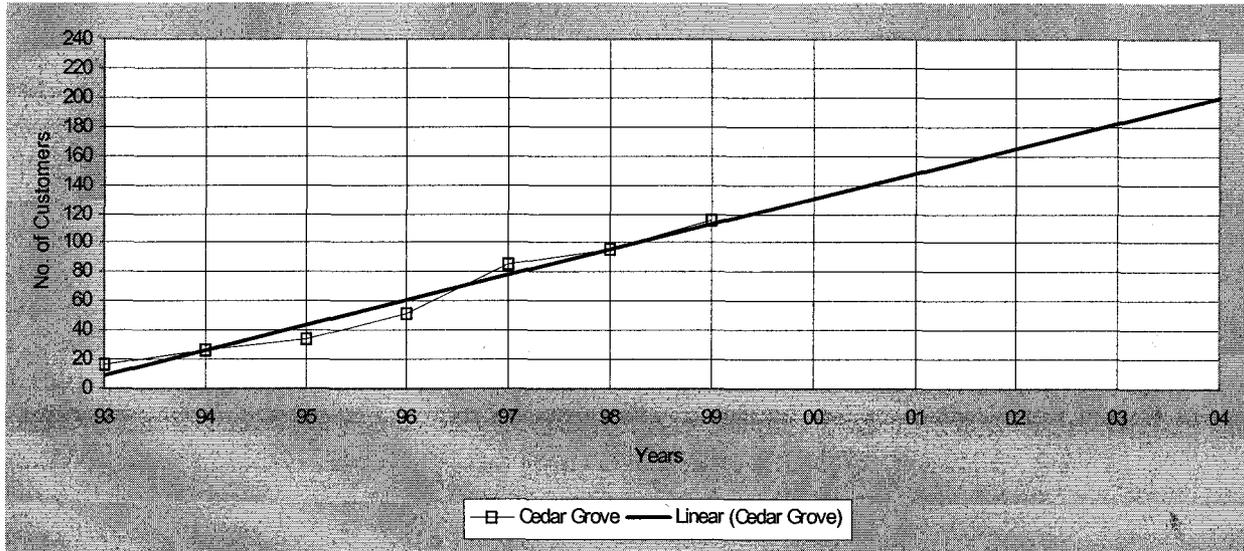


Figure 2. Growth Projection

F. EVALUATION OF CGW'S PLANTS-IN-SERVICE

CGW has not had a rate proceeding. CGW was originated in 1992 by purchasing and transferring the CC&N from Sunrise Vista Estates Water Company and adopting its rates and charges granted in November 1988. Since then, CC&N extensions have been granted and numerous plant facilities have been constructed. The current plants-in-service consists of the following facilities in Table A and Staff Engineering recommends using its adjustments in this table as a guideline in this rate proceeding.

Table A. CGW's Plants-in-Service

Acct. No.	Plant Items	2000 Company Filing	From Annual Reports	Additions & Deletions	Staff's Total Plant
301	Organization Cost	12,144			1,000
	North System -88		(1) 1,000		

302	Franchise Cost	1,500			500
	North System -88		(1) 0		
	South System -94		500		
303	Land & Land Rights	1,000			1,000
	North System -88		(1) 1,000		
304	Structures & Improvements	10,500			8,500
	North Wellsite, 6' x 6' bldg. -88		(1) 1,000	(1,000)	
	12' x 12' bldg. -94		1,000		
	North Tanksite, 5' x 15' bldg. -88		(1) 1,000	(1,000)	
	South Wellsite, 6' x 6' bldg. -93		?		
	20' x 30' bldg. -97		7,500		
307	Wells & Springs	20,700			20,700
	North Well, 6" x 860 ft. -88		(1) 16,300		
	South Well, 6" x 440 ft. -93		4,400		
311	Electric Pumping Equipment	18,655			17,160
	North Well, 5-Hp sub. @ 12 gpm -88		(1) 6,920		
	1-1/2-Hp booster pump -88		(1) 1,040		
	40 gal. Bladder tanks, 2 ea. -88		(1) 745	(745)	
	South Well, 1-Hp sub. @ 13 gpm -93		4,017	(750)	
	5-Hp sub. @ 32 gpm -97		2,806		
	2-Hp booster pumps, 2 each -94		2,520		
	2-Hp booster pumps, 2 each -00		0		
	5-Hp booster pump -98		607		
	3/4-Hp booster station -97 (w/ MXA)		0		
	1/2-Hp booster station -97 (w/ MXA)		0		
320	Water Treatment Equipment	500	(1) 500	(500)	0
330	Distribution Reservoirs & Standpipes	12,800			12,800
	North System:				
	15,000 gallon storage tank -00		0		

