

ORIGINAL



0000045913

BEFORE THE ARIZONA CORPORATION COMMISSION RECEIVED

CARL J. KUNASEK  
Chairman  
JIM IRVIN  
Commissioner  
WILLIAM A. MUNDELL  
Commissioner

1999 SEP 10 A 9:59

AZ CORP COMMISSION  
DOCUMENT CONTROL

IN THE MATTER OF THE APPLICATION OF SUN CITY WATER COMPANY AND SUN CITY WEST UTILITIES COMPANY FOR APPROVAL OF CENTRAL ARIZONA PROJECT WATER UTILIZATION PLAN AND FOR AN ACCOUNTING ORDER AUTHORIZING A GROUND WATER SAVINGS FEE AND RECOVER OF DEFERRED CENTRAL ARIZONA EXPENSES

Arizona Corporation Commission 00334A-98-577

DOCKETED

V-01656A-98-577

SEP 10 1999

DOCKETED BY *[Signature]*

STAFF'S NOTICE OF FILING TESTIMONY

Staff of the Arizona Corporation hereby files the direct testimony of Claudio M. Fernandez, and Marlin Scott, Jr., of the Utilities Division, in the above-referenced matter.

RESPECTFULLY SUBMITTED this 10<sup>th</sup> day of September, 1999.

*[Signature]*

Robert J. Metli, Attorney  
Legal Division  
Arizona Corporation Commission  
1200 West Washington Street  
Phoenix, Arizona 85007  
(602) 542-3402

The original and ten copies of the foregoing filed this 10<sup>th</sup> day of September, 1999, with:

Docket Control  
Arizona Corporation Commission  
1200 West Washington Street  
Phoenix, Arizona 85007

1 COPIES of the foregoing  
2 mailed and faxed this 10<sup>th</sup> day of  
September, 1999 to:

3 Michael A. Curtis  
4 William P. Sullivan  
5 MARTINEZ & CURTIS  
6 2712 N. Seventh Street  
7 Phoenix, Arizona 85006-1090  
8 Attorneys for Sun City Taxpayers Association

9 Walter W. Meek  
10 AUIA  
11 2100 N. Central Avenue, Suite 210  
12 Phoenix, Arizona 85004

13 Scott S. Wakefield, Esq.  
14 RUCO  
15 2828 North Central Avenue, Suite 1200  
16 Phoenix, Arizona 85004  
17 Intervenor

18 William G. Beyer  
19 BEYER, McMAHON & LaRUE  
20 10448 w. Coggins, Suite C  
21 Sun City, Arizona 85351  
22 Attorneys for CAP Task Force

23 Regulatory Manager  
24 CITIZENS UTILITIES COMPANY  
25 2901 N. Central Avenue, Suite 1660  
26 Phoenix, Arizona 85012

27  
28  
Angela Bennett

**DIRECT  
TESTIMONY  
OF**

**CLAUDIO M. FERNANDEZ  
MARLIN SCOTT, JR.**

**DOCKET NOS. W-01656A-98-0577  
SW-02334A-98-0577**

**SEPTEMBER 10, 1999**

**BEFORE THE ARIZONA CORPORATION COMMISSION**

**CARL J. KUNASEK  
CHAIRMAN**

**JIM IRVIN  
COMMISSIONER**

**WILLIAM A. MUNDELL  
COMMISSIONER**

IN THE MATTER OF THE JOINT APPLICATION )  
OF SUN CITY WATER COMPANY AND SUN )  
CITY WEST UTILITIES COMPANY FOR )  
APPROVAL OF CENTRAL ARIZONA PROJECT )  
WATER UTILIZATION PLAN AND FOR AN )  
ACCOUNTING ORDER AUTHORIZING A )  
GROUNDWATER SAVINGS FEE AND )  
RECOVERY OF DEFERRED CENTRAL )  
ARIZONA PROJECT EXPENSES )  
\_\_\_\_\_ )

**DOCKET NOS. W-01656A-98-0577  
SW-02334A-98-0577**

**DIRECT**

**TESTIMONY**

**OF**

**CLAUDIO M. FERNANDEZ**

**MANAGER, REVENUE REQUIREMENTS ANALYSIS**

**UTILITIES DIVISION**

**SEPTEMBER 10, 1999**

**TABLE OF CONTENTS**

	<u>Page</u>
Introduction.....	1
Purpose of Testimony .....	2
Background.....	3
Deferred CAP Charges .....	3
CAP Water Utilization Plan.....	6
MWD Recharge Option .....	7
CAWCD-Agua Fria Recharge Project.....	8
Groundwater Savings Project .....	10
Staff Recommendations .....	12

**SCHEDULES**

Computation of Deferred CAP Charges .....	CF-1
Deferred CAP Charges Rate Design.....	CF-2
On-Going CAP Costs Rate Design.....	CF-3

1 **INTRODUCTION**

2 Q. Please state your name and business address.

3 A. My name is Claudio M. Fernandez. My business address is 1200 West Washington,  
4 Phoenix, Arizona 85007.

5  
6 Q. By whom are you employed and in what capacity?

