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BEFORE THE ARIZONA CORPORATION COMMISSION

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IN THE MATTER OF THE APPLICATION)
OF RIO VERDE UTILITIES, INC. FOR AN)
INCREASE IN ITS WATER AND)
WASTEWATER RATES FOR CUSTOMERS)
WITHIN MARICOPA COUNTY, ARIZONA.)

~~DOCKET NO. WS-02156A-00-0321~~
WS-02156A-00-0321

IN THE MATTER OF THE APPLICATION)
OF RIO VERDE UTILITIES, INC. FOR)
AUTHORITY TO ISSUE PROMISSORY)
NOTE(S) AND OTHER EVIDENCES OF)
INDEBTEDNESS PAYABLE AT PERIODS)
OF MORE THAN TWELVE MONTHS AFTER)
THE DATE OF ISSUANCE.)

DOCKET NO. WS-02156A-00-0323

NOTICE OF FILING

The Residential Utility Consumer Office ("RUCO") hereby provides notice of filing the Direct Testimony of Timothy Coley and Marylee Diaz Cortez, in the above-referenced matter.

RESPECTFULLY SUBMITTED this 15th day of December, 2000.

Daniel W. Pozefsky
Attorney, RUCO

1 AN ORIGINAL AND TEN COPIES
of the foregoing filed this 15th day of
2 December, 2000 with:

3 Docket Control
Arizona Corporation Commission
4 1200 West Washington
Phoenix, Arizona 85007

5 COPIES of the foregoing hand delivered/
6 mailed this 15th day of December, 2000 to:

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22

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24

RIO VERDE UTILITIES, INC.

DOCKET NO. WS-02156A-00-0321

DOCKET NO. WS-02156A-00-0323

DIRECT TESTIMONY

OF

MARYLEE DIAZ CORTEZ

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

DECEMBER 15, 2000

1 Direct Testimony of Marylee Diaz Cortez
2 Docket Nos. WS-02156A-00-0321/WS-02156A-00-0323
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1 **INTRODUCTION**
2

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

4 A. My name is Marylee Diaz Cortez. I am a Certified Public Accountant. I
5 am the Utilities Audit Manager for the Residential Utility Consumer Office
6 (RUCO) located at 2828 N. Central, Phoenix, Arizona 85004.
7

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

10 A. Appendix I, which is attached to this testimony, describes my educational
11 background and includes a list of the rate case and regulatory matters in
12 which I have participated.
13

14 Q. Please state the purpose of your testimony.

15 A. The purpose of my testimony is present recommendations resulting from
16 my review and analysis of Rio Verde Utility's (Company or Rio Verde)
17 application for a rate increase and financing.
18

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

20 A. I will address certain issues related to the Company's plant in service, cost
21 of equity, and the CAP surcharge. RUCO witness Tim Coley will address
22 all other issues, as well as sponsor RUCO's recommended revenue
23 requirement.
24

1 **WATER PLANT IN SERVICE**

2 **Rate Base Adjustment #1 – Retired Plant - Water & Wastewater**

3 Q. Are Rio Verde's test-year recorded plant balances accurate?

4 A. No. As a result of incorrect accounting practices the Company's recorded
5 plant balances are inaccurate.

6

7 Q. How has the Company incorrectly accounted for its plant?

8 A. It has been the Company practice when it replaced plant items to record
9 the cost of the new plant on its books and records, but not to remove the
10 cost of the old plant from its books. Thus, Rio Verde's test-year plant
11 balances include plant that is no longer in service and has been retired.
12 The failure to remove retired plant has the effect of overstating the actual
13 plant in service balances and overstating the accumulated depreciation
14 reserve. Failure to remove this plant also has resulted in the Company
15 continuing to accrue depreciation expense on retired plant, after it was
16 fully depreciated. This continued depreciation of retired plant has had the
17 effect of understating accumulated deferred income taxes by generating
18 an inaccurate level of book vs. tax depreciation.

19

20

21

22

23

1 Q. What adjustment is necessary to retire this plant and correct all account
2 balances that were affected by the Company's failure to appropriately
3 account for plant retirements?

4 A. An adjustment is necessary to restate all account balances that were
5 affected by the Company's incorrect accounting practices. The following
6 accounts must be adjusted:

- 7 1) Plant in Service – remove all retired plant from this account.
- 8 2) Accumulated Depreciation – remove the original cost of the
9 retired plant from this account, as well as any excess
10 accumulated depreciation that was recorded after the asset
11 was fully depreciated.
- 12 3) Accumulated Deferred Income Taxes – increase account
13 balance to reflect the greater difference between book and
14 tax depreciation that results when the depreciation
15 erroneously taken on the retired plant is removed.

16

17 Q. What is the amount of your recommended adjustment?

18 A. My recommended adjustment is shown on Schedule MDC-1 Water and
19 Schedule MDC-1 Wastewater. These schedules show the necessary
20 adjustments to the plant account, accumulated depreciation account, and
21 the accumulated deferred income tax account. This adjustment results in
22 a net reduction in rate base of \$2,350 and \$13,010 for the water and
23 sewer division respectively.

1 **Rate Base Adjustment #6 - Storage Tank - Water**

2 Q. Have you examined the various plant additions the Company has made
3 since its last rate case in 1993?

4 A. Yes. The Company has made a substantial amount of plant additions
5 since its last rate case. This additional investment is in large part
6 attributable to the development of a new residential housing community in
7 the Rio Verde service territory called Tonto Verde. At build-out, Tonto
8 Verde will include 580 single-family homes and multi-family homes for 159
9 families. Thus, beginning in 1994 the Company has continued to make
10 plant additions that will enable the utility to serve the Tonto Verde growth.
11 In particular, Rio Verde made significant investment in transmission and
12 distribution mains, sewer lines, storage, additional sewer treatment plant
13 capacity, and a new well.

14

15 Q. How were these plant additions financed?

16 A. The transmission and distribution mains were financed primarily with
17 Contributions in Aid of Construction (CIAC) from the developer of Tonto
18 Verde. The remaining additions were financed either with debt or equity.

19

20 Q. Are all of the plant additions the Company made over the past several
21 years necessary to serve the current customer base?

22 A. No. The entire capacity of the sewer treatment plant expansion is not
23 necessary to serve the current level of customers. The Company has

1 acknowledged this, and accordingly has adjusted 35% of the sewer
2 treatment plant out of rate base, as excess capacity. According to
3 information provided by the Company, Tonto Verde at build-out will have
4 580 new single family homes. However, as of the end of the test year only
5 281 homes were sold. Thus, a large portion of the water distribution
6 mains and sewer lines are not being used to serve the current customer
7 base. Finally, the Company has increased its storage capacity by 740,000
8 gallons through the addition of a new tank, the necessary transmission
9 system, and booster pumps. This magnitude of additional storage is not
10 necessary to serve the current level of customers.

11
12 Q. Approximately how much incremental investment was made in the
13 transmission and distribution mains, sewer lines, additional sewer
14 treatment plant capacity, and additional storage capacity to accommodate
15 the Tonto Verde growth?

16 A. Approximately \$5.5 million.

17
18 Q. Should the current customer base be required to bear the entire cost of
19 these plant additions that were built primarily to serve potential future
20 growth?

21 A. No. Such a requirement would be inequitable and contrary to the
22 regulatory objective of setting fair and reasonable rates.

23

1 Q. What mechanisms are typically used in the regulatory process to hold
2 current customers harmless from investment that is made to serve
3 potential future growth?

4 A. Several mechanisms are used in the regulatory process to protect the
5 existing customer base. First, utility investment made to serve future
6 housing development is often financed with a Contribution in Aid of
7 Construction or an Advance in Aid of Construction (AIAC). Under an AIAC
8 or a CIAC the developer of the subdivision provides the utility with the
9 funds to make the necessary plant additions to serve the future growth.
10 This practice appropriately puts the risk of development on the developer,
11 and not on the utility and its ratepayers.

12
13 Q. Please explain.

14 A. Under both an AIAC and a CIAC, the developer is responsible for the plant
15 investment needed to serve new development. A CIAC is non-refundable
16 and since it represents non-investor supplied capital it is not included in
17 rate base. Thus, when plant additions are financed with a CIAC the
18 developer bears all the risk and cost associated with plant needed to
19 serve new development. In contrast, an AIAC is refundable, however,
20 refundings are generally limited to 10% of the annual revenues generated
21 by the new customers. As refundings are made, the AIAC supported plant
22 enters rate base. Like a CIAC, this mechanism also requires developers
23 to bear the risk of development. If the developer does not sell lots, the

1 utility receives no revenues from the new subdivisions. Absent any
2 revenues, there will be no refundings. Since AIAC supported plant only
3 enters rate base as a result of refundings, ratepayers as well as the
4 Company, are held harmless for the developer's failure to sell lots. The
5 use of CIAC and AIAC is a normal industry practice because it puts the
6 risk of development where it belongs, on the developer.

7
8 Q. What other mechanisms are typically used in the regulatory process to
9 hold current customers harmless from investment that is made to serve
10 potential future growth?

11 A. Excess capacity adjustments are frequently used to hold current
12 customers harmless from investment that is made to serve potential future
13 growth. The portion of any incremental plant investment that is in excess
14 of the investment necessary to serve the current customer base is
15 removed from rate base until such time as the future growth is realized.

16
17 Q. Has the Company utilized any of these mechanisms on the plant additions
18 made to serve future growth?

19 A. Yes. The distribution mains and sewer line plant additions are supported
20 by CIAC. Thus, the developer has borne the cost of this plant investment
21 and current customers are held harmless. The Company has also made
22 an excess capacity adjustment to remove the portion of the sewer
23 treatment expansion reserved for future growth.

1 Q. Since the Company has utilized these mechanisms, is the existing
2 customer base held harmless from investment that will serve future
3 growth?

4 A. No, not entirely. While the use of CIAC and an excess capacity
5 adjustment mitigate the problem for the distribution main, sewer line, and
6 sewer treatment plant additions, there has been no similar mitigation for
7 the over \$1 million investment in additional storage capacity to serve
8 future growth. Rio Verde has included its entire investment in additional
9 storage capacity in rate base, despite the fact this additional capacity is
10 not needed to serve existing customers, but rather was over sized to meet
11 potential future growth.

12
13 Q. How much storage capacity does Rio Verde have?

14 A. Prior to the recent plant additions, the Company had storage capacity of
15 300,000 gallons. The new storage tank adds an additional 740,000
16 gallons of capacity. The Company's test year total storage capacity is
17 1,040,000 gallons.

18
19 Q. Is there a set of standards or rules that dictate how much storage a given
20 water utility requires?

21 A. Yes. The Arizona Administrative Code Title 18 – Environmental Quality
22 sets minimum design criteria for public water systems. R18-4-503
23 specifically addresses storage requirements and reads as follows:

1 Storage Requirements

2 A. The minimum storage capacity for a community water
3 system or a non-community water system that serves
4 a residential population or a school shall be equal to
5 the average daily demand during the peak month of
6 the year. Storage capacity may be based on existing
7 consumption and phased as the water system
8 expands.

9 B. The minimum storage capacity for a multiple-well
10 system for a community water system or non-
11 community water system that serves a residential
12 population or a school may be reduced by the amount
13 of the total daily demand minus the production from
14 the largest producing well.
15

16 Q. Have you used this rule to calculate Rio Verde's test-year storage
17 requirements?

18 A. Yes. Since Rio Verde is a multiple-well system I have used part B of the
19 rule to calculate Rio Verde's test year storage requirements. During the
20 test year, the peak month demand occurred in November. As shown on
21 line 1 of Schedule MDC-2 the average daily demand in November was
22 545,967 gallons. I then subtracted the average daily production from the
23 largest well of 335,633 gallons. The resultant storage requirement for Rio
24 Verde's existing customer base is 210,333 gallons. Thus, according to
25 R18-4-503 the entire 740,000 gallon tank addition is not required to serve
26 the existing customer base and will only become necessary if there is
27 future growth.

1 Q. What mechanism should be used to prevent current customers from
2 bearing the cost of the additional storage that was built to serve potential
3 future customers?

4 A. As discussed earlier, the risk of housing development should be placed on
5 the entity that will ultimately reap the gains – the developer. Accordingly,
6 the cost of the storage tank that will serve potential future growth should
7 appropriately be advanced to the utility by the developer. If and when
8 such growth occurs, the advance should be refunded to the developer. In
9 this manner, current customers will be held harmless if the planned growth
10 does not occur.

11
12 Q. How much of the Company's storage capacity are you recommending be
13 advanced by the developer?

14 A. Although, pursuant to R-8-4-503, there is justification for requiring the
15 entire cost of the 740,000 gallon tank and associated pumps and
16 transmission system be advanced by the developer, I am recommending a
17 more conservative calculation of Rio Verde's current storage requirements
18 than that required by the rule. As shown on Schedule MDC-2, I have
19 increased Rio Verde's current storage requirements under R18-4-503 by
20 25% to recognize a margin of reserve. I have then divided the
21 Company's storage requirements (including the margin of reserve) by the
22 1,040,000 gallons of available storage. This calculation indicates that
23 74.72% of the available storage is not necessary to serve the existing

1 customer base. Accordingly, 74.72% of the cost of the new tank and
2 associated facilities should be financed by an advance from the developer
3 to facilitate potential future growth.

4
5 Q. What was the cost of the 740,000 gallon storage tank and associated
6 facilities?

7 A. The tank, booster pump, and transmission mains have a total cost of
8 \$1,187,058. I am recommending that 74.72%, or \$886,965 be financed
9 with an advance from the developer. Accordingly, as shown on Schedule
10 TJC-3, Rate Base Adjustment #6, I have reduced rate base by \$886,965
11 to reflect the developer's advance in aid of construction for the portion of
12 the tank that is needed to serve potential future growth.

13

14 **COST OF EQUITY**

15 Q. What amount has the Company requested for its cost of equity?

16 A. The Company has requested a cost of equity of 12.75% for both its water
17 and sewer operations.

18

19 Q. What is the basis of the Company's requested cost of equity?

20 A. The Company-requested cost of equity is based on the results of a DCF,
21 CAPM, and comparable earnings analysis, as adjusted to include a risk
22 premium.

23

1 Q. What were the results of the Company's analyses?

2 A. The Company's CAPM analysis determined a cost of equity range of
3 10.9% to 12.2%, the DCF analysis determined a cost of equity of 7.21%,
4 and the comparable earnings analysis a cost of equity of 10.71%. The
5 Company's cost of equity analysis therefore produced a cost of equity
6 range between a high of 12.2% and a low of 7.21%. These cost of equity
7 ranges are shown on Schedule MDC-3, page 1.

8

9 Q. Given the results of the Company's analysis, how did Rio Verde arrive at
10 its request for 12.75%?

11 A. The Company increased the indicated results of its analyses to include a
12 risk premium.

13

14 Q. Do you agree that a return on equity premium is warranted for this
15 Company?

16 A. No. The cost of equity of the sample companies included in Rio Verde's
17 DCF, CAPM, and comparable earnings analyses already contain a water
18 utility risk component. Thus, the inclusion of an additional premium, as
19 requested by the Company, would result in double recovery of the risk
20 element that is already reflected in the equity returns derived from the
21 Company's various cost of equity analyses.

22

1 Q. The Company argues that its smaller size warrants a higher return on
2 equity than the companies included in its various cost of equity analyses.
3 Do you agree?

4 A. No. I have compared the Company's cost of equity request with recently
5 authorized costs of equity for similar-size Arizona water and sewer
6 companies. As shown on Schedule MDC-3, page 2, the authorized
7 returns on equity ranged from a high of 12% to a low of 10.5%. The
8 average cost of equity was 11.35%. Thus, the Company's request of
9 12.75% substantially exceeds the average, as well as the highest cost
10 authorized for a similar size Arizona water company.

11

12 Q. What cost of equity are you recommending for Rio Verde?

13 A. As just discussed, the Company's own cost of equity analyses indicates a
14 range of 7.21% to 12.2%, or an average of 10.25%. My analysis of
15 similarly situated Arizona water companies indicates a range of 10.5% to
16 12%, or an average of 11.35%. Based on these analyses I recommend a
17 cost of equity of 11.4%.

18

19 **CAP SURCHARGE**

20 Q. Please explain how the Company is recovering its CAP water costs under
21 its current rates.

22 A. The Company is recovering a portion of its CAP costs through its base
23 rates and a portion of the CAP costs through a surcharge. Base rates

1 include the level of CAP expense based on the previous 1992 test year in
2 the Company's last rate case and the surcharge includes the incremental
3 difference between the CAP costs in the previous rate case and the 1998
4 CAP costs.

5
6 Q. Please describe how the surcharge came into being.

7 A. In June of 1999 Rio Verde filed an application to recover the incremental
8 cost of CAP water over that which was reflected in the Company's current
9 tariffs. The request for the surcharge was made pursuant to Senate Bill
10 1252. After much contention and debate the current surcharge of
11 \$0.181258 per thousand gallons was authorized in Decision No. 62037,
12 dated November 2, 1999. Thus, the Company has been collecting the
13 surcharge for approximately one year.