	10,000 gallon pressure tank -88		(1) 8,300		
	South System:				
	10,000 gallon storage tank -95		4,500		
	12,500 gallon storage tank -00		0		
	1,000 gallon pressure tank -93		?		
331	Transmission & Distribution Mains	423,533			199,540
	(2) North:				
	2" - PVC, 1,690 ft. -88		(1) 8,450		
	6" - PVC, 1,970 ft. -88		(1) 19,550		
	Per MXAs: 2" - PVC, 320 ft. -91		1,160		
	6" - PVC, 2,169 ft. -96		11,000		
	6" - PVC, 6,090 ft. -94		??		
	6" - PVC, 3,050 ft. -95 (@5.12')		15,616		
	6" - PVC, 7,880 ft. -97 (@5.12')		40,346		
	??-98		27,754	(27,754)	
	??-99		13,662	(13,662)	
	(2) South: (per MXAs)				
	6" - PVC, 5,120 ft. 92		19,033		
	2" - PVC, 370 ft. -93		1,100		
	2" - PVC, 700 ft. -94		1,490		
	6" - PVC, 8,946 ft. -96		50,944		
	6" - PVC, 5,040 ft. -97		15,248		
	2" - PVC, 300 ft. -98		2,976		
	6" - PVC, 460 ft. -98		4,227		
	6" - PVC, 1,020 ft. -99		8,400		
	Per CIAC: 6" - PVC, 560 ft. -96		0		
	(Burbank @ \$4,019)				
333	Services	15,084			15,084
	North: 36 each -96		4,681		
	South: 80 each -96		10,403		
334	Meters	3,806			3,806
	5/8" x 3/4", 115 each -96		3,356		
	2", 1 each -99		450		

335	Hydrants	0			0
	South: 10 each, contributed -99		0		
343	Tools & Work Equipment	350	(1) 350	(350)	0
348	Other Tangible Plant	550	(1) 550	(550)	0
TOTALS:		\$521,122	\$326,401	(\$46,311)	\$280,090

- Notes: (1) These plant facilities total to \$66,705 in a non-reported year ending December 31, 1990 Annual Report for the old Sunrise Vista Estates Water Company. In Decision No. 57990, dated August 26, 1992, CGW purchased the Sunrise Vista Estates system for \$6,881.50 by acquiring the assets for considerably less than the original cost value estimated at \$66,263 at that time by Staff Engineering. Therefore, Staff adopted and used the \$66,705 as the starting point for rate making in this proceeding.
- (2) Per pending and unapproved Main Extension Agreements (MXAs). (See Section I. OTHERS and Attachment A-1 of this report.)
- (3) The shaded Plant Items were installed in 2000 (outside the test year) and were not considered in this proceeding.

G. ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY COMPLIANCE

Compliance Status: The South System, PWS #01-058, has no major deficiencies. The North System, PWS #01-049, has major deficiencies due to unapproved water line extensions from the Sunrise Vista Estates to and through the Cedar Ridge subdivision. CGW is currently working with ADEQ to obtain these Approvals of Construction. Even with these major deficiencies, the ADEQ has determined both these systems are currently delivering water that does not exceed any maximum contaminant levels and meets the Safe Drinking Water Act quality standards.

Staff Engineering recommends that any rates approved in this proceeding be interim and subject to refund. These rates should become permanent if CGW obtains all required Approvals of Construction from ADEQ by December 31, 2001. If these Approvals are not obtained by then, the rate increase should be removed and refunded.

Water Testing: CGW reported its water testing cost at \$2,660 during the test year. Staff Engineering has evaluated the testing costs with consideration of ADEQ's Monitoring Assistance Program (MAP) and when combined with other testing requirements, the total

estimated cost is \$1,787. A breakdown of these costs for all testing requirements is shown in Table B.