7 A. I am employed by the Utilities Division of the Arizona Corporation Commission  
8 ("Commission" or "ACC") as Manager, Revenue Requirements Analysis.

9  
10 Q. Please state your educational background and work experience.

11 A. In 1973, I obtained a Bachelor in Business Administration Degree (B.B.A.) from the  
12 University of Texas majoring in Accounting. I have attended several training classes and  
13 courses regarding auditing, rate design, income taxes, and other utility related matters.

14  
15 From March 1978 to June 1981, I was the Accounting Manager at Sun Valley Hospital in  
16 El Paso, Texas. In this capacity, I was responsible for all fiscal services and general  
17 ledger maintenance. I also supervised the function of the Accounts Payable, and Payroll  
18 Departments. I prepared cash flow projections, and reviewed the annual operating  
19 budget. Finally, I was responsible for the preparation of the annual Medicare Cost Report  
20 in compliance with the United States Department of Health guidelines.

21  
22 From July 1981 to October 1984, I was employed by Fairall, Quindt & Cummins as a  
23 Staff Accountant in the Houston, Texas, branch of this public accounting firm. I  
24 formulated and executed audit plans regarding audit work of diverse industries such as  
25 health care, manufacturing, construction, and oil concerns. I also assisted in the  
26 preparation of the Securities Exchange Commission's (SEC) 10K Form in compliance  
27 with SEC guidelines.

28 ...

1 From December 1984 to July 1988, I was employed by Valley Community Hospital in El  
2 Paso, Texas, as Assistant Controller. I was responsible for performing comprehensive  
3 accounting functions, including supervision of four departments.  
4

5 In June 1989, I joined the Arizona Corporation Commission. My duties include review  
6 and analysis of financial records and other documents of regulated utilities for accuracy,  
7 completeness, and reasonableness; and the preparation of work papers and schedules  
8 resulting in testimony and/or Staff reports for ratemaking purposes regarding utility  
9 applications in the areas of rates, financings and other matters.  
10

11 **PURPOSE OF TESTIMONY**

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

13 A. I am presenting Staff's analysis and recommendations regarding the Sun City Water  
14 Company and Sun City West Utilities Company ("Sun Cities" or "Companies")  
15 application for approval of recovery of Deferred Central Arizona Project (CAP)  
16 expenses, Central Arizona Project Water Utilization Plan, and an accounting order  
17 authorizing a Groundwater Savings Fee.  
18

19 Q. What is the basis of Staff's recommendations?

20 A. Staff reviewed and analyzed the data to determine its accuracy and relevancy and  
21 whether data supports the Sun Cities' claims presented in their application. Staff also  
22 verified that the principles applied are in accordance with prior ACC orders.  
23

24 In addition, Staff engaged in discussions with Company representatives and made several  
25 written requests for data. Staff also made inquiries to other governmental agencies.  
26 ...  
27 ...  
28 ...

1 **BACKGROUND**

2 Q. Please briefly describe the Companies' application.

3 A. The Companies' application was the result of Decision No. 60172, dated May 7, 1997.  
4 This Decision recognized that the Sun Cities' decision to obtain allocations of CAP water  
5 was prudent. This Decision also allowed the Companies to defer CAP capital costs for  
6 future recovery from ratepayers when the CAP allocation has been put to beneficial use  
7 for the customers. Decision No. 60172 further stated that future recovery of the deferred  
8 CAP charges was subject to the development of an acceptable plan with implementation  
9 by December 31, 2000, or the Companies would lose their ability to defer future costs.

10  
11 The Sun Cities' filing, in compliance with the above mentioned decision, is seeking  
12 Commission approval to recover deferred CAP charges, to recover on-going CAP capital  
13 costs and delivery charges (interim solution), and approval of an accounting order for the  
14 Sun Cities/Youngtown Groundwater Savings Project (GSP).

15  
16 **DEFERRED CAP CHARGES**

17 Q. Would you briefly describe the Companies' proposals regarding the recovery of Deferred  
18 CAP Charges?

19 A. Yes. Sun City Water is requesting recovery of Deferred CAP Charges of \$638,946 (as of  
20 December 31, 1998) over a period of 42 months. This amount includes \$74,806 in  
21 interest charges. The Companies applied an 8.73 percent annual interest rate, which is  
22 equivalent to the Commission authorized Rate of Return in the Sun Cities' last rate case  
23 proceeding.