14
15 Q. Does RUCO agree with this surcharge?

16 A. No. RUCO has opposed this surcharge, and questioned its
17 constitutionality through both a request for rehearing at the Commission
18 as well as an appeal to the Courts. The appeal is currently pending
19 resolution.

20
21 Q. Is the Company requesting continuance of the surcharge in this docket?

22 A. Yes. Surprisingly enough the Company is requesting that the surcharge
23 continue.

1 Q. Why do you say surprising?

2 A. The Company's 1999 application for the surcharge was based on the fact
3 that there had been a substantial increase in the cost of CAP water over
4 and above the amount that was included in the 1992-based rates. In the
5 current application the Company has included the 1999 cost of its CAP
6 water in its proposed rates. Thus, the requested base rates will include
7 the current level of CAP costs and there is no need for a surcharge to
8 recover the difference.

9

10 Q. Why does the Company believe the surcharge should continue?

11 A. The reason the Company believes the surcharge should continue is two
12 fold. First, it appears the Company believes the \$0.181258 surcharge was
13 intended not just to recover the incremental difference between current
14 CAP costs and the level of CAP costs included in the 1992 base rates on-
15 going forward basis, but also to retroactively recover from prior years this
16 incremental difference. Accordingly, the Company believes the surcharge
17 should continue so it can recover this incremental difference for prior
18 years.

19

20 Second, leaving aside the issue of retroactive prior year recover, the
21 Company believes that the adjustor should remain in place so it can
22 recover any future differences between the CAP costs that are included in
23 the currently-requested rates and future CAP costs. In this manner, the

1 Company believes the CAP surcharge should function as automatic cost
2 adjustment mechanism.

3

4 Q. Do you agree with these reasons for continuing the surcharge?

5 A. No. First, Decision No. 62037 did not authorize retroactive recovery of
6 prior underrecoveries of CAP costs, nor did the Company's surcharge
7 application include a request, or for that matter even mention, retroactive
8 recovery of prior CAP costs. Further, authorization for retroactive
9 recovery of prior perceived rate deficiencies would be unlawful. The Court
10 of Appeals of Arizona stated the following on this issue in Mountain States
11 Telephone and Telegraph Company v. Arizona Corporation Commission:

12 When an agency approves a rate, and the rate becomes
13 final, the agency may not later on its own initiative or as the
14 result of a collateral attack make a retroactive determination
15 of a different rate and require reparations.

16
17 124 Ariz. 433, 436, 604 P.2d 1144, 1147 (App. 1979).

18
19

20 Accordingly, recovery of the surcharge is lawful only on a going-forward
21 basis. The Company has been collecting this surcharge since the date
22 the order authorizing the surcharge went into effect. Once new rates are
23 established in the current case, the \$0.181258 surcharge must cease
24 because these costs will now be included in base rates and recovery of
25 foregone CAP costs that preceded the authorization of the surcharge in
26 Decision No. 62037 is unlawful.

27

1 Q. Please discuss the Company's second reason for leaving the surcharge in
2 place.

3 A. The Company argues that the surcharge should remain in place after base
4 rates are adjusted to include the current level of CAP costs so that the
5 surcharge can serve as an automatic adjustment mechanism to allow the
6 Company to recover any potential future CAP cost increases. RUCO
7 does agree with this argument either.

8

9 Q. Please explain why you do not agree.

10 A. I do not believe the potential changes in the level of CAP expenses meet
11 the eligibility requirements for recovery or refund through an automatic
12 adjustment mechanism. The Arizona Court of Appeals discussed
13 automatic adjustment mechanisms in Scates v. Arizona Corporation
14 Commission. The court indicated that such mechanisms are restricted to
15 certain narrowly defined operating expenses that are characterized by
16 fluctuations. The Arizona Corporation Commission has also defined
17 automatic adjustor mechanisms as applying to expenses that routinely, or
18 widely, fluctuate. The ACC stated the following regarding automatic
19 adjustor mechanisms:

20 The principal justification for a fuel adjustor is volatility in fuel
21 prices. A fuel adjustor allows the Commission to approve
22 changes in rates for a utility in response to volatile changes
23 in fuel or purchased power prices without having to conduct
24 a rate case. (Arizona Public Service Company, Decision No.
25 56450, Page 6, dated April 13, 1989)

26
27

1 Q. Are CAP costs volatile or are they known to widely fluctuate?

2 A. No. Accordingly, the CAP expenses do not meet the requirement for
3 automatic adjustment.

4
5 Q. Is automatic adjustment justified simply because a given expense may
6 increase?

7 A. No. If the potential for price increases justified the implementation of an
8 automatic adjustment mechanism, nearly every expense would be eligible
9 for automatic adjustment. Such treatment would result in single-issue
10 ratemaking and would allow the Company to recover selected cost
11 increases, while at the same time ignore decreases in other costs, or
12 increases in revenues.

13

14 Q. Has the Commission denied automatic adjustment mechanisms in the
15 past because they did not meet the necessary criteria?

16 A. Yes. In Decision No. 58419, dated September 30, 1993, the Commission
17 denied a purchased power adjustment mechanism proposed by Paradise
18 Valley Water Company. In that order the Commission stated at page 19:

19 Staff argued that although purchased power does constitute
20 a significant portion of the Company's expenses and is
21 largely outside the control of management, the expense is
22 not subject to wide fluctuations, and therefore, such a
23 mechanism is unnecessary. We concur with Staff and will
24 deny the request to approve a PPAM tariff in this
25 proceeding.

26

27

28

1 Q. What is your recommendation?

2 A. As discussed above, continuance of the surcharge will be unnecessary
3 once new rates are set in place, use of the surcharge to facilitate
4 retroactive recovery of prior costs is unlawful, and CAP expenses do not
5 meet the criteria necessary for automatic adjustment mechanisms.
6 Accordingly, continuation of the surcharge should be denied.

7

8 **PROPOSED RATES**

9 Q. What are your proposed rates?

10 A. My proposed water rates are shown on Schedule MDC-4 – Water
11 and my proposed sewer rates are shown on Schedule MDC-4 –
12 Wastewater.

13

14 Q. What is the basis of your rate design?

15 A. I began with the Company proposed rate design and adjusted it
16 proportionately down to reflect RUCO's recommended revenue
17 requirement. For water rates, I then reallocated a greater portion of
18 the rate increase to the 8" and 12" irrigation rates that serve the golf
19 courses than the portion proposed by the Company.

20

21

22

1 Q. Why should these golf course meters receive a proportionally larger
2 share of the increase than that proposed by the Company?

3 A. The Company's proposed rates result in rate increases for the
4 smaller meters that range from approximately 75% to 236%, yet
5 increases of approximately 35% were allocated to the golf course
6 irrigation rates. One of the reasons the Company's plant
7 investment has increased so significantly is that it made over a half
8 million dollar investment during 1998 that enhanced the golf course
9 delivery system. I have therefore adjusted the Company's
10 proposed rate design structure slightly to recognize this.

11

12 Q. Have you made any adjustments to the Company's proposed
13 sewer rates?

14 A. I have used the same rate design as proposed by the Company,
15 adjusted for RUCO's recommended revenue requirement. No
16 additional adjustments were made to the sewer rates, as I have
17 with the water rates.

18

19 Q. Did you perform a comprehensive cost of service study and rate
20 design analysis to derive your proposed rates?

21 A. No. Due to resource constraints, RUCO was not able to perform an
22 in-depth analysis. I have accepted the Company-proposed rate
23 structure (as adjusted slightly to allocate a fairer share of the

1 increase to the golf course irrigation meters), while recognizing that
2 if there had been resources available to devote to a full analysis my
3 recommendation might have been different.

4

5 Q. Does this conclude your direct testimony?

6 A. Yes.

7

APPENDIX I

Qualifications of Marylee Diaz Cortez

EDUCATION: University of Michigan, Dearborn
B.S.A., Accounting 1989

CERTIFICATION: Certified Public Accountant - Michigan
Certified Public Accountant - Arizona

EXPERIENCE: Audit Manager
Residential Utility Consumer Office
Phoenix, Arizona 85004
July 1994 - Present

Responsibilities include the audit, review and analysis of public utility companies. Prepare written testimony, schedules, financial statements and spreadsheet models and analyses. Testify and stand cross-examination before Arizona Corporation Commission. Advise and work with outside consultants. Work with attorneys to achieve a coordination between technical issues and policy and legal concerns. Supervise, teach, provide guidance and review the work of subordinate accounting staff.

Senior Rate Analyst
Residential Utility Consumer Office
Phoenix, Arizona 85007
October 1992 - June 1994

Responsibilities included the audit, review and analysis of public utility companies. Prepare written testimony and exhibits. Testify and stand cross-examination before Arizona Corporation Commission. Extensive use of Lotus 123, spreadsheet modeling and financial statement analysis.

Auditor/Regulatory Analyst
Larkin & Associates - Certified Public Accountants
Livonia, Michigan
August 1989 - October 1992

Performed on-site audits and regulatory reviews of public utility companies including gas, electric, telephone, water and sewer throughout the continental United States. Prepared integrated proforma financial statements and rate models for some of the largest

public utilities in the United States. Rate models consisted of anywhere from twenty to one hundred fully integrated schedules. Analyzed financial statements, accounting detail, and identified and developed rate case issues based on this analysis. Prepared written testimony, reports, and briefs. Worked closely with outside legal counsel to achieve coordination of technical accounting issues with policy, procedural and legal concerns. Provided technical assistance to legal counsel at hearings and depositions. Served in a teaching and supervisory capacity to junior members of the firm.

RESUME OF RATE CASE AND REGULATORY PARTICIPATION

<u>Utility Company</u>	<u>Docket No.</u>	<u>Client</u>
Potomac Electric Power Co.	Formal Case No. 889	Peoples Counsel of District of Columbia
Puget Sound Power & Light Co.	Cause No. U-89-2688-T	U.S. Department of Defense - Navy
Northwestern Bell-Minnesota	P-421/EI-89-860	Minnesota Department of Public Service
Florida Power & Light Co.	890319-EI	Florida Office of Public Counsel
Gulf Power Company	890324-EI	Florida Office of Public Counsel
Consumers Power Company	Case No. U-9372	Michigan Coalition Against Unfair Utility Practices
Equitable Gas Company	R-911966	Pennsylvania Public Utilities Commission
Gulf Power Company	891345-EI	Florida Office of Public Counsel
Jersey Central Power & Light	ER881109RJ	New Jersey Department of Public Advocate Division of Rate Counsel

Green Mountain Power Corp.	5428	Vermont Department of Public Service
Systems Energy Resources	ER89-678-000 & EL90-16-000	Mississippi Public Service Commission
El Paso Electric Company	9165	City of El Paso
Long Island Lighting Co.	90-E-1185	New York Consumer Protection Board
Pennsylvania Gas & Water Co.	R-911966	Pennsylvania Office of Consumer Advocate
Southern States Utilities	900329-WS	Florida Office of Public Counsel
Central Vermont Public Service Co.	5491	Vermont Department of Public Service
Detroit Edison Company	Case No. U-9499	City of Novi
Systems Energy Resources	FA-89-28-000	Mississippi Public Service Commission
Green Mountain Power Corp.	5532	Vermont Department of Public Service
United Cities Gas Company	176-717-U	Kansas Corporation Commission
General Development Utilities	911030-WS & 911067-WS	Florida Office of Public Counsel
Hawaiian Electric Company	6998	U.S. Department of Defense - Navy
Indiana Gas Company	Cause No. 39353	Indiana Office of Consumer Counselor
Pennsylvania American Water Co.	R-00922428	Pennsylvania Office of Consumer Advocate
Wheeling Power Co.	Case No. 90-243-E-42T	West Virginia Public Service Commission Consumer Advocate Division

Jersey Central Power & Light Co.	EM89110888	New Jersey Department of Public Advocate Division of Rate Counsel
Golden Shores Water Co.	U-1815-92-200	Residential Utility Consumer Office
Consolidated Water Utilities	E-1009-92-135	Residential Utility Consumer Office
Sulphur Springs Valley Electric Cooperative	U-1575-92-220	Residential Utility Consumer Office
North Mohave Valley Corporation	U-2259-92-318	Residential Utility Consumer Office
Graham County Electric Cooperative	U-1749-92-298	Residential Utility Consumer Office
Graham County Utilities	U-2527-92-303	Residential Utility Consumer Office
Consolidated Water Utilities	E-1009-93-110	Residential Utility Consumer Office
Litchfield Park Service Co.	U-1427-93-156 U-1428-93-156	Residential Utility Consumer Office
Pima Utility Company	U-2199-93-221 U-2199-93-222	Residential Utility Consumer Office
Arizona Public Service Co.	U-1345-94-306	Residential Utility Consumer Office
Paradise Valley Water	U-1303-94-182	Residential Utility Consumer Office
Paradise Valley Water	U-1303-94-310 U-1303-94-401	Residential Utility Consumer Office
Pima Utility Company	U-2199-94-439	Residential Utility Consumer Office
SaddleBrooke Development Co.	U-2492-94-448	Residential Utility Consumer Office

Boulders Carefree Sewer Corp.	U-2361-95-007	Residential Utility Consumer Office
Rio Rico Utilities	U-2676-95-262	Residential Utility Consumer Office
Rancho Vistoso Water	U-2342-95-334	Residential Utility Consumer Office
Arizona Public Service Co.	U-1345-95-491	Residential Utility Consumer Office
Citizens Utilities Co.	E-1032-95-473	Residential Utility Consumer Office
Citizens Utilities Co.	E-1032-95-417 et al.	Residential Utility Consumer Office
Paradise Valley Water	U-1303-96-283 U-1303-95-493	Residential Utility Consumer Office
Far West Water	U-2073-96-531	Residential Utility Consumer Office
Southwest Gas Corporation	U-1551-96-596	Residential Utility Consumer Office
Arizona Telephone Company	T-2063A-97-329	Residential Utility Consumer Office
Far West Water Rehearing	W-0273A-96-0531	Residential Utility Consumer Office
SaddleBrooke Utility Company	W-02849A-97-0383	Residential Utility Consumer Office
Vail Water Company	W-01651A-97-0539 W-01651B-97-0676	Residential Utility Consumer Office
Black Mountain Gas Company Northern States Power Company	G-01970A-98-0017 G-03493A-98-0017	Residential Utility Consumer Office
Paradise Valley Water Company Mummy Mountain Water Company	W-01303A-98-0678 W-01342A-98-0678	Residential Utility Consumer Office

Bermuda Water Company	W-01812A-98-0390	Residential Utility Consumer Office
Bella Vista Water Company Nicksville Water Company	W-02465A-98-0458 W-01602A-98-0458	Residential Utility Consumer Office
Paradise Valley Water Company	W-01303A-98-0507	Residential Utility Consumer Office
Pima Utility Company	SW-02199A-98-0578	Residential Utility Consumer Office
Far West Water & Sewer Company Interim Rates	WS-03478A-99-0144	Residential Utility Consumer Office
Vail Water Company Interim Rates	W-01651B-99-0355	Residential Utility Consumer Office
Far West Water & Sewer Company	WS-03478A-99-0144	Residential Utility Consumer Office
Sun City Water and Sun City West	W-01656A-98-0577 SW-02334A-98-0577	Residential Utility Consumer Office
Southwest Gas Corporation ONEOK, Inc.	G-01551A-99-0112 G-03713A-99-0112	Residential Utility Consumer Office
Table Top Telephone	T-02724A-99-0595	Residential Utility Consumer Office
U S West Communications Citizens Utilities Company	T-01051B-99-0737 T-01954B-99-0737	Residential Utility Consumer Office
Citizens Utilities Company	E-01032C-98-0474	Residential Utility Consumer Office
Southwest Gas Corporation	G-01551A-00-0309 G-01551A-00-0127	Residential Utility Consumer Office

Rio Verde Utilities, Inc. - **WATER DIVISION**
 Docket No. WS-02156A-00-0321 and WS-02156A-00-0323
 Test Year Ended December 31, 1999
RATE BASE ADJUSTMENT #1
ADJUSTMENTS TO REFLECT PLANT RETIREMENTS

Schedule MDC-1

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>REFERENCES</u>
	Remove Retired Plant from Books:		
1	Plant	\$ (108,446)	See Note 1-W below.
2	Accumulated Depreciation	(108,446)	See Note 1-W below.
3	Remove Excess Depreciation on Retired Plant	(67,723)	See Note 1-W below.
4	Adjust Accumulated Deferred Income Taxes for Excess Depreciation	70,073	See Note 1-W below.
5	RUCO's Recommended Adjustment	(2,350)	-(Line 4 minus Line 3)

NOTE 1-W: All of the adjustments related to this page and schedule were obtained through a letter from Ronald Kozoman, dated November 21, 2000.