Table B. Water Testing Cost

Monitoring – 2 system, 2 wells (Tests per 3 years, unless noted)	Cost per Test	(1) of Tests (Per 3 years, unless noted)	With MAP	
			3-Year Cost	Annual Cost
Total Coliform – monthly	\$15	72	1,080	360
Inorganics – Priority Pollutants	\$239	2	478	159
Radiochemical – per 4 years				
Gross Alpha	\$55	8	440	110
Phase II and V:				
Nitrate – annual	\$20	6	120	40
Nitrite - per 9 years	\$15	2	30	3
Asbestos - per 9 years	\$180	2	360	40
MAP – IOCs, SOCs & VOCs	MAP	MAP	MAP	700
Lead & Copper – annual	\$25	45	1,125	375
TOTALS:				\$1,787

Note: ADEQ MAP invoices are \$350 each for the North & South Systems, totaling \$700.

H. ARIZONA DEPARTMENT OF WATER RESOURCES COMPLIANCE

CGW's water systems are not located in any Active Management Area as designated by ADWR.

I. OTHERS

1. Service Line and Meter Installation Charges

The Company has proposed to increase its service line and meter installation charges. These proposed charges are only half of what Staff's guidelines would recommend. Even though, CGW would opt to increase these charges to its proposed levels and not be burden with refunding larger amounts to the new customers. Therefore, Staff would accept CGW's charges as follows:

Table C. Service line and meter installation charges.

Meter Size	Company's Existing	Company's Proposed
5/8" x 3/4"	\$150	\$210
3/4"	\$175	\$245
1"	\$250	\$350
1-1/2"	\$375	\$525
2"	\$500	\$700
3"	\$700	\$980
4"	\$1,300	\$1,820
6"	\$2,800	\$3,920

2. Depreciation Rates

Staff Engineering recommends using its own guidelines for depreciation rates. These guidelines are for annual accrual rates on an account-by-account basis to be used in the future for the calculation of annual depreciation expense. Table D shows these rates for the average service life and the annual accrual rate for each depreciable account.

Table D. Depreciation Rates

Acct. No.	Depreciable Plant	Average Service Life (Years)	Annual Accrual Rate (%)
304	Structures & Improvements	30	3.33
307	Wells & Springs	30	3.33
311	Pumping Equipment	** 5	20.00
320	Water Treatment Equipment		
320.1	Treatment Plant Structures	30	3.33
320.2	Solution/Chemical Feeders	5	20.00
330	Distribution Reservoirs & Standpipes		
330.1	Storage Tanks	45	2.22
330.2	Pressure Tanks	20	5.00
331	Transmission & Distribution Mains	50	2.00
333	Services	30	3.33
334	Meters & Meter Installations	12	8.33

335	Hydrants	50	2.00
339	Other Plant & Misc. Equipment	15	6.67
340	Office Furniture & Equipment	15	6.67
340.1	Computers/Software	5	20.00
341	Transportation Equipment	5	20.00
343	Tools, Shop & Garage Equipment	20	5.00
347	Miscellaneous Equipment	10	10.00
348	Other Tangible Plant	30	3.33

** Note: CGW's is experiencing its wells' submersible pumps at service lives of 5 years due to the electrical single-phase power only being provided in the area.

3. Main Extension Agreements (MXAs)

On December 21, 2000, CGW submitted 26 MXAs for Commission approval for projects on the South System. Although these MXAs were constructed from 1992 to 1999, Staff can not approve these MXAs because of insufficient source production and storage capacities. CGW has submitted a WIFA financing to address these insufficient plant facilities.

At Staff's request, CGW provided information for the three (3) MXAs on the North System. These MXAs were also constructed from 1992 to 1999. According to CGW, these MXAs for the North System will not be submitted to the Commission until the ADEQ approvals have been obtained.

For this rate/financing proceeding, all these MXAs were evaluated for project cost and plant inventory only and verified for use in Acct. 331 – Transmission and Distribution Mains of the plant-in-service. These MXAs (listed on Attachment A-1 of this report and as shown for the cost per foot on the Attachment) were constructed at very low cost. Even though, Staff Engineering used these MXAs project costs to determine the cost amount for Acct. 331.