24  
25 Sun City West (SCW) is requesting recovery of \$361,908 (as of December 31, 1998)  
26 over a period of 42 months of which \$42,371 is due to the addition of an interest  
27 component at an annual rate of 8.73 percent.

28 ...

1 Sun City Water is proposing to recover \$638,946 based on a monthly flat fee of \$0.4088  
2 per household for the residential customer class and \$0.0406 (per 1,000 gallons) based on  
3 usage for the commercial customer class.

4  
5 Sun City West would recover \$361,908 based on a monthly flat fee of \$0.4492 per  
6 household and \$0.0529 per 1,000 gallons for the commercial customer class.

7  
8 Q. Did Staff prepare a schedule representative of Staff's recommended Deferred CAP Cost?

9 A. Yes, please refer to Schedule CF-1.

10

11 Q. Is Staff recommending any changes to the Companies' proposed recovery amounts?

12 A. Yes. Staff is recommending recovery of Deferred CAP Charges of \$767,473 versus Sun  
13 City Water's \$638,946 and \$432,827 versus Sun City West's \$361,908.

14

15 Q. What are the differences between Staff's and the Sun Cities' proposed recovery amounts  
16 of Deferred CAP Charges?

17 A. The difference is that Staff included \$423,696, which reflects the second half of 1999  
18 holding charges and removed the Companies' addition of an interest component.

19

20 Q. Is Staff recommending the addition of an interest rate component to the Deferred CAP  
21 Charges?

22 A. No, Staff believes that the addition of an annual interest rate of 8.73 percent to the  
23 Deferred CAP Charges is not warranted. As explained above, the Companies added an  
24 interest component equivalent to the Rate of Return granted in the Sun Cities last rate  
25 case. In other words, the Companies are seeking a return on their investment.

26 ...

27 ...

28 ...

1 Staff cannot recommend approval of the Companies' request because it would be  
2 contrary to prior Commission decisions which did not allow those costs until they meet  
3 the "used and useful" criteria. Consequently, the Companies are retroactively seeking in  
4 this filing a rate of return that the Commission previously denied.

5  
6 In addition, Decision No. 60172 allowed deferral of just the CAP Capital Costs for future  
7 recovery from ratepayers. This Decision did not mention recovery of CAP Capital Cost  
8 plus an interest component equal to the Commission authorized Rate of Return of 8.73  
9 percent, or any Rate of Return component.

10  
11 Q. Please explain how Staff is proposing to recover the Deferred CAP charges.

12 A. Staff adopted the Companies' rate design methodology. The residential customer class  
13 would be billed on a per household, per month basis. The commercial customer class  
14 will be billed based on usage.

15  
16 Q. Did Staff prepare a schedule representative of Staff's recommended rates for the recovery  
17 of the Deferred CAP Charges?

18 A. Yes, please refer to Schedule CF-2. Staff is recommending an amortization period of five  
19 years versus the Companies' 42 months. Staff believes that since the balance of the  
20 Deferred CAP Charges reflected five years of accumulated charges, it would be  
21 reasonable to use the same time period for recovery. Schedule CF-2 reflects Staff's  
22 calculations based on the Companies proposed billing determinants which Staff is  
23 adopting.

24  
25 Staff is recommending residential rates of \$0.3437 per month per household for Sun City  
26 Water. The commercial customer class would be charged based on usage at a rate of  
27 \$0.0341 per 1,000 gallons.

28 ...

1 Staff is further recommending residential rates of \$0.3761 per month per household for  
2 Sun City West. The commercial rate would be \$0.0443 per 1,000 gallons.

3  
4 **CAP WATER UTILIZATION PLAN**

5 Q. Would you briefly describe the Companies' proposal regarding the recovery of On-Going  
6 CAP Capital and Delivery Charges.

7 A. In conjunction with the Companies' application a document named "Final Report CAP  
8 Task Force" was included. This Task Force was assembled in response to intervening  
9 parties and Commission comments in the last rate case.

10  
11 The intervening parties expressed the need for a public participation process to decide if  
12 and how CAP water should be used in the Sun Cities. Under the sponsorship of the  
13 Northwest Valley Water Resources Advisory Board (formed by the Governor in 1997),  
14 the Board endorsed the formation of a task force of community leaders combined with a  
15 broad public outreach program.

16  
17 The Task Force was composed of representatives from major associations, Citizens  
18 Utilities Company, the Town of Youngtown and four at large members.

19  
20 The underlying principle is that CAP water is necessary to maintain the quality of life in  
21 the Sun Cities and Youngtown. The mission of the Task Force was to develop consensus  
22 on the best plan for the use of CAP water that meets the Arizona Department of Water  
23 Resources ("ADWR") guidelines to achieve "safe yield" and that would be supported and  
24 paid for by the customers of the Sun Cities.