ADJUSTMENTS TO REFLECT PLANT RETIREMENTS

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>REFERENCES</u>
	Remove Retired Plant from Books:		
1	Plant	\$ (79,477)	See Note 2-S below.
2	Accumulated Depreciation	(79,477)	See Note 2-S below.
3	Remove Excess Depreciation on Retired Plant	(31,427)	See Note 2-S below.
4	Adjust Accumulated Deferred Income Taxes for Excess Depreciation	44,437	See Note 2-S below.
5	RUCO's Recommended Adjustment to Rate Base	(13,010)	-(Line 4 minus Line 3)

NOTE 2-S: All of the adjustments related to this page and schedule were obtained through a letter from Ronald Kozoman, dated November 21, 2000.

RIO VERDE UTILITIES INC. - WATER
 TEST YEAR ENDED DECEMBER 31, 1999
 RATE BASE ADJUSTMENT # - ADVANCES IN
 AID OF CONSTRUCTION

DOCKET NOS. WS-02156A-00-321
 & WS-02156-00-0323
 SCHEDULE MDC-2

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>REFERENCE</u>
	<u>STORAGE REQUIREMENTS</u>		
1	AVERAGE DAILY DEMAND PEAK MONTH	545,967	DR # RVCA-1-5
2	AVERAGE DAILY PRODUCTION - LARGEST WELL	<u>335,633</u>	DR# RVCA-30
3	SUBTOTAL	210,333	LINE 1 - LINE 2
4	MARGIN OF RESERVE	<u>1.25</u>	
5	STORAGE REQUIREMENTS	262,917	AZ ADMIN. CODE R18-4-503
	<u>AVAILABLE STORAGE</u>		
6	TANK 1	300,000	RV ANNUAL REPORT, PG. 17
7	TANK 2	<u>740,000</u>	RV ANNUAL REPORT, PG. 17
8	TOTAL STORAGE CAPACITY	1,040,000	LINE 6 + LINE 7
9	EXCESS STORAGE AVAILABLE FOR FUTURE GROWTH	777,083	LINE 8 - LINE 5
10	PERCENT OF NEW TANK BUILT FOR FUTURE GROWTH	74.72%	LINE 9/LINE 7
	<u>IMPUTATION OF DEVELOPER ADVANCE</u>		
11	TOTAL COST OF ASHER TANK	1,187,058	DR # RVCA-7, RVCA-8, RVCA-9
12	PERCENT OF NEW TANK BUILT FOR FUTURE GROWTH	<u>74.72%</u>	LINE 10
13	AMOUNT TO BE FINANCED WITH A DEVELOPER ADVANCE	<u>\$886,965</u>	LINE 11 x LINE 12

RIO VERDE UTILITIES INC. - WATER & WASTEWATER
TEST YEAR ENDED DECEMBER 31, 1999
COST OF EQUITY

DOCKET NOS. WS-02156A-00-321
& WS-02156-00-0323
SCHEDULE MDC-3
PAGE 1 OF 2

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>REFERENCE</u>
1	RESULTS OF DCF ANALYSIS	7.21%	CO. SCH. D-4-A
2	RESULTS OF CAPM ANALYSIS	10.95 -12.2%	CO. SCH. D-4-B
3	CA TURNER REPORT	10.71%	CO. SCH. D-4
4	ARIZONA CLASS A & B WATER UTILITIES	11.35%	
5	COST OF EQUITY	11.40%	TESTIMONY MDC

RIO VERDE UTILITIES INC. - WATER & WASTEWATER
TEST YEAR ENDED DECEMBER 31, 1999
AVERAGE COST OF EQUITY
ARIZONA WATER & SEWER COMPANIES

DOCKET NOS. WS-02156A-00-321
& WS-02156-00-0323
SCHEDULE MDC-3
PAGE 2 OF 2

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>AUTHORIZED ROE</u>	<u>DECISION NO.</u>	<u>DECISION DATE</u>
1	PARADISE VALLEY WATER CO.	11.00%	61831	07/20/99
2	FAR WEST WATER CO.	11.50%	62649	06/12/00
3	PIMA UTILITY CO.	11.75%	62184	01/05/00
4	CITIZENS MARICOPA WATER & WW	10.50%	60172	05/07/97
5	BERMUDA WATER COMPANY	12.00%	61854	07/21/99
6	TOTAL	56.75%		
7	AVERAGE	11.35%		

RIO VERDE UTILITIES INC. - WATER
TEST YEAR ENDED DECEMBER 31, 1999
RUCO PROPOSED RATES

DOCKET NOS. WS-02156A-00-321
& WS-02156-00-0323
SCHEDULE MDC-4

<u>LINE NO.</u>	<u>CUSTOMER CLASSIFICATION/METER SIZE</u>	<u>RUCO PROPOSED RATES</u>	<u>RUCO PROPOSED REVENUE</u>
1	RESIDENTIAL - 5/8 3/4 INCH	\$7.80	367,390
2	COMMERCIAL - 1 INCH	7.80	8,603
3	COMMERCIAL - 2 INCH	42.00	45,451
4	COMMERCIAL - 4 INCH	130.00	390
5	COMMERCIAL - 6 INCH	264.00	6,878
6	IRRIGATION - 6 INCH	264.00	3,207
7	IRRIGATION - 6 INCH - POTABLE	264.00	3,168
8	IRRIGATION - 8 INCH	584.00	151,536
9	IRRIGATION - 12 INCH	992.00	<u>540,469</u>
10	TOTAL WATER REVENUES		1,127,092
11	HOOK-UP FEE REVENUE		60,000
12	MISC. REVENUE		<u>6,399</u>
13	TOTAL REVENUE		\$1,193,491

RIO VERDE UTILITIES INC - WASTEWATER
TEST YEAR ENDED DECEMBER 31, 1999
RUCO PROPOSED RATES

DOCKET NOS. WS-02156A-00-321
& WS-02156-00-0323
SCHEDULE MDC-4

<u>LINE NO.</u>	<u>CUSTOMER CLASSIFICATION</u>	<u>RUCO PROPOSED RATES</u>	<u>RUCO PROPOSED REVENUE</u>
1	RESIDENTIAL	43.15	605,757
2	COMMERCIAL	143.00	32,605
3	COMMERCIAL - RESTUARANT	190.00	4,560
4	EFFLUENT REVENUE	1.12	<u>60,934</u>
5	TOTAL WASTEWATER REVENUES		703,856
6	HOOK-UP FEE REVENUE	1,500	90,000
7	OTHER REVENUE		<u>2,341</u>
8	TOTAL REVENUE		796,197

RIO VERDE UTILITIES, INC.

DOCKET NO. WS-02156A-00-0321

DOCKET NO. WS-02156A-00-0323

WASTEWATER DIVISION

DIRECT TESTIMONY

OF

TIMOTHY J. COLEY

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

DECEMBER 15, 2000

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1 **INTRODUCTION**

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

3 A. My name is Timothy James Coley. I am a Senior Rate Analyst for the
4 Residential Utility Consumer Office (RUCO) located at 2828 N. Central
5 Avenue, Suite 1200, Phoenix, Arizona 85004.

6
7 Q. Please state your educational background and qualifications in utility
8 regulation.

9 A. I have a BS Degree in Business Administration and Management from Troy
10 State University in Troy, Alabama. In addition, I received a Master Degree in
11 Public Administration from State University of West Georgia, which is located
12 in Carrollton, Georgia, and I am currently enrolled at Arizona State University
13 – West in the Post-baccalaureate Accountancy Program. From 1985 through
14 1991, I worked with the Georgia Public Service Commission – Utility Division-
15 as a junior auditor, auditor, and senior auditor.

16
17 Q. Please state the purpose of your testimony.

18 A. The purpose of my testimony is to present findings and recommendations
19 resulting from my analysis and review of Rio Verde Utilities, Inc.'s application
20 for an increase in the Company's rates and authorization to incur long term
21 debt. The Company proposes a rate increase for both its Water and
22 Wastewater Divisions, and authorization to issue \$1,290,389 in long term
23 debt.

1 Q. Please describe your participation and work effort on this project.

2 A. Under the supervision of my audit manager, Marylee Diaz Cortez, I reviewed
3 the Company's Rate Application to obtain a broad perspective on each of its
4 Divisions (Water and Wastewater). My inspection focused on the financial
5 position of the Company in regards to each division and the Company as a
6 whole. After the initial financial analysis and examination, I discussed my
7 preliminary assessment with my manager. At her direction, I developed
8 and/or assisted in the development of six sets of data requests, reviewed
9 Staff's requested data, examined data requests of the Rio Verde Community
10 Association (RVCA), met with RVCA's members and their attorney, Mr.
11 Mumaw. Other efforts included obtaining information from the Commission
12 such as annual reports, prior Commission Decisions, main extension
13 agreements, letters of correspondence between the Company and
14 Commission, and the Company's current tariff. In my efforts, I gained a
15 thorough and comprehensive account of the Company.

16
17 Q. What areas will you address in your testimony?

18 A. First, I will address RUCO's overall revenue requirement recommendations,
19 which are a result of the overall analysis, adjustments and recommendations
20 that RUCO found appropriate and proper under accepted ratemaking
21 practices. Next, I will address, in the following order, the rate base, operating
22 income, and cost of capital issues. RUCO's Audit Manager, Marylee Diaz
23 Cortez, will sponsor any subject matter relating to deferred income tax/credit

1 issues, advances-in-aid-of-construction (AIAC), return on common equity
2 CAP surcharge, and finally, present RUCO's rate design model.

3

4 Q. Please identify any Schedules and Exhibits you are sponsoring.

5 A. I am sponsoring Schedules TJC-1 thru TJC-17 independently for both the
6 Water and Wastewater Divisions of Rio Verde Utilities, Inc. All schedules and
7 adjustments will be presented in chronological order as they are depicted in
8 my testimony. The two divisions of the Company, water and sewer, will be
9 discussed separately and distinctly. First, I will address the water issues, and
10 then, the wastewater issues will be discussed.

11

12 **SUMMARY OF ADJUSTMENTS FOR THE WASTEWATER DIVISION**

13 Q. Please summarize the recommendations and adjustments pertaining to the
14 Company's Wastewater Division.

15 A. My testimony addresses the following issues:

16 Unamortized Finance Charges: This adjustment decreases rate base by
17 \$3,099. The Company proposed a \$1,179,398 new CoBank loan, which has
18 a 1% finance rate charge to be expensed in the year incurred. I have
19 recommended a loan that is \$309,945 less than the Company proposed.
20 Thus, my recommendation in the reduction of the proposed loan would result
21 in \$3,099 less finance expenses than proposed by the Company.

22 Debt Reserve Fund Requirements of Proposed New Long-Term Financing:
23 This adjustment has a threefold effect. It decreases the amount of the loan

1 requested, the debt reserve fund account, and any earnings potential that the
2 restricted funds would generate. Thus, interest expense of the loan is also
3 reduced. CoBank requires that the Company maintain a 10% balance of the
4 new loan in an account designated as the "Debt Reserve Fund Account", on
5 which the Company earns a 4.50% APR. Because a portion of the Company-
6 requested loan is already supported by Contributions in Aid of Construction
7 (CIAC), I have recommended that the Company be allowed a long-term
8 borrowing arrangement totaling \$869,453. This recommendation represents
9 a decrease of \$309,945 from the Company's originally requested loan. In
10 turn, this decreases both the Company's reserve fund required and earnings
11 on the same.

12 Working Capital: This adjustment reduces the Company's requested level of
13 working capital to reflect RUCO recommended level of operating expense.

14 Wastewater Hook-Up Fees: This adjustment increases wastewater revenues
15 generated by the Company's hook-up fee by \$20,000. I am recommending
16 an increase in the hook-up fee for wastewater service from \$1,000 to \$1,500.
17 The rationale for this revenue enhancement is the ever-increasing cost of
18 plant per customer from 1992 –1999. My cost study substantiates the
19 adjustment so made.

20 Salaries & Wages: This adjustment arises from test year end changes in
21 employees and employee salaries and includes an adjustment to reflect the
22 recent retirement of the General Manager of Rio Verde and certain wage and

1 salary increases. Consequently, this modification reduces operating
2 expenses for the wastewater division by \$12,326.

3 Property Taxes: This adjustment is necessary to reflect the actual Rio Verde
4 property taxes versus the Company's proforma estimate. This adjustment
5 resulted in a reduction of operating expenses of \$4,134.

6 Rate Case Expense: This adjustment decreases rate case expenses by \$540
7 in the wastewater division. The adjustment is due to over estimates detected
8 in the Company's proposed rate case expense.

9 Depreciation & Amortization: This adjustment decreases depreciation and
10 amortization expense by \$10,888 for the wastewater division of the Company.
11 The decrease in depreciation and amortization expense results from my
12 recommended plant balances and my correction to the computation of CIAC
13 amortization based on the gross CIAC balance.

14 Income Taxes: As a consequence of the adjustments and proposed changes
15 made in this case by RUCO, net income inevitably changes and as a result,
16 income taxes increased by \$36,353.

17 Effective Cost of New Proposed Loan: This adjustment computes the
18 effective interest rate of the RUCO recommended loan. The loan to satisfy
19 payables to associated affiliates has a fixed APR of 9.75%, but when all
20 variables, such as restricted funds of 10% of the original loan amount earning
21 4.50% and a 1% finance charge amortized over the life of the loan (20 years),
22 are factored, the resulting effective interest rate equals 9.35%.

23

1 **REVENUE REQUIREMENTS**

2 Q. Considering your adjustments and recommendations to the revenue
3 requirement formula, please briefly summarize the results of your analysis of
4 Rio Verde Utilities, Inc. and your recommended revenue requirements.

5 A. My analysis determined that Rio Verde Utilities Wastewater Division rates
6 should be increased by no more than \$164,517. This recommendation is
7 shown on Schedule TJC-1. My recommended Fair Value and Original Cost
8 rate base of \$2,913,663 is shown on Schedule TJC-2. The detail supporting
9 my recommended rate base is presented on Schedule TJC-3. My
10 recommended adjusted operating income of \$172,882 is shown on Schedule
11 TJC-7, and the detail supporting that recommendation is presented on
12 Schedule TJC-8.

13
14 **RATE BASE ADJUSTMENTS**

15 **Rate Base Adjustment #1 – Remove Plant Retirements and Accumulated**
16 **Depreciation**

17 Q. Has the Company included property, plant, and/or equipment in its rate base
18 that should have been retired, removed from the Company's books, and no
19 longer included as an expense to depreciation?

20 A. Yes. Ms. Marylee Diaz Cortez will sponsor and address this rate base
21 adjustment issue.

22

1 **Rate Base Adjustment #2 – Unamortized Finance Charge on RUCO's Proposed**
2 **Loan**

3 Q. Has the Company included in its rate base unamortized finance charges
4 relating to the new long-term debt financing that the Company's rate
5 application requests?

6 A. Yes. The Company has included in its rate base unamortized finance
7 charges equal to 1% of the total requested loan amount, which based on the
8 Company-proposed loan is \$11,794.

9
10 Q. Why have you made an adjustment to the Unamortized Finance Charges in
11 this particular case?

12 A. This adjustment is necessary because I am recommending that the Company
13 not receive the full amount of the "proposed loan" it requested. My
14 recommended loan amount will be discussed in more detail in the cost of debt
15 section of my testimony. Thus, the 1% finance charge that the financing
16 company (CoBank) charges must be reduced relative to the loan amount I am
17 recommending.

18
19 Q. What loan amount do you recommend to support your adjustment?

20 A. I recommend the Company receive a loan from CoBank in the amount of
21 \$869,452 as opposed to the Company's proposed request of \$1,179,398,
22 which again, will be discussed later in the cost of debt section of my
23 testimony. The difference between the Company's proposed loan amount

1 (\$1,179,398) and what I recommend (\$869,452) is \$309,945. The difference
2 in the two loan amounts ($1,179,398 - 869,452 = 309,945$) multiplied by the
3 1% finance charge ($309,945 \times 1\% = 3,099$) equals the necessary adjustment,
4 which is \$3,099. My recommended adjustment is shown on Schedule TJC-4.
5

6 **Rate Base Adjustment #3 – Debt Reserve Fund**

7 Q. Did the Company include a pro forma adjustment that increased rate base
8 due to a provision in the proposed loan from Cobank?

9 A. Yes. The Company is required to carry a “Restricted Fund” balance of 10%
10 of the original loan amount. As will be discussed later in my testimony, I am
11 recommending a loan authorization for Rio Verde that is less than the
12 Company proposed. Consequently, the required 10% reserve requirement
13 also requires reduction. This adjustment reduces rate base by \$30,995 and is
14 shown on Schedule TJC-5.
15

16 **Rate Base Adjustment #4 – Cash & Working Capital**

17 Q. What amount of working capital is the Company requesting?

18 A. The Company is requesting working capital in the amount of \$64,924.
19

20 Q. How did the Company determine the requested amount of working capital?

21 A. The Company determined its working capital request utilizing the formula
22 method.
23

1 Q. Please explain the concept of working capital?

2 A. A company's working capital requirement represents the amount of cash the
3 company must have on hand to cover any differences in the time frame
4 between when revenues are received and expenses must be paid. The most
5 accurate way to measure the working capital requirement is via a lead/lag
6 study. The lead/lag study measures the actual lead and lag days attributable
7 to the individual revenues and expenses. A lead/lag study, however, is costly
8 and resource intensive. As a result, smaller companies quite often utilize
9 what is known as the formula method. The main difference between the
10 formula method and a lead/lag study is that where the lead/lag study
11 measures actual leads and lags in revenues and expenses, the formula
12 method simply assumes an average expense lag of 45 days. Theoretically,
13 the formula method when applied to the average small utility operation is
14 assumed to be relatively accurate.