4. Financing – WIFA Loan

CGW submitted a financing application for approval of a WIFA Loan in the amount of \$120,000 for the purchase of a new 250,000 gallon storage tank and interconnection between the North and South Systems. A breakdown of the loan amount and its projects are as follows:

a. Storage tank project:

1.	New 250,000 gallon storage tank from Brown Tank & Steel	\$84,200
2.	Sales tax at 5.5% on tank	\$4,631
3.	Tank site preparation	\$500

4.	Tank base – ABC base and compaction	\$750
5.	Connect tank to system, 20 feet of 6-inch main & altitude valve	\$4,000

6.	Sub-total:	\$94,081

b. Interconnection project:

7.	Boring across State Highway 60	\$10,000
8.	Materials, 1,500 feet of 6-inch PVC pipes & fittings	\$8,015
9.	Bedding materials	\$1,500
10.	Equipment rental	\$3,000
11.	Labor	\$8,000

12.	Sub –total:	\$30,515

c. TOTAL: \$124,596

These WIFA Loan projects will interconnect the North and South Systems and provide the needed fire flow requirements to the South System and a second source production for each system. Once these projects are completed and placed into operation, the pending 26 MXAs for the South System will have the sufficient source production and storage capacities for Staff approval.

After review of these projects for the WIFA Loan in the amount of \$120,000, it is Staff Engineering's opinion that these projects and their costs are reasonable at CGW's estimated cost of \$124,596. Although CGW has submitted the WIFA Loan at \$120,000, CGW acknowledged and will be responsible for the short fall of \$4,596.

Staff Engineering recommends that a surcharge mechanism be approved which will provide debt service for the \$120,000 WIFA Loan. It is further recommended that this surcharge be collected each month by CGW and shown as a separate line item on the customers' water bills. This surcharge should also be placed in a separate interest bearing account that can only be used to pay off this financial debt.

Cedar Grove Water							
MXA - Advances in Aid of Construction							
South System:			Water mains, ft.			Year Totals	
Date	Name	Amount	6-inch	2-inch	Cost/Ft.	Cost	Feet
04/30/1992	Rippy	\$11,649	3,700		\$3.15		
10/05/1992	Rippy/Riley	\$7,385	1,420		\$5.20	\$19,035	5,120
11/08/1993	Bay/Scott	\$1,100		370	\$2.97	\$1,100	370
10/01/1994	Scott - w/ Smith	\$625					
10/01/1994	Smith - w/ Scott	\$865		700	\$2.13	\$1,490	700
02/03/1996	Johnson	\$3,945	745		\$5.30		
02/03/1996	Rippy	\$3,544	684		\$5.18		
02/03/1996	Valichnac	\$3,544	667		\$5.31		
06/27/1996	Ramsey	\$5,000	1,040		\$4.81		
07/27/1996	Blair	\$1,318	230		\$5.73		
08/13/1996	Brier	\$4,429	860		\$5.15		
08/13/1996	Countryman/Eckert	\$4,479	860		\$5.21		
08/13/1996	Greco	\$4,479	860		\$5.21		
08/13/1996	Koglneier	\$4,479	860		\$5.21		
08/13/1996	Williams	\$4,429	860		\$5.15		
09/02/1996	Rippy	\$11,296	1,280		\$8.83	\$50,944	8,946
04/04/1997	Johnson, S & P	\$1,240	140		\$8.86		
06/30/1997	Odom	\$5,000	2,280		\$2.19		
06/30/1997	Riley	\$6,000	2,280		\$2.63		
07/29/1997	Crosse	\$3,008	340		\$8.85	\$15,248	5,040
05/22/1998	Cueva - w/ Vickery	\$1,984					
05/22/1998	Vickery - w/ Cueva	\$1,984	100	300	\$9.92		
06/02/1998	Terella	\$1,500	120		\$12.50		
07/02/1998	Hunter	\$1,735	240		\$7.23		
					2-inch:	\$2,976	300
					6-inch:	\$4,227	460
03/18/1999	Meyer	\$6,200	820		\$7.56		
09/20/1999	Hider	\$2,200	200		\$11.00	\$8,400	1,020
Totals		\$103,419	20,586	1,370		\$103,420	21,956
North System:							
04/25/1991	Csanyi	\$1,160		320	\$3.63	\$1,160	320
02/09/1996	McClure	\$5,000	997		\$5.02	\$5,000	997
02/09/1996	Olsen	\$6,000	1,172		\$5.12	\$6,000	1,172
Totals		\$12,160	2,169	320		\$12,160	2,489