25  
26 The Task Force, over a course of fourteen weeks, met thirteen times and heard from  
27 eighteen outside water experts, including hydrologists, engineers, city and state officials  
28 and lawyers.

1 The Task Force evaluated a number of options (including relinquishing the CAP water  
2 allocation) and concluded that:

- 3 a. It was in the public interest to retain the CAP water allocation of 6,561 acre  
4 feet.
- 5 b. The Interim Solution which recommended that the Sun Cities recharge its  
6 CAP allotment at the existing Maricopa Water District ("MWD") recharge  
7 facility, meets the criteria of "used and useful".
- 8 c. The ratepayers would pay for the Deferred CAP Charges.
- 9 d. The ratepayers would pay for the Ongoing CAP Costs.
- 10 e. The Long-term Solution to deliver CAP water to the Sun Cities through a non-  
11 potable pipeline, where the water would be used to irrigate golf courses that  
12 have historically used groundwater.
- 13 f. The Deferred CAP Charges and the On-going CAP Costs would be recovered  
14 on a per household, per month fee for the residential customer class.
- 15 g. The Deferred CAP Charges and the On-going CAP Costs for the commercial  
16 customer class would be recovered based on usage. The fee would be  
17 assessed per 1,000 gallons used.

#### 16 MWD RECHARGE OPTION

17 Q. Please describe the recharge option through the existing facilities at the MWD.

18 A. The Task Force opted for an Interim Solution for the utilization of the CAP water until  
19 the permanent solution consisting of 46,000 feet of pipeline is constructed to deliver CAP  
20 water to the golf courses.

21  
22 The MWD option consists of delivering CAP water to the existing groundwater savings  
23 project. CAP water would be delivered to farms located in the MWD service area.

24  
25 For every acre-foot of groundwater not pumped by MWD farmers, the Companies will be  
26 entitled to recover that water to meet existing demands in the Sun Cities. This type of  
27 recharge is indirect. The idea behind the Groundwater Savings Facility (GSF) is that  
28

1 CAP water or some other surface water is used instead of pumping groundwater, thereby  
2 leaving the water in the aquifer.

3  
4 Q. What are the on-going costs associated with this option?

5 A. The cost of recharge at the MWD location is \$107 per acre foot consisting of the  
6 following charges and credits:

- 7  
8 a. Holding charges of \$54 per acre foot.  
9 b. Delivery charges of \$69 per acre foot  
c. Offset from MWD of (\$16) per acre-foot.

10 **CAWCD-AGUA FRIA RECHARGE PROJECT**

11 Q. Please explain the CAWCD-Agua Fria Recharge Project option.

12 A. The Agua Fria Recharge Project as an interim solution, consists of multiple recharge  
13 basins with an estimated recharge capacity of 100,000 acre feet per year. The Companies  
14 under this option would lease the recharge capacity and the water would be conveyed  
15 from the CAP canal to the recharge facility by gravity through the channel of the Agua  
16 Fria River.

17  
18 According to Mr. Jim Sweeney, General Manager for the MWD, there are two basic  
19 types of recharge, direct and indirect. The Agua Fria Recharge Project is considered a  
20 direct recharge because the recharged water could provide a hydrological impact in the  
21 Sun Cities' locale. According to Mr. Marvin Glotfelty of Brown and Caldwell, the  
22 MWD project is an indirect recharge and would not provide much direct benefit to the  
23 Sun Cities. In other words, the MWD would only generate "water credits," but it would  
24 not increase the water levels in Sun Cities' wells.

25 ...

26 ...

27 ...

28 ...

1           The capital costs for construction of the CAWCD-Agua Fria Recharge Project will be  
2           paid by CAWCD using public funds. Therefore, the cost to participate in this project is  
3           limited to the cost of the purchased CAP water and the cost of the pro-rata share of the  
4           Operation and Maintenance (O & M) expenses of the facility.

5  
6           The O & M costs are unknown at this time since construction of the recharge facility has  
7           not been completed. However, in the Tucson area where a CAWCD Recharge Facility is  
8           in operation the O & M costs are approximately \$20 per acre foot.

9  
10          This recharge option is not going to be available to the Companies until the facilities are  
11          constructed. According to CAWCD, this project should be completed by the latter part of  
12          next year.

13  
14          It is Staff's opinion that the Sun Cities should utilize the CAWCD-Agua Fria Recharge  
15          Project as soon as it becomes operational.

16  
17          The Agua Fria Recharge Project could provide a positive hydrological impact to the Sun  
18          Cities. In certain recharge projects the hydrological impact is felt immediately, according  
19          to Mr. Tom Harbour, Project Manager of the Agua Fria Recharge facility.

20  
21   Q.     Did Staff prepare a schedule representative of Staff's recommended On-Going CAP  
22           Costs?