15

16 Q. Are you proposing any adjustment to the Company-proposed working capital?

17 A. Yes. Although I have also utilized the formula method of computing working
18 capital, an adjustment is necessary to restate working capital requirement
19 based on my recommended level of operating expenses.

20

21

22

23

1 **OPERATING INCOME**

2 **Operating Adjustment #1 – Recommendation to Increase Wastewater Hook-Up**

3 **Fee**

4 Q. Is the Company proposing any change in the currently authorized hook-up fee
5 tariff?

6 A. Yes.

7
8 Q. What position is the Company proposing in the instant case for the
9 wastewater hook-up fees?

10 A. The Company proposes that the cap of 60 hook-up fees be eliminated and all
11 hook-up fees be accounted for as revenue. In the Company's application it
12 has estimated that the annual hook-up fees would be 70. The Company also
13 proposes the wastewater hook-up fee remain at \$1,000.

14
15 Q. Do you agree with the Company's proposal concerning wastewater hook-up
16 fees?

17 A. No.

18
19 Q. What do you propose for the wastewater hook-up fee?

20 A. Traditionally, RUCO has maintained a position opposing hook-up fees to be
21 accounted for as revenue. RUCO holds the position that hook-up fees should
22 be accounted for as contributions in aid (CIAC). However, in light of Rio
23 Verde residents' support of revenue treatment of hook-up fees, the

1 Commission authorized such treatment of the Company's hook-up fees in a
2 prior case. Although, RUCO has long believed the better accounting for
3 hook-up fees is as contributions (CIAC). However, inequities will result if the
4 hook-up fee policy is changed at this juncture. Accordingly, the Company's
5 proposed removal on the cap of hook-ups to be reflected as revenues should
6 be denied. Accordingly, I recommended that the Company be held at the
7 same number of hook-up fees (60) the Commission approved in its last
8 decision. However, I believe that hook-up fees should be increased from the
9 current \$1,000 to \$1,500. The cost of the plant necessary to serve Rio Verde
10 customers continues to increase. Thus, a higher hook-up fee is justified. In
11 my analysis, plant was verified to have slightly more than doubled per
12 customer since 1993. Therefore, RUCO's rationale for increasing the hook-
13 up fee is firmly based and directly relative to the cost of plant per customer.

14
15 Q. What adjustment does RUCO deem appropriate regarding your position with
16 hook-up fees?

17 A. I have made an adjustment of \$20,000 to Wastewater Revenues to reflect the
18 increase to \$1,500 per hook-up fee. If any additional hook-up fees beyond
19 60 incur, the additional fees are to be accounted for as contributions. This
20 adjustment is supported and shown on Schedule TJC-9

1 **Operating Adjustment #2 – Payroll Adjustment**

2 Q. What level of payroll expense is included in the Company's application?

3 A. The Company's application includes \$102,061 in payroll expense.

4
5 Q. Do you agree with this level of payroll expense?

6 A. No. There have been significant changes in the Company's payroll expense
7 as compared to when this application was filed.

8
9 Q. What changes have occurred that render the Company's proposed amount of
10 payroll expense inaccurate on a going forward basis?

11 A. The General Manager, Mr. Bush, has retired. His retirement alone freed up
12 \$23,000 because Mr. Bush's replacement, Mike Kleminski – former Assistant
13 General Manager, received an increase in salary of \$8,000. Formerly, Mr.
14 Bush's salary was \$83,000, and presently, the promotion of Mr. Kleminski to
15 General Manager demanded a salary increase from \$53,000 to \$60,000. The
16 difference between Mr. Bush's \$83,000 salary and Mr. Kleminski's present
17 \$60,000 accounts for the decrease in payroll of \$23,000. At this point in
18 time, the Company has yet to hire a new Assistant General Manager to fill Mr.
19 Kleminski's vacant position. Thus, the Company currently is incurring no
20 expense associated with this position. While ordinarily RUCO would not
21 recommend recovery of costs which are not being incurred, I recognize that
22 the Company will be required to fill this position on a going forward basis. I
23 have therefore allowed a salary of \$42,000 for this position, which is lower

1 than the salary of the previous Assistant Manager to recognize that a new
2 hire will not command the salary of a seasoned employee, and also to
3 recognize that there may be some lag between when rates go into effect and
4 the new employee is hired.

5

6 Q. Does your recommended level of payroll include the approximate 10%
7 proforma payroll expense requested by the Company for the existing
8 employees?

9 A. Yes, RUCO's recommended payroll expenses recognizes an annualization of
10 the payroll increase.

11

12 Q. What adjustment to the wastewater payroll expense is necessary to account
13 for this overall employment makeover?

14 A. RUCO recommends an adjustment to decrease wastewater payroll in the
15 amount of \$12,326. This adjustment is shown on Schedule TJC-10.

16

17 **Operating Income Adjustment #3 – Property Taxes Adjustment**

18 Q. What adjustment did you make to reflect the actual property taxes that the
19 Company was billed?

20 A. I adjusted the Taxes & Licenses account by \$4,134, which decreased the
21 expense account appropriately.

22

23

1 **Operating Adjustment #4 – Over Estimates of Rate Case Expenses**

2 Q. Do you agree with the Company's estimated \$60,000 of rate case expense
3 filed in the application?

4 A. No. In response to a RUCO data request, the Company provided a
5 breakdown of its estimated rate case expense. As a result of my review of
6 this information, I believe the Company's estimate is overstated.

7
8 Q. Would you please identify the amounts and nature of the overstated charges?

9 A. The Company's rate case expense for legal fees is overstated because it
10 includes charges that normally would not be associated with a company of
11 this size and magnitude of rate case. These charges are identified as follows:

12	Line #65	Prepare Opening Brief	\$ 2,700
13	Line #66	Review Other Parties Opening Briefs	900
14	Line #67	Prepare Reply Brief	1,260
15	Line #68	Review Hearing Officer's Recommended Order	540
16			-----
17			\$ 5,400

18
19 It is unlikely in the instant case that briefs will be required and accordingly
20 speculative expenses should not be included in rates. I have therefore
21 reduced rate case expense by \$5,400. I have allocated this amount 50/50 to
22 water and sewer plant respectively, which allocates \$2,700 to each division.
23 The \$2,700 is then amortized over the allowed period of time, which is 5

1 years. As a result of the amortization, a total of \$540 is deducted on an
2 annual basis from the Company's proposed rate case expense. This
3 adjustment is shown on Schedule TJC-12.

4

5 **Operating Adjustment #5 – Depreciation & Amortization**

6 Q. What amount did the Company include in its application for “Total Sewer
7 Plant” to be depreciated and amortized?

8 A. The amount of “Total Sewer Plant” that the Company included in its
9 application to be depreciated was \$5,442,410. The \$5,442,410 is calculated
10 by taking the “Total Water Plant” balance of \$5,494,303 on Schedule B-2 of
11 the Company’s application and subtracting the non-depreciable items of plant.
12 The non-depreciable plant accounts are “Organization Costs” and “Land and
13 Land Rights”, which are \$1,380 and \$50,513 respectively. Simply, the
14 calculation is as follows: \$5,494,303 minus the sum of (\$1,380 + \$50,513).
15 Next, the Company applied the composite depreciation rate of 2.603750% to
16 depreciate and amortize its “Gross Depreciable Sewer Plant”.

17

18 Q. Do you agree with the amount that the Company used for Gross Utility Plant
19 in Service?

20 A. No. As discussed in the testimony of Marylee Diaz Cortez the Company
21 failed to remove from the books plant that had been fully depreciated in the
22 amount of \$79,477. The Company’s Total Plant in Service is overstated by
23 this amount.

1 Q. What amount of Gross Total Depreciable Plant is included in your
2 depreciation expense calculations?

3 A. I have included \$5,414,433 which is my total recommended plant as shown
4 on Schedule TJC-3, Column H, line 24, less the non-depreciable accounts of
5 organization costs and land and land rights, which are \$1,380 and \$50,513
6 respectively: $(\$5,414,433 - \$1,380) - \$50,513 = \$5,362,540$

7
8 Q. What amount of depreciation expense are you recommending based on
9 RUCO's plant balances?

10 A. I recommend a depreciation expense on Gross Total Depreciable Plant of
11 \$139,627, but there is one other calculation for the amortization CIAC that will
12 affect the actual depreciation expense found on the income statement.

13
14 Q. How does amortization of CIAC effect your recommended depreciation
15 expense?

16 A. When CIAC is received, it must be placed on the books and subsequently
17 amortized over the life of the plant it supports. Because a utility has no
18 investment in CIAC-supported plant, amortization of the CIAC serves to offset
19 the depreciation expense taken on CIAC-support plant. As shown on
20 Schedule TJC-13, my recommended depreciation expense is
21 reduced/decreased by the CIAC amortization. Instead of the depreciation
22 expense proposed earlier of \$139,627, this amount must be offset by the
23 amortization amount attributable to CIAC. Now, the depreciation expense

1 that flows through to the income statement is not \$139,627, but instead, it is
2 \$139,627 less the \$59,414 attributable to the amortization of CIAC, or
3 \$80,213.

4

5 Q. Why does the Company's CIAC amortization income differ from your
6 recommended amount?

7 A. The Company understated CIAC Amortization Income, because it
8 erroneously based its calculation on a net CIAC balance. I have corrected
9 this error by calculating CIAC amortization income based on the gross CIAC
10 balance. This increases CIAC amortization by \$8,818.

11

12 Q. What adjustment was necessary to reflect the proper depreciation expense
13 for the test year?

14 A. I made an adjustment of \$10,888 that decreased depreciation and
15 amortization expense. This adjustment is supported in detail on Schedule
16 TJC-13. The \$2,069 of this adjustment results from RUCO's recommended
17 plant adjustment and \$8,818 for the Company's CIAC amortization error.

18

19 **Operating Adjustment #10 – Income Tax Expense**

20 Q. Please discuss your income tax expense adjustment.

21 A. As shown on Schedule TJC-14, page 1, I calculated Rio Verde's state and
22 federal income taxes based on RUCO's recommended level of operating
23 income at present water rates.

1 Q. Have you computed income taxes based on RUCO's proposed rates?

2 A. Yes. I calculated the additional income tax expense attributable to RUCO's
3 proposed rate increase by utilizing the gross revenue conversion factor. This
4 calculation is shown on Schedule TJC-14, page 2.

5

6 **COST OF CAPITAL**

7 **Capital Structure**

8 Q. Have you made any adjustments to the Company's proposed capital
9 structure?

10 A. Yes. As discussed earlier, I recommend a long-term debt-financing amount
11 that is less than the Company requested. Several rate base adjustments
12 hinged on this new recommended loan amount.

13

14 Q. What is the original loan amount requested by the Company before you made
15 any adjustments to the Company's proposed loan?

16 A. The Company originally sought long-term indebtedness in the amount for up
17 to \$2,469,787 to fund certain plant additions, refinancing of certain existing
18 obligations of the Corporation and certain costs and reserves required for the
19 financing.

20

21 Q. From whom has the Company requested this loan?

22 A. The Company is negotiating with CoBank. The loan is contingent upon the
23 outcome of this rate application.

1 Q. Is the Company requesting this proposed new loan in a separate docket
2 before the ACC?

3 A. Yes. The rate application and request for new debt financing are separate
4 and distinct dockets, but for the sake necessity and convenience, the two
5 dockets have been consolidated and are to be heard simultaneously. Docket
6 No. WS-02156A-00-0321 is the rate application while Docket No. WS-
7 02156A-00-0323 pertains to the request for approval of financing.

8
9 Q. What is the purpose of the loan or how is the Company proposing to use the
10 proceeds of the loan?

11 A. In RUCO Data Request 1.30, I asked the Company for its purpose in
12 requesting the loan in this docket before the ACC. The response of Thomas
13 Bourassa, CPA was as follows:

14 "The Company has used the advances from associated entities
15 to finance plant added since 1998. The advance amounts
16 totaling \$2,198,110 (\$1,049,664 for waste water and \$1,148,446
17 for water), plus \$271,677, comprise the total Cobank loan
18 proceeds of \$2,469,787 and are to be used to finance plant
19 added since 1998.

20
21 The total loan funds of \$2,469,787 are to be used as follows:

22
23 \$1,290,389 for water plant; and,
24 \$1,179,398 for waste water plant.

25
26 Internally generated cash has financed the balance of the plant
27 additions since 1998, or \$1,798,287.

28
29 The proposed financing will "free up" \$271,677 of working
30 capital (\$141,943 for water and \$129,734 for waste water) which
31 the Company used for plant expenditures since 1998. This
32 cash will then be available for future plant expenditures. The
33 Company's capital expenditure plans call for \$175,000 of

1 wastewater plant and \$795,000 of water plant to be added in
2 2000 and 2001".
3

4 Q. What adjustments have you made to the proposed loan that the Company
5 seeks approval?

6 A. I treated the loan as if it were of two parts. One part of the loan is for the
7 Company's Water Division and the other for the Company's Waste Water
8 Division. My treatment was much the same as the Company views the loan.
9 Therefore, my recommendation is that the Water Division receive \$880,068
10 and the Waste Water Division be approved for \$869,452. The two amounts
11 total \$1,749,520. This total amount would be disbursed in one amount.
12

13 Q. For what reasons did you make adjustments to the requested loan?

14 A. A large majority of the loan was to satisfy payables to affiliated entities and
15 companies. The Company further stated that the payables to which it was
16 obligated were due to plant that has been already installed. After RUCO's
17 review and analysis, it was determined that many of the plant additions the
18 Company was requesting be funded by the proposed loan were, in fact,
19 already supported by CIAC. Therefore, RUCO made the necessary
20 adjustments to the loan where plant had already been provided for
21 through CIAC.
22
23
24

1 Q. What were the necessary adjustments to account for plant already
2 provided for from CIAC?

3 A. I made an adjustment to the loan that was designated to the water division
4 for \$410,321 and the other adjustment was for \$309,945 that was
5 designated for the wastewater division. Both adjustments decreased the
6 amount of the loan requested, and both adjustments together totaled
7 \$720,266.

8

9 Q. What basis did you utilize in determining your adjustments?

10 A. Responses to two Data Requests supplied by the Company.

11

12 Q. What two data requests did you use in this determination?

13 A. RUCO Data Request 1.41 and RUCO Data Request 2.7. RUCO DR 1.41
14 presented the total plant additions for 1998 and 1999 for both water and
15 sewer. RUCO DR 2.7 displayed the contributed plant from 1993 through
16 1999. From that point, a calculation was made as to what plant was
17 added in 1998 - 1999 and the amount of contributed plant was subtracted,
18 which left the plant to be financed. The new proposed loan was
19 determined by the amount that had not been contributed already and still
20 needed some means of financing to pay for plant added.

21

22

23

1 **Cost of Debt**

2 Q. Have you reviewed the Company's proposed cost of debt for its existing
3 debt?

4 A. Yes. Rio Verde Utilities has existing three loans. One is a short-term loan
5 with a fixed APR of 6%. This short-term loan is for financing plant
6 additions that the new loan will pay off. The second loan is specifically for
7 financing the Water Division activities. It has a fixed rate of 9.80% APR.
8 The third loan is explicitly for the Wastewater Division. It has both a fixed
9 and variable rate on 50/50 amount of the outstanding loan amount. The
10 fixed portion is at a 9.80% APR. The variable portion floats with the prime
11 rate. Rio Verde has utilized the respective stated interest rates of these
12 debt issuances in calculating its proposed weighted average cost of debt.

13
14 Q. Do you agree with the weighted cost of debt proposed by the Company?

15 A. Yes and no. I agree with the weighted cost of debt for the water division,
16 but I do not agree with that in the wastewater division. The weighted cost
17 of debt is overstated. Under the terms of the fixed and variable loan with
18 Cobank, the Company is required to maintain a debt reserve fund equal to
19 10% of original loan. This investment generates interest earnings at 4.5%
20 per year. The Company has failed to reflect these earnings in its cost of
21 debt calculations. The Company has also overstated the variable rate
22 portion of the loan. I have calculated the test year variable interest rate

1 based on the actual variable rate interest payment that the Company
2 made to Co-bank.

3

4 Q. Have you recalculated the cost of the wastewater division's existing debt?

5 A. Yes. As shown on Schedule TJC-16, I have recalculated the effective
6 interest rate of the existing loans to include the annual returns earned and
7 the actual variable rate experienced. The calculation results in an
8 effective interest rate of 8.60%.