23   A.     Yes, please refer to Schedule CF-3.

24   ...

25   ...

26   ...

27   ...

28   ...

1 Q. What is Staff recommended rates for the recovery of the On-going CAP Costs for Sun  
2 City Water and Sun City West?

3 A. Staff is recommending a per household, per month surcharge of \$1.0036 for the Sun City  
4 Water residential customer class and \$0.0996 per 1,000 gallons for the commercial  
5 customer class. For the Sun City West residential customer Staff is recommending  
6 \$1.1026 per household per month and \$0.1299 per 1,000 gallons for the commercial  
7 customer class.

8  
9 Schedule CF-3 reflects Staff's computations based on the Companies' proposed billing  
10 Determinants which Staff is adopting.

11  
12 **GROUNDWATER SAVINGS PROJECT**

13 Q. Please explain the Sun Cities' request for an Accounting Order authorizing a  
14 Groundwater Savings Project/Exchange with Local Golf Courses.

15 A. The Groundwater Savings Project/Exchange with Local Golf Courses consists of the  
16 construction of and operation of a non-potable pipeline to deliver raw CAP water to local  
17 golf courses that have historically used groundwater. This means that every gallon not  
18 pumped by the golf courses would be preserved for drinking water customers in the Sun  
19 Cities.

20  
21 Pursuant to the application, the capital cost of the Groundwater Savings Project has been  
22 very conservatively estimated at \$15 million. Annual operating and maintenance cost are  
23 estimated to be approximately \$400,000.

24  
25 The Sun Cities are requesting that the Commission approve the general concept of the  
26 construction of a pipeline to the golf course as a reasonable and prudent approach for  
27 implementing the long-term solution for the utilization of CAP water in the Sun Cities.

28 ...

1 Q. How are the Companies going to finance the GSP?

2 A. It is not clear to Staff how this project is going to be financed and at what cost. The  
3 Companies stated that they supported finding alternative methods of financing rather than  
4 financing the project themselves.

5  
6 The engineering firm of Brown and Caldwell estimated construction costs and also  
7 expressed those costs on a per household basis. The Companies stated in their  
8 application that the pipeline would not be operational until 2002, and at that time, the  
9 deferral would discontinue and the costs associated with the pipeline would begin.

10  
11 This cost recovery methodology leaves a gap of four years between the time construction  
12 starts and cost recovery begins during which no funding is in place. In the meantime,  
13 construction costs will need to be paid (at least \$15 million) without a Commission  
14 approved financing plan.

15  
16 Q. Did the Companies file a financing application in conjunction with their request for an  
17 accounting order?

18 A. No, the Companies did not file a financing application.

19  
20 Q. Is Staff recommending that the Commission approve the Sun Cities request for an  
21 accounting order?

22 A. No, Staff believes that it would be premature to issue an accounting order at this time,  
23 even though the Companies stated that they are not seeking pre-approval of the  
24 expenditures for the pipeline project.

25 ...

26 ...

27 ...

28 ...

1 Usually, for ratemaking purposes, accounting orders create assets and/or liabilities  
2 measured in monetary terms. In Staff's opinion, the magnitude of this project and the  
3 estimated construction cost of \$15 million attached to the concept of the pipeline cannot  
4 be ignored.

5  
6 As a matter of fact, the Task Force members were given cost estimates and based on  
7 upon those estimates (among other considerations like water quality, etc.) they chose to  
8 adopt the pipeline concept. The members were also provided with per household  
9 recovery rates. In other words, the concept cannot be visualized in its entirety without  
10 regard to cost implications.

11  
12 Staff believes that the Commission should not issue an accounting order that is going to  
13 have a large impact on Rate Base and Operating Expenses and consequently, some type  
14 of recovery in rates, where the amount and terms of some type of financing are unknown.

15  
16 Consequently, Staff recommends that the Sun Cities file a financing application  
17 requesting approval of a plan to fund the construction of the pipeline by June 30, 2000.

18  
19 Staff believes that this intermediate step is necessary in order for the Commission to have  
20 all the pertinent information on which to base their decision regarding the accounting  
21 order.

22  
23 **STAFF RECOMMENDATIONS**

24 Q. Please summarize Staff's recommendations in this proceedings.

25 A. Staff recommends that the Commission approve Staff's Deferred CAP Charges and On-  
26 Going CAP Costs Surcharge rates as depicted on Schedules CF-2 and CF-3.

27 ...

28 ...

1 Staff further recommends that the Sun Cities submit an annual informational report to the  
2 Director of Utilities showing the amounts collected through the deferred CAP costs  
3 surcharge and the outstanding balance.

4  
5 Staff further recommends that when the Deferred CAP Charges are recovered, the  
6 corresponding surcharge be terminated and any over-collection be applied to the On-  
7 Going CAP Costs.

8  
9 Staff further recommends that when the Agua Fria Recharge Project is operational the  
10 Sun Cities be required to utilize this facility instead of the MWD.

11  
12 Staff further recommends that if the Sun Cities fail to recharge their CAP water allocation  
13 prior to the implementation of long-term solution, the Deferred CAP Cost surcharge  
14 should be terminated and the Sun Cities forfeit recovery of the deferred CAP Cost.

15  
16 Staff further recommends that the Sun Cities file with the Commission for an adjustment  
17 to the On-Going CAP Costs Surcharge to reflect any price fluctuations in the recharge  
18 costs or billing determinants. This filing should be made as soon as any fluctuation  
19 becomes known and measurable but not less than annually.

20  
21 Staff further recommends that the Sun Cities file an informational report with the  
22 Director of Utilities on an annual basis reflecting the amounts collected through the On-  
23 Going CAP Costs.

24  
25 Staff further recommends that the Commission reject the Companies request for an  
26 accounting order for approval of the pipeline concept.

27 ...

28 ...

1 Staff further recommends that the Sun Cities file a financing application no later than  
2 June 30, 2000, requesting approval for a plan to fund the construction of the pipeline.

3

4 Q. Does this conclude your direct testimony?

5 A. Yes, it does.

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

**COMPUTATION OF DEFERRED CAP CHARGES**

LINE NO.	DATE	A.F.	COST PER ACRE FT.	CAPITAL CHARGE	CREDITS	DEFERRED CHARGES	LATE CHGS.	TOTAL DEFERRED
1	1995	17,274	\$ 21.00	\$ 362,754	\$ (58,265)	\$ 304,489	-	\$ 304,489
2	1995	380	10.50	3,990	0	308,479	-	308,479
3	1996	17,654	30.00	529,620	0	838,099	-	838,099
4	1997	17,654	39.00	688,506	0	1,526,605	-	1,526,605
5	1998	17,654	48.00	847,392	0	2,373,997	4,023	2,378,019
6	1999	17,654	48.00	847,392	0	3,221,389	-	3,225,411

**ALLOCATION OF DEFERRED COST**

	ACRE FEET	PER A.F.	AMOUNT	LATE CHGS.	TOTALS
7 SUN CITY	4,189	\$ 182.47	\$ 764,382	\$ 3,091	\$ 767,473
8 SUN CITY WEST	2,372	182.47	432,827	-	432,827
9 AGUA FRIA	11,093	182.47	2,024,179	932	2,025,111
10 TOTALS	<u>17,654</u>		<u>\$ 3,221,389</u>	<u>\$ 4,023</u>	<u>\$ 3,225,411</u>

**DEFERRED CAP CHARGES  
 RATE DESIGN**

LINE NO		SUN CITY WATER	SUN CITY WEST
1	Deferred CAP Charges (12/31/99)	\$ 767,473	\$ 432,827
2	Amortization Period - Months	60	60
3	Amount to be Recovered-Monthly	\$ 12,791	\$ 7,214
4	Billing Determinants		
5	Residential-Households	29,502	16,731
6	Commercial-Monthly Usage (1,000 gls.)	77,774	20,801
7	Volume Allocation		
8	Residential	79.27%	87.22%
9	Commercial	20.73%	12.78%
10	Recovery Amount		
11	Residential	\$ 10,140	\$ 6,292
12	Commercial	\$ 2,652	\$ 922
13	Deferred CAP Charges Fee		
14	Residential-Per Household Per Month	\$ 0.3437	\$ 0.3761
15	Commercial-per 1,000 gallons	\$ 0.0341	\$ 0.0443

**ON-GOING CAP COSTS  
 RATE DESIGN**

LINE NO		SUN CITY WATER	SUN CITY WEST
1	Acre Feet	4,189	2,372
2	Cost per acre foot		
3	Holding Charge	\$ 54	
4	Delivery Charge	69	
5	MWD Offset	(16) \$ 107	\$ 107
6	On-Going CAP Costs	\$ 448,223	\$ 253,804
7	Amortization Period - Months	12	12
8	Amount to be Recovered-Monthly	\$ 37,352	\$ 21,150
9	Billing Determinants		
10	Residential-Households	29,502	16,731
11	Commercial-Monthly Usage (1,000 gls.)	77,774	20,801
12	Volume Allocation		
13	Residential	79.27%	87.22%
14	Commercial	20.73%	12.78%
15	Recovery Amount		
16	Residential	\$ 29,609	\$ 18,447
17	Commercial	7,743	2,703
18	On-Going CAP Costs Surcharge		
19	Residential-Per Household Per Month	\$ 1.0036	\$ 1.1026
20	Commercial-per 1,000 gallons	\$ 0.0996	\$ 0.1299