9

10 **Cost of Equity**

11 Q. What cost of equity is RUCO recommending?

12 A. This issue is addressed in the testimony of Marylee Diaz Cortez.

13

14 **Overall Rate of Return**

15 Q. What is your overall recommended rate of return?

16 A. As shown on Schedule TJC-17, my overall recommended rate of return is
17 9.68%. This is based on my recommended adjusted capital structure,
18 cost of debt, and the cost of equity recommended by Marylee Diaz Cortez.

19

20 Q. Does this conclude your testimony?

21 A. Yes.

22

23

Rio Verde Utilities, Inc. - **WASTEWATER DIVISION**
Docket No. WS-02156A-00-0321 and WS-02156A-00-0323
Test Year Ended December 31, 1999
REVENUE REQUIREMENT

Schedule TJC-1

<u>LINE NO.</u>	<u>DESCRIPTION</u>	(A) COMPANY <u>ORIGINAL COST</u>	(B) RUCO <u>ORIGINAL COST</u>
1	Adjusted Rate Base	\$ 2,967,137 (A)	\$ 2,913,663
2	Adjusted Operating Income	\$ 183,425	\$ 172,882
3	Current Rate of Return (L2 / L1)	6.18%	5.93%
4	Required Rate of Return	10.56%	9.68%
5	Required Operating Income (L4 * L1)	\$ 313,330	\$ 282,001
6	Operating Income Deficiency (L5 - L2)	\$ 129,905	\$ 109,119
7	Gross Revenue Conversion Factor (Sch. TJC-14)	1.6469	1.5077
8	Required Revenue Increase (L7 * L6)	\$ 213,940	\$ 164,517
9	Adjusted Test Year Revenue	\$ 611,279	\$ 631,279
10	Proposed Annual Revenue (L8 + L9)	\$ 825,219	\$ 795,796
11	Required Increase in Revenue (%)	35.00%	26.06%
12	Requested Rate of Return on Common Equity (%)	12.75%	11.40%

NOTES:

(A) The Company's application reflects a rate base of \$2,967,530. The difference between the amount shown in the application as opposed to the amount on TJC-1 - Line #1 is the result of a transposition error in the Company's reflection of the "Wastewater Treatment Plant Excess Capacity".

Rio Verde Utilities, Inc. - **WASTEWATER DIVISION**
Docket No. WS-02156A-00-0321 and WS-02156A-00-0323
Test Year Ended December 31, 1999
RATE BASE - ORIGINAL COST

Schedule TJC-2

LINE NO.	(A) COMPANY AS FILED	(B) RUCO ADJUSTMENTS	(C) RUCO AS ADJUSTED
1	Plant in Service	\$ 5,493,910	\$ 5,414,433
2	Less: Accumulated Depreciation	878,277	767,373
3	Net Plant in Service	<u>\$ 4,615,633</u>	<u>\$ 4,647,060</u>
<u>LESS:</u>			
4	Contributions in Aid of Construction (CIAC)	\$ 1,943,194	\$ 1,943,194
5	Less: Accumulated Amortization	-	-
6	Net CIAC	<u>1,943,194</u>	<u>1,943,194</u>
7	Advances in Aid of Construction (AIAC)	-	-
8	Customer Deposits	-	-
9	Meter Advances	-	-
10	Deferred Income Tax Credits	141,682	186,119
<u>ADD:</u>			
11	Cash Working Capital	64,924	58,554
12	Unamortized Finance Charges	29,016	25,917
13	Debt Reserve Fund - Existing	224,500	224,500
14	Debt Reserve Fund - Proposed	<u>117,940</u>	<u>86,945</u>
15	Total Rate Base	<u>\$ 2,967,137</u>	<u>\$ 2,913,663</u>

REFERENCES:

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

Rio Verde Utilities, Inc. - WASTEWATER DIVISION
 Docket No. WS-02156A-00-0321 and WS-02156A-00-0323
 Test Year Ended December 31, 1999
SUMMARY OF RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJ.#1	(C) ADJ.#2	(D) ADJ.#3	(E) ADJ.#4	(F) ADJ.#5	(H) RUCO ADJUSTED
PLANT IN SERVICE:								
1	Organization Cost	\$ 1,380						1,380
2	Franchise Cost							
3	Land and Land Rights	50,513						50,513
4	Structures and Improvements	277,883						277,883
5	Sewer Line Services	1,723,698						1,723,698
6	Lift Station	560,154						560,154
7	Effluent Pump	194,885						194,885
8	Treatment Plant	29,905						29,905
9	Less: Removal of 35% Excess Plant	3,686,714						3,686,714
10	Effluent Lines	(1,290,350)						(1,290,350)
11	Transportation Equipment	91,869						91,869
12	Tools and Work Equipment	36,680						36,680
13	Laboratory Equipment	2,303						2,303
14	Communications Equipment	58,223						58,223
15	Other Tangible Plant	7,950						7,950
16	Adjustment for Plant Retirements		(79,477)					62,103
17								(79,477)
18								
19	Total Plant in Service	\$ 5,493,910	\$ (79,477)	\$ -	\$ -	\$ -	\$ -	\$ 5,414,433
20	Less: Accumulated Depreciation	878,277	(110,904)					767,373
21	Net Plant in Service (L18 - L19)	\$ 4,615,633	\$ 31,427	\$ -	\$ -	\$ -	\$ -	\$ 4,647,060
LESS:								
22	Contributions in Aid of Construction (CIAC)	\$ 1,943,194						\$ 1,943,194
23	Less: Accumulated Amortization							
24	Net CIAC (L21 - L22)	\$ 1,943,194						\$ 1,943,194
25	Advances in Aid of Construction (AIAC)							
26	Customer Deposits							
27	Meter Advances							
28	Deferred Income Tax Credits	141,682	44,437					186,119
ADD:								
29	Unamortized Finance Charges	29,016						
30	Working Capital Allowance	64,924		(3,099)				
31	Debt Reserve Fund (existing CoBank Loan)	224,500						58,554
32	Debt Reserve Fund (proposed CoBank Loan)	117,940						224,500
33	Projected Capital Expenditures				(30,995)			86,945
34	Deferred Debits							
35	Other Additions							
36	Total Rate Base	\$ 2,967,137	\$ (13,010)	\$ (3,099)	\$ (30,995)	\$ (6,370)	\$ -	\$ 2,913,663

ADJUSTMENT #:
 1. Retired Plant Reference Sch. MDC-1
 2. Unamortized Finance Charge Sch. TJC-4
 3. Debt Reserve Fund - Proposed Sch. TJC-5
 4. Working Capital Sch. TJC-6
 5. Not Used

Rio Verde Utilities, Inc. - **WASTEWATER DIVISION**
Docket No. WS-02156A-00-0321 and WS-02156A-00-0323
Test Year Ended December 31, 1999

Schedule TJC-4

RATE BASE ADJUSTMENT #2

ADJUSTMENT TO UNAMORTIZED FINANCE CHARGES TO REFLECT RUCO's RECOMMENDED LOAN

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>REFERENCE</u>
1	RUCO Recommended Loan	\$ 869,452	TJC-15
2	Finance Rate Charge	<u>1.00%</u>	WAR #5-22
3	Finance Charges per RUCO	8,695	Line 1 X Line 2
4	Finance Charge per Company's Rate Filing	<u>11,794</u>	Schedule B-2, page 1
5	RUCO's Recommended Adjustment	<u>(3,099)</u>	Line 3 minus Line 4

Rio Verde Utilities, Inc. - **WASTEWATER DIVISION**
Docket No. WS-02156A-00-0321 and WS-02156A-00-0323
Test Year Ended December 31, 1999
RATE BASE ADJUSTMENT #3
DEBT RESERVE FUND - RUCO PROPOSED LOAN

Schedule TJC-5

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>
1	RUCO Recommended New Loan	\$ 869,452
2	% Debt Reserve Requirement	<u>10%</u>
3	Debt Reserve Requirement per RUCO	86,945
4	Debt Reserve Requirement per Company	<u>117,940</u>
5	Debt Reserve Fund Requirement Adjustment	<u>(30,995)</u>

RIO VERDE UTILITIES -WASTEWATER DIVISION
 Docket No. WS-02156A-00-0321 and WS-02156A-00-0323
 TEST YEAR ENDED DECEMBER 31, 1999
RATE BASE ADJUSTMENT #4
WORKING CAPITAL

Schedule TJC-6

LINE NO.	DESCRIPTION	Total Amount
1	Total Operating Expense	<u>\$ 458,397</u>
2	Less: Income Tax (42)	
3	Property Tax 22,497	
4	Depreciation 80,213	
5	Rate Case Expense 11,460	
6	Purchased Power <u>65,656</u>	<u>179,783</u>
		278,614
7	1/8th Operating Expenses	34,827
	Add:	
8	Purchased Power/24	<u>2,736</u>
9	Cash Working Capital RUCO Recommends	<u>37,562</u>
10	Prepayments	20,992
11	Materials & Supplies	<u>0</u>
12	Total RUCO Working Capital	<u>58,554</u>
13	Working Capital per Company	64,924
14	RUCO's Recommended Adjustment	<u>\$ (6,370)</u>

OPERATING INCOME - TEST YEAR AND RUCO PROPOSED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] RUCO TEST YEAR ADJUSTMENTS	[C] RUCO TEST YEAR AS ADJUSTED	[D] RUCO PROPOSED CHANGES	[E] RUCO RECOMMENDED
REVENUES - WASTEWATER:						
1	Residential	\$ 477,328	\$ -	\$ 477,328		\$ 477,328
2	Commercial	18,188	-	18,188		18,188
3	Effluent	43,422	-	43,422		43,422
4	Hook Up Fees	70,000	20,000	90,000		90,000
5	Other Sewer	2,341	-	2,341		2,341
6	Service Fees	-	-	-		-
7	Total Operating Revenues	\$ 611,279	\$ 20,000	\$ 631,279	\$ 164,517	\$ 795,796
OPERATING EXPENSES:						
8	Salaries & Wages	\$ 102,061	\$ (12,326)	\$ 89,735		\$ 89,735
9	Purchased Power	65,656	-	65,656		65,656
10	Maintenance - Plant	78,032	-	78,032		78,032
11	Maintenance - Electronics	375	-	375		375
12	Equipment Repairs	816	-	816		816
13	Chemicals	13,264	-	13,264		13,264
14	Sludge Processing	14,676	-	14,676		14,676
15	Administrative Office	12,000	-	12,000		12,000
16	Automotive	5,538	-	5,538		5,538
17	RVUI Lab Operations	5,670	-	5,670		5,670
18	Outside Lab	828	-	828		828
19	Supplies	11	-	11		11
20	Postage/Express/UPS	1,823	-	1,823		1,823
21	Office Supplies	1,556	-	1,556		1,556
22	Payroll Taxes	11,490	-	11,490		11,490
23	Employee Benefits	7,399	-	7,399		7,399
24	Taxes & Licenses	26,631	(4,134)	22,497		22,497
25	Telephone	2,390	-	2,390		2,390
26	Insurance	8,772	-	8,772		8,772
27	Legal Fees	138	-	138		138
28	Professional Fees	6,103	-	6,103		6,103
29	Education & Training	1,740	-	1,740		1,740
30	Travel & Entertainment	576	-	576		576
31	Security Charges	1,724	-	1,724		1,724
32	Outside Services	27,839	-	27,839		27,839
33	Miscellaneous	719	-	719		719
34	Rate Case Expense	12,000	(540)	11,460		11,460
35	Depreciation	91,101	(10,888)	80,213		80,213
36	Patronage Divided Sewer	(14,600)	-	(14,600)		(14,600)
37	Income Taxes	(58,474)	58,432	(42)	55,397	55,355
38	Total Operating Expenses	427,854	30,543	458,397	55,397	513,795
39	Operating Income (Loss)	183,425	(10,543)	172,882	109,119	282,001

Rio Verde Utilities, Inc. - WASTEWATER DIVISION
 Docket No. WS-02156A-00-0321 and WS-02156A-00-0323
 Test Year Ended December 31, 1999
Summary of Operating Adjustments

LINE NO.	DESCRIPTION	COMPANY PROFORMA	ADJ. #1	ADJ. #2	ADJ. #3	ADJ. #4	ADJ. #5	ADJ. #6	RUCO ADJUSTED
REVENUES:									
1	Sewer - Residential	\$ 477,328							\$ 477,328
2	Sewer - Commercial	18,188							18,188
3	Sewer - Effluent	43,422							43,422
4	Sewer - Hook-Up Fee	70,000	20,000						90,000
5	Other Sewer	2,341							2,341
6	Service Fees								
7	Total Revenues	611,279	20,000						\$ 631,279
OPERATING EXPENSES:									
8	Salaries & Wages	\$ 102,061							\$ 89,735
9	Purchased Power	65,656		\$ (12,326)					65,656
10	Maintenance - Sewer Plant	78,032							78,032
11	Maintenance - Electronics	375							375
12	Equipment Repairs	816							816
13	Chemicals	13,264							13,264
14	Sludge Processing	14,676							14,676
15	Administrative Office	12,000							12,000
16	Automotive	5,538							5,538
17	RVUI Lab Operations	5,670							5,670
18	Outside Lab	828							828
19	Supplies	11							11
20	Postage/Express/UPS	1,823							1,823
21	Office Supplies	1,556							1,556
22	Payroll Taxes	11,490							11,490
23	Employee Benefits	7,399							7,399
24	Taxes & Licenses	26,631							22,497
25	Telephone	2,390			(4,134)				2,390
26	Insurance	8,772							8,772
27	Legal Fees	138							138
28	Professional Fees	6,103							6,103
29	Education & Training	1,740							1,740
30	Travel & Entertainment	576							576
31	Security Charges	1,724							1,724
32	Outside Services	27,839							27,839
33	Miscellaneous	719							719
34	Rate Case Expense	12,000			(540)				11,460
35	Depreciation	91,101					(10,888)		80,213
36	Patronage Dividend Sewer	(14,600)							(14,600)
37	Income Taxes	(58,474)							(42)
38	Total Expenses	427,854		(12,326)	(4,134)	(540)	(10,888)	58,432	458,397
39	Operating Income	\$ 183,425	\$ 20,000	\$ 12,326	\$ 4,134	\$ 540	\$ 10,888	\$(58,432)	\$ 172,882

Adjustment #:	Reference:	Adjustment #:	Reference:
1. Increase Sewer Hook-up Fee - maintain 60 customers.	Sch. TJC-9	4. Over Estimated Case Exp.	Sch. TJC-12
2. Payroll Adjustment	Sch. TJC-10	5. Depreciation & Amortization	Sch. TJC-13
3. Property Tax Adjustment	Sch. TJC-11	6. Income Tax Expense	Sch. TJC-14

Rio Verde Utilities, Inc. - **WASTEWATER DIVISION**
 Docket No. WS-02156A-00-0321 and WS-02156A-00-0323
 Test Year Ended December 31, 1999
OPERATING ADJUSTMENT #1
RUCO's PROPOSED HOOK-UP FEE ADJUSTMENT

Schedule TJC-9

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>REFERENCE</u>
1	Proposed <u>Sewer</u> Hook-Up Fee Per RUCO Recommendation	\$ 1,500	Proposed by RUCO
2	Number of <u>Sewer</u> Hook-Ups Reflected as Revenue	60	Current Tariffed Amount
3	Hook-Up Revenue Allowed by RUCO's Proposal	90,000	Line 1 X Line 2
4	Proposed Hook-Up Fee Revenue per Company's Rate Application	70,000	Schedule C-1, page 1
5	RUCO's Proposed Increase in Revenue Hook-Up Fees	\$ 20,000	Line 3 - Line 4

Rio Verde Utilities, Inc. - **WATER DIVISION**
Docket No. WS-02156A-00-0321 and WS-02156A-00-0323
Test Year Ended December 31, 1999
OPERATING ADJUSTMENT #2
PAYROLL ADJUSTMENT

Schedule TJC-10

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>REFERENCE</u>
1	General Manager	\$ 60,000	Staff letter dated 11/13/2000
2	Assistant Operator I	34,320	Staff letter dated 11/13/2000
3	Assistant Operator II	27,560	Staff letter dated 11/13/2000
4	Lab Technician	<u>10,200</u>	Staff letter dated 11/13/2000
5	Payroll Subtotal	132,080	Summation of Line #1, 2, 3 and 4
6	Assistant General Manager	42,000	Testimony TJC
	Hours Overtime Pay:		
7	Assistant Operator I	4,412	RUCO DR# 6.1
8	Assistant Operator II	<u>979</u>	RUCO DR# 6.1
9	Total Payroll	179,471	Summation of Line #5, 6, 7 and 8
10	Water Division - RUCO's Payroll Recommendation	89,735	Water Division - 50% of Line #9
11	Payroll per Company - Sewer	<u>102,061</u>	Company's Schedule C-1, page 1
12	RUCO's Recommended Adjustment - Sewer	<u><u>(12,326)</u></u>	Line #10 less Line #11

Rio Verde Utilities, Inc. - **WASTEWATER DIVISION**
Docket No. WS-02156A-00-0321 and WS-02156A-00-0323
Test Year Ended December 31, 1999
OPERATING ADJUSTMENT #3
RUCO's Property Tax Adjustment

Schedule TJC-11

LINE NO.	DESCRIPTION	AMOUNT	REFERENCE
1	Property Taxes per Company's Rate Application	\$ 21,579	See Reference Below
2	Actual 2000 Sewer Property Tax Bills	21,876	RUCO's DR #4.7
LESS:			
3	Excess Capacity Percentage of Total Plant	<u>20.26%</u>	See Reference Below
4	Subtotal	4,431	Line 2 X Line 3
5	2000 Property Taxes (Net of Excess Capacity)	17,445	Line 2 minus Line 4
6	RUCO's Adjustment	<u>(4,134)</u>	Line 1 minus Line 5

Reference:

Line 1 equals 12/31/99 - Company's Schedule C-1, page 1		\$	26,631
LESS: General Ledger Entries as follows:			
1/1/99 - Dept.of Arizona	1,000		
1/12/99 - Dept.of Arizona	15		
2/24/99 - ADHS	500		
3/24/99 - ACC	22		
4/17/99 - Dept.of Arizona	1,400		
6/1/99 - State of Arizona	15		
12/1/99 - Maricopa County - Permit	<u>2,100</u>		<u>5,052</u>
TOTAL PROPERTY TAXES.....		\$	<u>21,579</u>

Line 3 equals Gross Plant net of Excess Capacity	5,492,923		
less Accumulated Depreciation.....	<u>878,277</u>		
	<u>4,614,646</u>		
		<u>4,614,646</u>	100.00%
		<u>5,786,918</u>	79.74%
			<u>20.26%</u>
divided by Total Gross Plant inclusive of Excess Capacity	6,783,278		
less Accumulated Depreciation.....	<u>996,360</u>		
	<u>5,786,918</u>		

Rio Verde Utilities, Inc. - **WASTEWATER DIVISION**
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Test Year Ended December 31, 1999
OPERATING ADJUSTMENT #4
RUCO's RATE CASE EXPENSE ADJUSTMENTS

Schedule TJC-12

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>REFERENCES</u>
1	Company Estimated Rate Case Expense - Sewer	\$ 60,000	Schedule C-2, page 6
LESS:			
2	Over Estimates	5,400	NOTE (A)
3	Amount Allocated to Wastewater Division - 50%	50%	
4	Amount to be Amortized	<u>2,700</u>	Line 2 X Line 3
5	Estimated Amortization Period in Years	<u>5</u>	Schedule C-2, page 6
6	Annual Adjustment Recommended by RUCO	<u>\$ (540)</u>	Line 4 X Line 5

NOTE (A):

"Per Legal Expense Estimate of Sallquist & Drummond, P.C."

	<u>AMOUNT</u>
Line 65 - Prepare Opening Brief.....	2,700
Line 66 - Review Other Parties Opening Briefs.....	900
Line 67 - Prepare Reply Brief.....	1,260
Line 68 - Review Hearing Officer's Recommended Order and Prepare Exceptions.....	540
	<u>5,400</u>

Rio Verde Utilities, Inc. - **WASTEWATER DIVISION**
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Test Year Ended December 31, 1999

Schedule TJC-13

OPERATING ADJUSTMENT #5
DEPRECIATION & AMORTIZATION EXPENSE ADJUSTMENT

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>REFERENCES</u>
1	Total Plant	\$ 5,362,540	TJC-3
2	Depreciation Rate	<u>2.603750%</u>	Schedule C-2, page 4
3	Depreciation Expense	139,627	Line 1 X Line 2
4	Total CIAC	2,281,879	Company's G/L, page 106
5	Amortization Rate	<u>2.603750%</u>	Schedule C-2, page 4
6	Amortization Income	59,414	Line 4 X Line 5
7	Net Depreciation & Amortization	80,213	Line 3 minus Line 6
8	Net Depreciation & Amortization per Company	<u>91,101</u>	Schedule C-1, page 1 - Test Year Adjusted Results
9	RUCO's Recommended Adjustment	<u>(10,888)</u>	Line 7 minus Line 8

RIO VERDE UTILITIES - WASTEWATER DIVISION
Docket No. WS-02156A-00-0321 and WS-02156A-00-0323
TEST YEAR ENDED DECEMBER 31, 1999
OPERATING ADJUSTMENT #6
INCOME TAX EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]	[D]
<i>Calculation of Arizona Income Tax</i>					
1	Operating Income (Schedule TJC-7, L39)	\$ 172,882			
2	Income Taxes Used to Calculate Operating Income (Schedule TJC-7, L49)	\$ (42)			
3	Operating Income Before Income Taxes (L1 + L2)		\$ 172,840		
4	Less: Synchronized Interest (L23)		\$ 173,033		
5	Arizona Taxable Income (L3 - L4)			\$ (193)	
6	Arizona State Income Tax Rate			8.00%	
7	Arizona Income Tax (L5 X L 6)				\$ (15)
<i>Calculation of Federal Income Tax</i>					
8	Operating Income Before Income Taxes (L3)			\$ 172,840	
9	Less: Arizona Income Tax (L7)			\$ (15)	
10	Less: Synchronized Interest (L22)			\$ 173,033	
11	Federal Taxable Income (L8 + L9 + L10)			\$ (178)	
		<u>Taxable Income</u>	<u>Tax Rate</u>	<u>Tax</u>	
12	Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15%	\$ (178)	15.00%	\$ (27)	
13	Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 25%	\$ -	25.00%	\$ -	
14	Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34%	\$ -	34.00%	\$ -	
15	Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39%	\$ -	39.00%	\$ -	
16	Federal Tax on Fifthe Income Bracket (\$335,001 to \$10 million) @ 34%	\$ -	34.00%	\$ -	
17	Total Federal Income Tax (Shown in Column D)	\$ (178)			\$ (27)
18	Combined Federal and State Income Tax - RUCO(L7 + L17)				\$ (42)
19	Income Tax - Company (Company Schedule C-1)				(58,474)
20	RUCO Adjustment				<u>\$ 58,432</u>
<i>Calculation of Interest Synchronization</i>					
21	Rate Base (Schedule TJC-2, Col. (C), Line 15)	\$ 2,913,663			
22	Weighted Average Cost of Debt (Schedule TJC-17, Col. [F], L1 + L2)	5.94%			
23	Synchronized Interest (L21 X L22)	<u>\$ 173,033</u>			

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
<i>Calculation of Gross Revenue Conversion Factor:</i>					
1	Revenue	1.0000			
2	Less: Combined Federal and State Tax Rate (Line 10)	0.3367			
3	Subtotal (L1 - L2)	0.6633			
4	Revenue Conversion Factor (L1 / L3)	1.5077			
 <i>Calculation of Effective Tax Rate:</i>					
5	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
6	Arizona State Income Tax Rate	8.0000%			
7	Federal Taxable Income (L5 - L6)	92.0000%			
8	Applicable Federal Income Tax Rate (Line 32)	27.9052%			
9	Effective Federal Income Tax Rate (L7 x L8)	25.6727%			
10	Combined Federal and State Income Tax Rate (L6 +L9)	33.6727%			
11	Required Operating Income (Schedule TJC-1, Col. (B), Line 5)	\$ 282,001			
12	Adjusted Test Year Operating Income (Loss) (Schedule TJC-7, Line 39)	\$ 172,882			
13	Required Increase in Operating Income (L11 - L12)		\$ 109,119		
14	Income Taxes on Recommended Revenue (Col. (D), L31)	\$ 55,355			
15	Income Taxes on Test Year Revenue (Col. (B), L31)	\$ (42)			
16	Required Increase in Revenue to Provide for Income Taxes (L14 - L15)		\$ 55,397		
17	Total Required Increase in Revenue (L13 + L16)		\$ 164,517		
<i>Calculation of Income Tax:</i>					
		<u>Test Year</u>		<u>RUCO Recommended</u>	
18	Revenue (Schedule TJC-8, Col.(C), Line 7 & Sch. TJC-1, Col. (B), Line 9)	\$ 631,279		\$ 795,796	
19	Less: Operating Expenses Excl. Inc. Tax (Sch TJC-7, Col. (C), L8 thru L48)	\$ 458,439		\$ 458,439	
20	Less: Synchronized Interest (L35)	\$ 173,033		\$ 173,033	
21	Arizona Taxable Income (L18 - L19 - L20)	\$ (193)		\$ 164,324	
22	Arizona State Income Tax Rate	8.00%		8.00%	
23	Arizona Income Tax (L21 x L22)		\$ (15)		\$ 13,146
24	Federal Taxable Income (L21 - L23)	\$ (178)		\$ 151,178	
25	Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15%	\$ (27)		\$ 7,500	
26	Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 25%	\$ -		\$ 6,250	
27	Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34%	\$ -		\$ 8,500	
28	Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39%	\$ -		\$ 19,959	
29	Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34%	\$ -		\$ -	
30	Total Federal Income Tax	\$ (27)		\$ 42,209	
31	Combined Federal and State Income Tax (L23 + L30)	\$ (42)		\$ 55,355	
32	Applicable Federal Income Tax Rate [Col. (D), L30 - Col. (B), L30] / [Col. (C), L24 - Col. (A), L24]				27.9052%
 <i>Calculation of Interest Synchronization:</i>					
33	Rate Base (Schedule TJC-2, Col. (C), Line 15)	\$ 2,913,663			
34	Weighted Average Cost of Debt (Schedule TJC-17, Col. [F], L1 + L2)	5.94%			
35	Synchronized Interest (L33 X L34)	\$ 173,033			

RIO VERDE UTILITIES - WASTEWATER DIVISION
Docket No. WS-02156A-00-0321 and WS-02156A-00-0323
TEST YEAR ENDED DECEMBER 31, 1999
REQUESTED NEW DEBT FINANCING BY RIO VERDE UTILITIES

Schedule TJC-15

LINE NO.	ACCOUNT NO.	ACCOUNT NAME	(A) TOTAL PLANT ADDITIONS 1998 & 1999	(B) COMPANY REQUESTED PLANT AMOUNT TO BE FINANCED	(C) LESS AMOUNT OF CONTRIBUTIONS PER COMPANY	(D) RUCO RECOMMENDED LOAN AMOUNT TO BE APPROVED
1	361	Sewer Line	\$ 697,020	\$ 135,095	\$ 677,373	\$ 19,647
2	368	Lift Station	194,885	194,885	194,497	388
3	380	Treatment Plant	849,417	849,417	0	849,417
TOTAL AMOUNT OF DEBT FINANCING REQUESTED BY COMPANY				\$ 1,179,397		
TOTAL AMOUNT OF DEBT FINANCING RECOMMENDED BY RUCO						\$ 869,452
RUCO RECOMMENED ADJUSTMENT ON DEBT FINANCING				\$ (309,945)		

NOTE :

- Column (A): Refer to Company's Rate Case Application Filing - Schedule B-2 pages 2c & 2d - 1998 & 1999 Plant Additions.
- Column (B): Refer to Company's response in RUCO's Data Request #4.5; labeled DR-1, page 1.
- Column (C): Refer to Company's DR #1 in response to RUCO's Data Request #4.5.
- Column (D): Column (A) minus Column (C) above.

COST OF DEBT - PROPOSED LOAN ADJUSTMENT

LINE NO.	DESCRIPTION	<u>AMOUNT</u>	<u>TOTALS</u>
1	Total Amount of RUCO Recommended New Loan - WasteWater	\$ 869,452	
2	Fixed APR on New Proposed CoBank Loan	X 9.75%	
3	Total Annual Interest Expense on RUCO's Recommended Loan Amount		\$ 84,772
 LESS:			
4	CoBank's Required Debt Reserve Fund - 10% of Original Loan Principal Line 1 X 10%.....	\$ 86,945	
5	Interest Earnings on RUCO's Recommended Proposed CoBank Loan	X 4.50%	
6	Total Annual Interest Earnings on CoBank's Required Debt Reserve		- 3,913
7	Interest Attributable to New Loan Net of 10% Debt Reserve Fund Earnings		<u>80,859</u>
 ADD:			
8	Annual Amortization of New Loan, 1% Finance Charge - Amortized over 20 yrs.		435
9	Total Annual Effective Interest on New Loan		<u>81,294</u>
9	Effective Interest Rate - Line 9 / Line 1		<u>9.35%</u>
 <u>COST OF DEBT - EXISTING CoBANK LOAN</u>			
10	Test Year Interest Expense - 1/2 Fixed Rate and 1/2 Variable Rate		\$ 168,680
11	CoBank's Required Debt Reserve Fund - Schedule E-9, Note 4.	\$ 224,500	
12	Interest Earnings on RUCO's Recommended Existing CoBank Loan	X 4.50%	
13	Total Annual Interest Earnings on CoBank's Required Debt Reserve		- \$ 10,103
14	Total Interest		\$ 158,578
15	Test Year End Debt Balance		\$ 1,844,602
16	Effective Interest Rate - Line 14 / Line 15		<u>8.60%</u>

RIO VERDE UTILITIES - WASTEWATER DIVISION
Docket No. WS-02156A-00-0321 and WS-02156A-00-0323
TEST YEAR ENDED DECEMBER 31, 1999
COST OF CAPITAL

Schedule TJC-17

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>(A) AMOUNT</u>	<u>(B) ADJUSTMENT</u>	<u>(C) ADJUSTED BALANCE</u>	<u>(D) CAPITAL RATIO</u>	<u>(E) COST</u>	<u>(F) WEIGHTED COST</u>
1	Long-Term Debt: CoBank Existing Loan	\$ 1,844,602		\$ 1,844,602	45.67%	8.60%	3.93%
2	CoBank Proposed Loan	1,179,398	(309,945)	869,453	21.53%	9.35%	2.01%
3	Equity	1,253,691		1,253,691	31.04%	11.40%	3.54%
4	Equity Adjustment (a)	71,401		71,401	1.77%	11.40%	0.20%
5	TOTAL	<u>\$ 4,349,092</u>		<u>\$ 4,039,147</u>	<u>100.00%</u>		<u>9.68%</u>

RIO VERDE UTILITIES, INC.

DOCKET NO. WS-02156A-00-0321

DOCKET NO. WS-02156A-00-0323

WATER DIVISION

DIRECT TESTIMONY

OF

TIMOTHY J. COLEY

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

DECEMBER 15, 2000

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29		

1 **INTRODUCTION**

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

3 A. My name is Timothy James Coley. I am a Senior Rate Analyst for the
4 Residential Utility Consumer Office (RUCO) located at 2828 N. Central
5 Avenue, Suite 1200, Phoenix, Arizona 85004.

6
7 Q. Please state your educational background and qualifications in utility
8 regulation.

9 A. I have a BS Degree in Business Administration and Management from Troy
10 State University in Troy, Alabama. In addition, I received a Master Degree in
11 Public Administration from State University of West Georgia, which is located
12 in Carrollton, Georgia, and I am currently enrolled at Arizona State University
13 – West in the Post-baccalaureate Accountancy Program. From 1985 through
14 1991, I worked with the Georgia Public Service Commission – Utility Division-
15 as a junior auditor, auditor, and senior auditor.

16
17 Q. Please state the purpose of your testimony.

18 A. The purpose of my testimony is to present findings and recommendations
19 resulting from my analysis and review of Rio Verde Utilities, Inc.'s application
20 for an increase in the Company's rates and authorization to incur long term
21 debt. The Company proposes a rate increase for both its Water and
22 Wastewater Divisions, and authorization to issue \$1,290,389 in long term
23 debt.

1 Q. Please describe your participation and work effort on this project.

2 A. Under the supervision of my audit manager, Marylee Diaz Cortez, I reviewed
3 the Company's Rate Application to obtain a broad perspective on each of its
4 Divisions (Water and Wastewater). My inspection focused on the financial
5 position of the Company in regards to each division and the Company as a
6 whole. After the initial financial analysis and examination, I discussed my
7 preliminary assessment with my manager. At her direction, I developed
8 and/or assisted in the development of six sets of data requests, reviewed
9 Staff's requested data, examined data requests of the Rio Verde Community
10 Association (RVCA), met with RVCA's members and their attorney, Mr.
11 Mumaw. Other efforts included obtaining information from the Commission
12 such as annual reports, prior Commission Decisions, main extension
13 agreements, letters of correspondence between the Company and
14 Commission, and the Company's current tariff. In my efforts, I gained a
15 thorough and comprehensive account of the Company.

16
17 Q. What areas will you address in your testimony?

18 A. First, I will address RUCO's overall revenue requirement recommendations,
19 which are a result of the overall analysis, adjustments and recommendations
20 that RUCO found appropriate and proper under accepted ratemaking
21 practices. Next, I will address, in the following order, the rate base, operating
22 income, and cost of capital issues. RUCO's Audit Manager, Marylee Diaz
23 Cortez, will sponsor any subject matter relating to deferred income tax/credit

1 issues, advances-in-aid-of-construction (AIAC), return on common equity
2 CAP surcharge, and finally, present RUCO's rate design model.