**BEFORE THE ARIZONA CORPORATION COMMISSION**

CARL J. KUNASEK  
CHAIRMAN  
JIM IRVIN  
COMMISSIONER  
WILLIAM A. MUNDELL  
COMMISSIONER

IN THE MATTER OF THE JOINT	)	DOCKET NO. W-01656A-98-0577
APPLICATION OF SUN CITY WATER	)	DOCKET NO. SW-02334A-98-0577
COMPANY AND SUN CITY WEST UTILITIES	)	
COMPANY FOR APPROVAL OF CENTRAL	)	
ARIZONA PROJECT WATER UTILIZATION	)	
PLAN AND FOR AN ACCOUNTING ORDER	)	
AUTHORIZING A GROUNDWATER SAVINGS	)	
FEE AND RECOVERY OF DEFERRED	)	
CENTRAL ARIZONA PROJECT EXPENSES	)	
_____	)	

DIRECT  
TESTIMONY  
OF  
MARLIN SCOTT, JR.  
UTILITIES CONSULTANT  
UTILITIES DIVISION

SEPTEMBER 10, 1999

**TABLE OF CONTENTS**

	<u>Page</u>
Introduction.....	1
Purpose of Testimony .....	2
CAP Water Use Options .....	3
CAP Water Utilization Plan.....	3
The Long-term Solution.....	4
The Interim Solution.....	4
Staff Engineering Recommendations .....	6

1 **INTRODUCTION**

2 Q. Please state your name and business address.

3 A. My name is Marlin Scott, Jr. My business address is 1200 West Washington Street,  
4 Phoenix, Arizona 85007.

5  
6 Q. By whom and in what position are you employed?

7 A. I am employed by the Utilities Division of the Arizona Corporation Commission  
8 (Commission) as an Utilities Consultant - Water/Wastewater Engineer.

9  
10 Q. How long have you held this position?

11 A. Since November 1987.

12  
13 Q. What are your responsibilities as an Utilities Consultant - Water/Wastewater Engineer?

14 A. Among other responsibilities, I inspect, investigate and evaluate water and wastewater  
15 systems; obtain data, prepare reconstruction cost new and/or original cost studies and  
16 investigative reports; interpret rules and regulations; suggest corrective action and  
17 provide technical recommendations on water and wastewater system deficiencies; and  
18 provide written and oral testimony on rate and other cases before the Commission.

19  
20 Q. How many water and wastewater companies have you analyzed for the Utilities  
21 Division?

22 A. I have analyzed approximately 270 companies in various capacities for the Utilities  
23 Division.

24  
25 Q. Have you previously testified before this Commission?

26 A. Yes, I have testified in 23 proceedings.

27 ...

28 ...

1 Q. What is your educational background?

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

4

5 Q. Briefly describe your pertinent work experience.

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

9

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

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

13

14 **PURPOSE OF TESTIMONY**

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

16 A. To present the findings of my engineering evaluation of the Sun City Water Company  
17 and Sun City West Utilities Company (Sun Cities or Citizens) application for approval of  
18 the Central Arizona Project (CAP) water utilization plan as provided in a Final Report –  
19 CAP Task Force.

20

21 Q. What is the basis of Staff Engineering's recommendations?

22 A. Staff Engineering reviewed and analyzed the data in the CAP Task Force's Final Report  
23 for the CAP water utilization plan.

24 ...

25 ...

26 ...

27 ...

28 ...

1 **CAP WATER USE OPTIONS**

2 Q. Did the Task Force's Final Report provide options for using CAP water?

3 A. Yes. A study and report was prepared for the Task Force by Brown and Caldwell to  
4 assist in evaluating six options for using 6,561 acre-feet of CAP water. The options  
5 considered were:

6 Option 1: Lease Capacity at the Central Arizona Water Conservation District's  
7 (CAWCD) Agua Fria Recharge Project

8 Option 2: Independent groundwater recharge project owned and operated by  
9 Citizens Water Resources

10 Option 3: Groundwater savings project or exchange with Maricopa Water District

11 Option 4: Groundwater savings project or exchange with local golf courses

12 Option 5: CAP water treatment plant owned and operated by Citizens

13 Option 6: Lease/purchase capacity at the Pyramid Peak Water Treatment Plant  
14 owned by the City of Glendale

15 Q. How were these options evaluated by the Task Force?

16 A. The Task Force developed and defined criteria for evaluating these water use options,  
17 including relinquishment, to select a preferred plan for using CAP water. The Task Force  
18 also produced a report that described the decision-making process and recommendations  
19 of the Task Force.

20  
21 Q. What were the final recommendations by the Task Force?