3

4 Q. Please identify any Schedules and Exhibits you are sponsoring.

5 A. I am sponsoring Schedules TJC-1 thru TJC-17 independently for both the
6 Water and Wastewater Divisions of Rio Verde Utilities, Inc. All schedules and
7 adjustments will be presented in chronological order as they are depicted in
8 my testimony. The two divisions of the Company, water and sewer, will be
9 discussed separately and distinctly. First, I will address the water issues, and
10 then, the wastewater issues will be discussed.

11

12 **SUMMARY OF ADJUSTMENTS FOR THE WATER DIVISION**

13 Q. Please summarize the recommendations and adjustments pertaining to the
14 Company's Water Division.

15 A. My testimony addresses the following issues:

16 Unamortized Finance Charges: This adjustment decreases rate base by
17 \$4,103. The Company proposed a \$1,290,389 new CoBank loan, which has
18 a 1% finance rate charge to be expensed in the year incurred. I have
19 recommended a loan that is \$410,321 less than the Company proposed.
20 Thus, my recommendation in the reduction of the proposed loan would result
21 in \$4,103 less finance expenses than proposed by the Company.

22 Debt Reserve Fund Requirements of Proposed New Long-Term Financing:
23 This adjustment has a threefold effect. It decreases the amount of the loan

1 requested, the debt reserve fund account, and any earnings potential that the
2 restricted funds would generate. Thus, interest expense of the loan is also
3 reduced. CoBank requires that the Company maintain a 10% balance of the
4 new loan in an account designated as the "Debt Reserve Fund Account", on
5 which the Company earns a 4.50% APR. Because a portion of the Company-
6 requested loan is already supported by Contributions in Aid of Construction
7 (CIAC), I have recommended that the Company be allowed a long-term
8 borrowing arrangement totaling \$880,068. This recommendation represents
9 a decrease of \$410,321 from the Company's originally requested loan. In
10 turn, this decreases both the Company's reserve fund required and earnings
11 on the same.

12 Plant Held for Future Use: In response to a Data Request, the Company
13 indicated that a portion of its plant is not currently in use but is intended to be
14 used to serve future development. The amount of plant held for future use is
15 \$26,480. It should be removed from rate base.

16 Working Capital: This adjustment reduces the Company's requested level of
17 working capital to reflect RUCO recommended level of operating expense.

18 Reversed Adjustment to Water Revenues: This adjustment increases water
19 revenues by \$3,092. This adjustment reverses an adjustment, the Company
20 made so that its bill counts would reconcile with the revenues reported and
21 booked.

22 Water Hook-Up Fees: This adjustment increases water revenues generated
23 by the Company's hook-up fee by \$25,000. I am recommending an increase

1 in the hook-up fee for water service from \$500 to \$1,000. The rationale for
2 this revenue enhancement is the ever-increasing cost of plant per customer
3 from 1992 –1999. My cost study substantiates the adjustment so made.

4 Miscellaneous Service Revenues – Meter Tests: This adjustment increases
5 water revenue in the amount of \$625. During the test year the Company
6 failed to record and charge 25 customers the tariffed \$25 meter test fee. In
7 addition, the Company proposes an increase of \$20 per meter test in the
8 instant case to which RUCO does not object. In consideration of this new
9 tariffed charge for meter tests, RUCO further proposes an additional \$500 in
10 “Miscellaneous Service Revenue” to properly reflect these new tariffed rates
11 as proposed by the Company in this rate application.

12 Salaries & Wages: This adjustment arises from test year end changes in
13 employees and employee salaries and includes an adjustment to reflect the
14 recent retirement of the General Manager of Rio Verde and certain wage and
15 salary increases. Consequently, this modification reduces operating
16 expenses for the water division by \$14,411.

17 Maintenance – Water Plant: This adjustment reduces operating expenses by
18 \$2,200. This expense is nonrecurring in nature as it was incurred to
19 safeguard against any Y2K millennium disruption.

20 Property Taxes: This adjustment is necessary to reflect the actual Rio Verde
21 property taxes versus the Company's proforma estimate. This adjustment
22 resulted in a reduction of operating expenses of \$10,635.

1 Rate Case Expense: This adjustment decreases rate case expenses by \$540
2 in the water division. The adjustment is due to over estimates detected in the
3 Company's proposed rate case expense.

4 Depreciation & Amortization: This adjustment decreases depreciation and
5 amortization expense by \$8,669 for the water division of the Company. The
6 decrease in depreciation and amortization expense results from my
7 recommended plant balances and my correction to the computation of CIAC
8 amortization based on the gross CIAC balance.

9 Income Taxes: As a consequence of the adjustments and proposed changes
10 made in this case by RUCO, net income inevitably changes and as a result,
11 income taxes increased by \$36,353.

12 Effective Cost of New Proposed Loan: This adjustment computes the
13 effective interest rate of the RUCO recommended loan. The loan to satisfy
14 payables to associated affiliates has a fixed APR of 9.75%, but when all
15 variables, such as restricted funds of 10% of the original loan amount earning
16 4.50% and a 1% finance charge amortized over the life of the loan (20 years),
17 are factored, the resulting effective interest rate equals 9.35%.

1 **REVENUE REQUIREMENTS**

2 Q. Considering your adjustments and recommendations to the revenue
3 requirement formula, please briefly summarize the results of your analysis of
4 Rio Verde Utilities, Inc. and your recommended revenue requirements.

5 A. My analysis determined that Rio Verde Utilities Water Division rates should
6 be increased by no more than \$211,573. This recommendation is shown on
7 Schedule TJC-1. My recommended Fair Value and Original Cost rate base of
8 \$3,278,841 is shown on Schedule TJC-2. The detail supporting my
9 recommended rate base is presented on Schedule TJC-3. My recommended
10 adjusted operating income of \$231,081 is shown on Schedule TJC-7, and the
11 detail supporting that recommendation is presented on Schedule TJC-8.

12
13 **RATE BASE ADJUSTMENTS**

14 **Rate Base Adjustment #1 – Remove Plant Retirements and Accumulated**
15 **Depreciation**

16 Q. Has the Company included property, plant, and/or equipment in its rate base
17 that should have been retired, removed from the Company's books, and no
18 longer included as an expense to depreciation?

19 A. Yes. Ms. Marylee Diaz Cortez will sponsor and address this rate base
20 adjustment issue.

21
22
23

1 **Rate Base Adjustment #2 – Unamortized Finance Charge on RUCO’s Proposed**
2 **Loan**

3 Q. Has the Company included in its rate base unamortized finance charges
4 relating to the new long-term debt financing that the Company’s rate
5 application requests?

6 A. Yes. The Company has included in its rate base unamortized finance
7 charges equal to 1% of the total requested loan amount, which based on the
8 Company-proposed loan is \$12,904.

9
10 Q. Why have you made an adjustment to the Unamortized Finance Charges in
11 this particular case?

12 A. This adjustment is necessary because I am recommending that the Company
13 not receive the full amount of the “proposed loan” it requested. My
14 recommended loan amount will be discussed in more detail in the cost of debt
15 section of my testimony. Thus, the 1% finance charge that the financing
16 company (CoBank) charges must be reduced relative to the loan amount I am
17 recommending.

18
19 Q. What loan amount do you recommend to support your adjustment?

20 A. I recommend the Company receive a loan from CoBank in the amount of
21 \$880,068 as opposed to the Company’s proposed request of \$1,290,389,
22 which again, will be discussed later in the cost of debt section of my
23 testimony. The difference between the Company’s proposed loan amount

1 (\$1,290,389) and what I recommend (\$880,068) is \$410,321. The difference
2 in the two loan amounts ($1,290,389 - 880,068 = 410,321$) multiplied by the
3 1% finance charge ($410,321 \times 1\% = 4,103$), equals the necessary adjustment,
4 which is \$4,103. My recommended adjustment is shown on Schedule TJC-4.

5

6 **Rate Base Adjustment #3 – Plant Held for Future Use (Effluent Piping)**

7 Q. Has the Company included in its test year any “Plant Held for Future Use” in
8 its rate base?

9 A. Yes. The Company has included \$26,480 in Plant Held for Future Use
10 (Effluent Piping) in its rate base. The Company stated in Staff Data Request
11 JACA-17 “The only known main within the service area which was paid for by
12 the Utility Company which is not in use is an effluent line which was installed
13 to direct effluent to the most recent Tonto Verde lake on the Ranch Course.
14 The line is installed, but has not been connected to the effluent system”.
15 Since the line is not connected to the system, that renders it as not used and
16 useful. Under accepted ratemaking principles non-used and useful plant is
17 excluded from rate base.

18

19 Q. Is Plant Held for Future Use an appropriate rate base element?

20 A. No. Traditionally, the Arizona Corporation Commission (ACC) has not
21 recognized Plant Held for Future Use as a ratemaking element.

22

23

1 Q. Why has the ACC not included Plant Held for Future Use in rate base?

2 A. Until plant is used and useful, it provides no benefit to the customer.
3 Accordingly, ratepayers should not be required to pay a return on assets that
4 provide no benefit to them.

5
6 Q. What adjustment have you made to correct this?

7 A. As shown on Schedule TJC-3, Rate Base Adjustment #3, I have removed the
8 test-year Plant Held for Future Use from the Water Transmission and
9 Distribution Mains Account balance of \$26,480 from rate base.

10
11 **Rate Base Adjustment #4 – Debt Reserve Fund**

12 Q. Did the Company include a pro forma adjustment that increased rate base
13 due to a provision in the proposed loan from Cobank?

14 A. Yes. The Company is required to carry a "Restricted Fund" balance of 10%
15 of the original loan amount. As will be discussed later in my testimony, I am
16 recommending a loan authorization for Rio Verde that is less than the
17 Company proposed. Consequently, the required 10% reserve requirement
18 also requires reduction. This adjustment reduces rate base by \$41,032 and is
19 shown on Schedule TJC-5.

20
21 **Rate Base Adjustment #5 – Cash & Working Capital**

22 Q. What amount of working capital is the Company requesting?

23 A. The Company is requesting working capital in the amount of \$98,339.

1 Q. How did the Company determine the requested amount of working capital?

2 A. The Company determined its working capital request utilizing the formula
3 method.

4

5 Q. Please explain the concept of working capital?

6 A. A company's working capital requirement represents the amount of cash the
7 company must have on hand to cover any differences in the time frame
8 between when revenues are received and expenses must be paid. The most
9 accurate way to measure the working capital requirement is via a lead/lag
10 study. The lead/lag study measures the actual lead and lag days attributable
11 to the individual revenues and expenses. A lead/lag study, however, is costly
12 and resource intensive. As a result, smaller companies quite often utilize
13 what is known as the formula method. The main difference between the
14 formula method and a lead/lag study is that where the lead/lag study
15 measures actual leads and lags in revenues and expenses, the formula
16 method simply assumes an average expense lag of 45 days. Theoretically,
17 the formula method when applied to the average small utility operation is
18 assumed to be relatively accurate.

19

20 Q. Are you proposing any adjustment to the Company-proposed working capital?

21 A. Yes. Although I have also utilized the formula method of computing working
22 capital, an adjustment is necessary to restate working capital requirement
23 based on my recommended level of operating expenses. As shown on

1 Schedule TJC-6, a decrease in working capital of \$8,804 is warranted based
2 on RUCO's recommended operating expenses.

3

4 **Rate Base Adjustment #6 – Advance-In-Aid-of-Construction (AIAC)**

5 Q. Are you proposing any adjustments to Advances in Aid of Construction?

6 A. Ms. Marylee Diaz Cortez will address any issues relating to advances in aid of
7 construction (AIAC).

8

9 **OPERATING INCOME**

10 **Operating Adjustment #1 – Reverse Company's Water Revenue Adjustment**
11 **#12**

12 Q. Did the Company make a test-year adjusting entry to its Income Statement for
13 Water Revenues?

14 A. Yes. The Company made an adjustment of \$3,092 in the test year for Water
15 Revenues.

16

17 Q. What affect did the Company's adjustment have on Water Revenues?

18 A. The adjustment decreased Water Revenues by \$3,092.

19

20 Q. What rationale did the Company use in making this adjustment to reduce
21 Water Revenues by the stated amount that you accentuated?

22 A. It appears the Company made the entry for the sole purpose to reconcile the
23 revenues it derived from its bill counts with the Water Revenues booked in the

1 General Ledger. The Company took the position that the bill count calculation
2 was a more accurate and correct figure than the amount reported in the
3 General Ledger.

4

5 Q. Which is the more accurate measure of revenues - the bill count calculation or
6 the general ledger?

7 A. I would recommend the amount stated in the General Ledger would be the
8 correct figure to report in this instance. Since the General Ledger supported
9 a specific amount of revenue, the Company reported the amount stated in the
10 General Ledger for its annual report filed with the ACC and also to the IRS for
11 tax purposes. My recommendation is to reverse the Company's adjustment
12 and add back the \$3,092 to water revenue that the Company chose to
13 remove. There is no evidence in the Company's adjustment that the amount
14 reported in the General Ledger was not the correct figure to be used in
15 determining revenue.

16

17 Q. What adjustment is proper in this situation?

18 A. I recommend the Company's adjustment be reversed and the revenue be
19 added back to water revenue in the amount of \$3,092.

20

21

22

23

1 **Operating Adjustment #2 – Recommendation to Increase Water Hook-Up Fee**

2 Q. Is the Company proposing any change in the currently authorized hook-up fee
3 tariff?

4 A. Yes.

5
6 Q. What did the ACC approve in its last decision regarding Rio Verde's water
7 hook-up fee?

8 A. The last case was settled without a hearing, however the Commission
9 approved a \$500 water hook-up fee, in Decision No. 58525. In that decision,
10 the Commission also approved a maximum of 60 hook-up fees to be
11 accounted for as revenue. Any hook-ups exceeding the cap of 60 were to be
12 accounted for as contributions in aid of construction (CIAC).

13
14 Q. What treatment is the Company proposing in the instant case for the water
15 hook-up fees?

16 A. The Company proposes that the cap of 60 hook-up fees be eliminated and all
17 hook-up fees be accounted for as revenue. In the Company's application it
18 has estimated that the annual hook-up fees would be 70. The Company also
19 proposes the water hook-up fee remain at \$500.

20
21 Q. Do you agree with the Company's proposal concerning water hook-up fees?

22 A. No.

23

1 Q. What do you propose for the water hook-up fee?

2 A. Traditionally, RUCO has maintained a position opposing hook-up fees to be
3 accounted for as revenue. RUCO holds the position that hook-up fees should
4 be accounted for as contributions in aid (CIAC). However, in light of Rio
5 Verde residents' support of revenue treatment of hook-up fees, and the
6 Commission's authorization of such treatment of the Company's hook-up fees
7 in a prior case, RUCO does not oppose the continuation of the hook-up
8 revenue. Although, RUCO has long believed the better accounting for hook-
9 up fees is as contributions (CIAC), inequities will result if the hook-up fee
10 policy is changed at this juncture. Thus, the Company's proposed removal on
11 the cap of hook-ups to be reflected as revenues should be denied.
12 Accordingly, I recommended that the Company be held at the same number
13 of hook-up fees (60) the Commission approved in its last decision. However,
14 I believe that the hook-up fee should be increased from the current \$500 to
15 \$1,000. The cost of the plant necessary to serve Rio Verde customers
16 continues to increase. Thus, a higher hook-up fee is justified. In my analysis,
17 plant was verified to have slightly more than doubled per customer since
18 1993. My rationale for increasing the hook-up fee is firmly based and directly
19 relative to the cost of plant per customer.

20
21
22
23

1 Q. What adjustment do you deem appropriate regarding your position with hook-
2 up fees?

3 A. I have made an adjustment of \$25,000 to Water Revenues to reflect the
4 increase to \$1,000 per hook-up fee. If any additional hook-up fees beyond
5 60 incur, the additional fees should be accounted for as contributions. This
6 adjustment is supported and shown on Schedule TJC-9

7

8 **Operating Adjustment #3 – Meter Tests**

9 Q. How has the Company charged for the tariffed meter tests?

10 A. In response to RUCO Data Request 1.8, the Company stated that it
11 performed 20 – 25 meter tests in the test year for which it did not charge
12 customers. The Company's current tariffs require a \$25 charge for this
13 service. In this rate application, the Company requests a \$20 increase in
14 charge per meter test (from \$25 to \$45).

15

16 Q. Since this is a current tariffed service, should not the Company be
17 appropriately billing for such meter test services?

18 A. Yes.

19

20 Q. What adjustment have you made to properly record this tariffed charge?

21 A. I have made an adjustment to miscellaneous water service revenue that
22 increases water revenue by \$625 (25 tests x \$25 = \$625). The Company
23 apparently waived these revenues during the test year at its own discretion.

1 Future rates should not be set to reflect the absence of revenues to which the
2 Company is entitled under its authorized tariffs.

3

4 **Operating Adjustment #4 – Disallowance of Nonrecurring Charges**

5 Q. Did the Company incur any non-recurring expenses during the test year?

6 A. Yes. The Company rented a large fuel tank and had it transported in for fuel
7 storage for any Y2K utility or service disruptions.