22 A. The Task Force recommended a combination of options to use CAP water and called this  
23 the "CAP Water Utilization Plan".  
24

25 **CAP WATER UTILIZATION PLAN**

26 Q. Would you briefly describe the CAP water utilization plan?

27 A. The Task Force's Final Report recommended long-term and interim-solutions for CAP  
28 water use.

1           The Long-term Solution

2           The Task Force's long-term recommendation is that the CAP water be delivered to the  
3           Sun Cities through a non-potable pipeline (8.7 miles), where the water would be used to  
4           irrigate golf courses. This project, called the Sun Cities/Youngtown Groundwater  
5           Savings Project, would use a combination of new and existing infrastructures. The CAP  
6           water will be conveyed from the aqueduct, be stored in reservoirs (3.9 million gallons),  
7           and pumped (10,800 gallons per minute) to multiple golf courses for irrigation. This  
8           Groundwater Savings Project is projected to be complete in four years at a capital cost  
9           estimated at \$14,993,000 and an annual operating cost estimated at \$187,000 (Table 3-4  
10          in Brown and Caldwell's report), assuming the Sun Cities construct a combined pipeline  
11          project. This project will require extensive permitting including water storage and  
12          recharge well permits from the Arizona Department of Water Resources.

13  
14          Cost estimates for this Groundwater Savings Project are considered preliminary, and an  
15          opinion of probable cost due to the multiple facilities and numerous undefined elements  
16          of construction. The estimate is considered conservative, but actual location of facilities,  
17          alignment and rights-of-way for the distribution system pipelines could have a substantial  
18          impact on costs. It is also assumed that the existing effluent irrigation pumping station is  
19          usable after rehabilitation.

20  
21          The Interim Solution

22          The Task Force recommended this interim solution to resolve the issue of CAP water  
23          being "used and useful" until the Groundwater Savings Project is complete in four years.  
24          This interim solution would recharge Citizens' CAP water at the existing Maricopa Water  
25          District (MWD) Groundwater Savings Project or, if the MWD project is not available, at  
26          the CAWCD Agua Fria Recharge Project. Using the MWD Groundwater Savings  
27          Project, CAP water would be delivered through an existing distribution system to farms  
28          located in MWD's service area. For every acre-foot of groundwater not pumped by

1 MWD farmers, the Sun Cities will be legally entitled to recover the CAP water, through  
2 their wells.

3  
4 There are no capital costs associated with the MWD project. In fact, there is actually  
5 revenue generated by the project that will be reflected as an offset in the annual operating  
6 costs associated with using CAP water. The estimated annual revenue is \$111,000.

7  
8 The CAWCD Recharge Project would require Citizens to lease recharge capacity and  
9 water would be conveyed from the CAP canal to the recharge facility by gravity through  
10 the channel of the Agua Fria River. Recharged water would be recovered through  
11 existing wells in the Sun Cities. This Recharge Project is currently under construction.

12  
13 Q. What is Staff Engineering's opinion of this CAP Water Utilization Plan?

14 A. Staff Engineering would concur that the interim solution would resolve the "used and  
15 useful" criteria when CAP water is put to use. It is Staff Engineering's opinion that the  
16 Groundwater Savings Project with the golf courses for the long-term solution is the most  
17 favorable solution because, 1) the CAP water would directly be applied on to the golf  
18 courses, 2) the high use consumption golf courses would stop pumping groundwater, and  
19 3) the direct use of CAP water on to the golf courses would eliminate any type of  
20 groundwater pumping to use this CAP water, even through the use recharge wells.

21  
22 Q. What is Staff Engineering's opinion of the other CAP water use options?

23 A. As for the recharge projects, Staff Engineering does not favor the use of these projects as  
24 the long-term solution because the use of any recharge project would not directly benefit  
25 the Sun Cities alone. Many other well owners in the area would benefit from this  
26 concept, at the expense of the Sun Cities.

27 ...

28 ...

1 As for treatment plants, these facilities are costly to construct and to operate and  
2 maintain. The treatment of CAP water would benefit all the users, but the actual  
3 characteristic of treated CAP water would not be cost-effective for drinking water versus  
4 irrigation water.

5  
6 **STAFF ENGINEERING RECOMMENDATIONS**

7  
8 Q. Please summarize Staff Engineering's recommendations in this proceeding?

9 A. Staff Engineering has reviewed the CAP water utilization plan and concurs with the Task  
10 Force's recommendation for the long-term and interim solutions. Staff Engineering also  
11 concurs that the cost estimates for the long-term project are very preliminary and  
12 extremely conservative. Until more final details are developed for this project, Staff  
13 Engineering is unable to give a final opinion as to the reasonableness and appropriateness  
14 of these costs.

15  
16 Q. Does this conclude your direct testimony?

17 A. Yes, it does.  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28