8

9 Q. Under ratemaking principles, is the disallowance of nonrecurring charges
10 appropriate?

11 A. Yes. When determining what expenses and revenues should be allowed or
12 disallowed, the objective is to determine and ascertain what expenses and
13 revenues are to be known and measurable for the years that the new rates
14 will effect. This particular expense was incurred specifically to meet
15 extraordinary circumstances and is not appropriately included in normal
16 operating expenses.

17

18 Q. What adjustment is necessary to recognize and disallow an expense not
19 expected to occur within the next 100 years?

20 A. I have decreased plant maintenance operating expenses by \$2,200. This
21 adjustment is shown on Schedule TJC-8.

22

23

1 **Operating Income Adjustment #5 – Property Taxes Adjustment**

2 Q. Have you reviewed the Company's proforma property tax calculation?

3 A. Yes. The Company has computed an estimated level of property taxes of
4 \$41,820 for the adjusted test year. The Company's property tax estimate is
5 based on the use of an Arizona Department of Revenue (ADOR) formula.

6
7 Q. Does this formula produce known and measurable results?

8 A. No. The ADOR does not use a strict set formula to compute property taxes.
9 ADOR's calculation involves a discretionary element. After determining the
10 revenue and plant values for a given utility, ADOR, at its discretion assigns
11 each of these factors a weight. The weighting can range from a 100% for the
12 plant and 0% for revenue or 0% for plant and 100% for revenue, or anywhere
13 in-between. Because of this discretionary element, the Company's property
14 tax calculation does not produce known and measurable results.

15
16 Q. Has the Commission ever authorized use of this formula?

17 A. Despite repeated requests for the use of this formula by utility companies, the
18 Commission has only authorized its use once. Far West Water Company
19 was authorized use of this formula in Decision No. 60826. The Commission
20 in granting use of the formula noted that Far West had erred in reporting its
21 property values to ADOR and thus the actual property tax bills were also in
22 error. The Commission also stated the following regarding its authorization:

23 We note, however, that if circumstances change, the Company's
24 methodology of calculating property taxes based on the

1 approved revenue and plant figures may not be reasonable in
2 the future. By approving the Company's methodology **we are**
3 **not approving this methodology for any other public**
4 **service corporation**, nor are we approving this methodology
5 for use in any future rate case for Far West. (Decision No.
6 60826 at page 4-5) [Emphasis added]
7
8

9 Q. What typically has been the Commission's position regarding property taxes?

10 A. The Commission has typically held that the last known actual property tax bill
11 should be used for purposes of setting rates. Accordingly, I am
12 recommending use of the actual 2000 property tax bills for ratemaking
13 purposes.

14
15
16 Q. What adjustment did you make to reflect the actual property taxes that the
17 Company was billed?

18 A. I adjusted property taxes account by \$10,635, which decreased the expense
19 account appropriately.
20

21 **Operating Adjustment #6 – Payroll Adjustment**

22 Q. What level of payroll expense is included in the Company's application?

23 A. The Company's application includes \$104,146 in payroll expense.
24

25 Q. Do you agree with this level of payroll expense?

26 A. No. There have been significant changes in the Company's payroll expense
27 as compared to when this application was filed.
28

1 Q. What changes have occurred that render the Company's proposed amount of
2 payroll expense inaccurate on a going forward basis?

3 A. The General Manager, Mr. Bush, has retired. His retirement alone freed up
4 \$23,000 because Mr. Bush's replacement, Mike Kleminski – former Assistant
5 General Manager, received an increase in salary of \$8,000. Formerly, Mr.
6 Bush's salary was \$83,000, and presently, the promotion of Mr. Kleminski to
7 General Manager demanded a salary increase from \$53,000 to \$60,000. The
8 difference between Mr. Bush's \$83,000 salary and Mr. Kleminski's present
9 \$60,000 accounts for the decrease in payroll of \$23,000. At this point in
10 time, the Company has yet to hire a new Assistant General Manager to fill Mr.
11 Kleminski's vacant position. Thus, the Company currently is incurring no
12 expense associated with this position. While ordinarily RUCO would not
13 recommend recovery of costs which are not being incurred, I recognize that
14 the Company will be required to fill this position on a going forward basis. I
15 have therefore allowed a salary of \$42,000 for this position, which is lower
16 than the salary of the previous Assistant Manager to recognize that a new
17 hire will not command the salary of a seasoned employee and also to
18 recognize that there may be some lag between when rates go into effect and
19 the new employee is hired.

20
21
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23

1 Q. Does your recommended level of payroll include the approximate 10%
2 proforma payroll expense requested by the Company for the existing
3 employees?

4 A. Yes, RUCO's recommended payroll expenses recognizes an annualization of
5 the payroll increase.

6
7 Q. What adjustment to the water payroll expense is necessary to account for this
8 overall employment makeover?

9 A. RUCO recommends an adjustment to decrease water payroll in the amount of
10 \$14,411. This adjustment is shown on Schedule TJC-11.

11

12 **Operating Adjustment #7 – Not Used**

13

14 **Operating Adjustment #8 – Over Estimates of Rate Case Expenses**

15 Q. Do you agree with the Company's estimated \$60,000 of rate case expense
16 filed in the application?

17 A. No. In response to a RUCO data request, the Company provided a
18 breakdown of its estimated rate case expense. As a result of my review of
19 this information, I believe the Company's estimate is overstated.

20

21

22

23

1 Q. Would you please identify the amounts and nature of the overstated charges?

2 A. The Company's rate case expense for legal fees is overstated because it
3 includes charges that normally would not be associated with a company of
4 this size and magnitude of rate case. These charges are identified as follows:

5	Line #65	Prepare Opening Brief	\$ 2,700
6	Line #66	Review Other Parties Opening Briefs	900
7	Line #67	Prepare Reply Brief	1,260
8	Line #68	Review Hearing Officer's Recommended Order	540
9			-----
10			\$ 5,400

11

12 It is unlikely in the instant case that briefs will be required and, accordingly,
13 speculative expenses should not be included in rates. I have therefore
14 reduced rate case expense by \$5,400. I have allocated this amount 50/50 to
15 water and sewer plant respectively, which allocates \$2,700 to each division.
16 The \$2,700 is then amortized over the allowed period of time, which is 5
17 years. As a result of the amortization, a total of \$540 is deducted on an
18 annual basis from the Company's proposed rate case expense. This
19 adjustment is shown on Schedule TJC-12.

20

21

22

23

1 **Operating Adjustment #9 – Depreciation & Amortization**

2 Q. What amount did the Company include in its application for “Total Water
3 Plant” to be depreciated and amortized?

4 A. The amount of “Total Water Plant” that the Company included in its
5 application was \$6,576,482. The \$6,576,482 is calculated by taking the
6 “Total Water Plant” balance of \$6,619,374 on Schedule B-2, page 2d of the
7 Company’s application and subtracting the non-depreciable items of plant.
8 The non-depreciable plant accounts are “Organization Costs” and “Land and
9 Land Rights”, which are \$1,380 and \$41,512 respectively. Simply, the
10 calculation is as follows: \$6,619,374 minus the sum of (\$1,380 + \$41,512).
11 Next, the Company applied the composite depreciation rate of 3.064119% to
12 depreciate and amortize its “Gross Depreciable Water Plant”.

13
14 Q. Do you agree with the amount that the Company used for Gross Utility Plant
15 in Service?

16 A. No. RUCO identified some “Plant Held for Future Use” (\$26,480), which the
17 Company failed to remove from its Plant in Service balance. My rate base
18 adjustment #3 on Schedule TJC-3 made that necessary adjustment. Ms.
19 Diaz Cortez also is recommending an adjustment related to plant retirements.

20
21
22
23

1 Q. What amount of Gross Total Depreciable Plant is included in your
2 depreciation expense calculations?

3 A. I have included \$6,441,556 which is my total recommended plan as shown on
4 Schedule TJC-3, Column H, line 24, less the non-depreciable accounts of
5 organization costs and land and land rights, which are \$1,380 and \$41,512
6 respectively: $(\$6,484,448 - \$1,380) - \$41,512 = \$6,441,556$

7
8 Q. What amount of depreciation expense are you recommending based on
9 RUCO's plant balances?

10 A. I recommend a depreciation expense on Gross Total Depreciable Plant of
11 \$197,377, but there is one other depreciation calculation for CIAC that will
12 affect the actual depreciation expense found on the income statement.

13
14 Q. How does amortization of CIAC effect your recommended depreciation
15 expense?

16 A. When CIAC is received, it must be placed on the books and subsequently
17 amortized over the life of the plant it supports. Because a utility has no
18 investment in CIAC-supported plant, amortization of the CIAC serves to offset
19 the depreciation expense taken on CIAC-support plant. As shown on
20 Schedule TJC-13, my recommended depreciation expense is
21 reduced/decreased by the CIAC amortization. Instead of the depreciation
22 expense proposed earlier of \$197,377, this amount must be offset by the
23 amortization amount attributable to CIAC. Now, the depreciation expense

1 that flows through to the income statement is not \$197,377, but instead, it is
2 \$197,377 less the \$43,447 attributable to the amortization of CIAC, or
3 \$153,930.

4

5 Q. Why does the Company's CIAC amortization income differ from your
6 recommended amount?

7 A. The Company understated CIAC Amortization Income, because it
8 erroneously based its calculation on a net CIAC balance. I have corrected
9 this error by calculating CIAC amortization income based on the gross CIAC
10 balance. This increases CIAC amortization by \$4,134.

11

12 Q. What adjustment was necessary to reflect the proper depreciation expense
13 for the test year?

14 A. I made an adjustment of \$8,669 that decreased depreciation and amortization
15 expense. This adjustment is supported in detail on Schedule TJC-13. The
16 \$4,134 of this adjustment results from RUCO's recommended plant
17 adjustments and \$4,530 for the Company's CIAC amortization error.

18

19 **Operating Adjustment #10 – Income Tax Expense**

20 Q. Please discuss your income tax expense adjustment.

21 A. As shown on Schedule TJC-14, page 1, I calculated Rio Verde's state and
22 federal income taxes based on RUCO's recommended level of operating
23 income at present water rates.

1 Q. Have you computed income taxes based on RUCO's proposed rates?

2 A. Yes. I calculated the additional income tax expense attributable to RUCO's
3 proposed rate increase by utilizing the gross revenue conversion factor. This
4 calculation is shown on Schedule TJC-14, page 2.

5

6 **COST OF CAPITAL**

7 **Capital Structure**

8 Q. Have you made any adjustments to the Company's proposed capital
9 structure?

10 A. Yes. As discussed earlier, I recommend a long-term debt-financing amount
11 that is less than the Company requested. Several rate base adjustments
12 hinged on this new recommended loan amount.

13

14 Q. What is the original loan amount requested by the Company before you made
15 any adjustments to the Company's proposed loan?

16 A. The Company originally sought long-term indebtedness in the amount for up
17 to \$2,469,787 to fund certain plant additions, refinancing of certain existing
18 obligations of the Corporation and certain costs and reserves required for the
19 financing.

20

21 Q. From whom has the Company requested this loan?

22 A. The Company is negotiating with CoBank. The loan is contingent upon the
23 outcome of this rate application.

1 Q. Is the Company requesting this proposed new loan in a separate docket
2 before the ACC?

3 A. Yes. The rate application and request for new debt financing are separate
4 and distinct dockets, but for the sake necessity and convenience, the two
5 dockets have been consolidated and are to be heard simultaneously. Docket
6 No. WS-02156A-00-0321 is the rate application while Docket No. WS-
7 02156A-00-0323 pertains to the request for approval of financing.

8
9 Q. What is the purpose of the loan or how is the Company proposing to use the
10 proceeds of the loan?

11 A. In RUCO Data Request 1.30, I asked the Company for its purpose in
12 requesting the loan in this docket before the ACC. The response of Thomas
13 Bourassa, CPA was as follows:

14 "The Company has used the advances from associated entities
15 to finance plant added since 1998. The advance amounts
16 totaling \$2,198,110 (\$1,049,664 for waste water and \$1,148,446
17 for water), plus \$271,677, comprise the total Cobank loan
18 proceeds of \$2,469,787 and are to be used to finance plant
19 added since 1998.

20
21 The total loan funds of \$2,469,787 are to be used as follows:

22
23 \$1,290,389 for water plant; and,
24 \$1,179,398 for waste water plant.

25
26 Internally generated cash has financed the balance of the plant
27 additions since 1998, or \$1,798,287.

28
29 The proposed financing will "free up" \$271,677 of working
30 capital (\$141,943 for water and \$129,734 for waste water) which
31 the Company used for plant expenditures since 1998. This
32 cash will then be available for future plant expenditures. The
33 Company's capital expenditure plans call for \$175,000 of

1 wastewater plant and \$795,000 of water plant to be added in
2 2000 and 2001".
3

4 Q. What adjustments have you made to the proposed loan that the Company
5 seeks approval?

6 A. I treated the loan as if it were of two parts. One part of the loan is for the
7 Company's Water Division and the other for the Company's Waste Water
8 Division. My treatment was much the same as the Company views the loan.
9 Therefore, my recommendation is that the Water Division receive \$880,068
10 and the Waste Water Division be approved for \$869,452. The two amounts
11 total \$1,749,520. This total amount would be disbursed in one amount.
12

13 Q. For what reasons did you make adjustments to the requested loan?

14 A. A large majority of the loan was to satisfy payables to affiliated entities and
15 companies. The Company further stated that the payables to which it was
16 obligated were due to plant that has been already installed. After RUCO's
17 review and analysis, it was determined that many of the plant additions the
18 Company was requesting be funded by the proposed loan were, in fact,
19 already supported by CIAC. Therefore, RUCO made the necessary
20 adjustments to the loan where plant had already been provided for
21 through CIAC.
22
23
24

1 Q. What were the necessary adjustments to account for plant already
2 provided for from CIAC?

3 A. I made an adjustment to the loan that was designated to the water division
4 for \$410,321 and the other adjustment was for \$309,945 that was
5 designated for the wastewater division. Both adjustments decreased the
6 amount of the loan requested, and both adjustments together totaled
7 \$720,266.

8
9 Q. What basis did you utilize in determining your adjustments?

10 A. Responses to two Data Requests supplied by the Company.

11

12 Q. What two data requests did you use in this determination?

13 A. RUCO Data Request 1.41 and RUCO Data Request 2.7. RUCO DR 1.41
14 presented the total plant additions for 1998 and 1999 for both water and
15 sewer. RUCO DR 2.7 displayed the contributed plant from 1993 through
16 1999. From that point, a calculation was made as to what plant was
17 added in 1998 - 1999 and the amount of contributed plant was subtracted,
18 which left the plant to be financed. The new proposed loan was
19 determined by the amount that had not been contributed already and still
20 needed some means of financing to pay for plant added.

21

22 Q. What were the terms of the loan?

23 A. The terms were a 20 year, fixed rate of interest of 9.75% APR.

1 **Cost of Debt**

2 Q. Have you reviewed the Company's proposed cost of debt for its existing
3 debt?

4 A. Yes. Rio Verde Utilities has existing three loans. One is a short-term loan
5 with a fixed APR of 6%. This short-term loan is for financing plant
6 additions that the new loan will pay off. The second loan is specifically for
7 financing the Water Division activities. It has a fixed rate of 9.80% APR.
8 The third loan is explicitly for the Wastewater Division. It has both a fixed
9 and variable rate on 50/50 amount of the outstanding loan amount. The
10 fixed portion is at a 9.80% APR. The variable portion floats with the prime
11 rate. Rio Verde has utilized the respective stated interest rates of these
12 debt issuances in calculating its proposed weighted average cost of debt.

13
14 Q. Do you agree with the weighted cost of debt proposed by the Company?

15 A. Yes and no. I agree with the weighted cost of debt for the water division,
16 but I do not agree with that in the wastewater division. The weighted cost
17 of debt is overstated. Under the terms of the fixed and variable loan with
18 Cobank, the Company is required to maintain a debt reserve fund equal to
19 10% of original loan. This investment generates interest earnings at 4.5%
20 per year. The Company has failed to reflect these earnings in its cost of
21 debt calculations. The Company has also overstated the variable rate
22 portion of the loan. I have calculated the test year variable interest rate

1 based on the actual variable rate interest payment that the Company
2 made to Co-bank.

3
4 Q. Have you recalculated the cost of the wastewater division's existing debt?

5 A. Yes. As shown on Schedule TJC-16, I have recalculated the effective
6 interest rate of the existing loans to include the annual returns earned and
7 the actual variable rate experienced. The calculation results in an
8 effective interest rate of 8.60%.

9

10 **Cost of Equity**

11 Q. What cost of equity is RUCO recommending?

12 A. This issue is addressed in the testimony of Marylee Diaz Cortez.

13

14 **Overall Rate of Return**

15 Q. What is your overall recommended rate of return?

16 A. As shown on Schedule TJC-17, my overall recommended rate of return is
17 10.70%. This is based on my recommended adjusted capital structure,
18 cost of debt, and the cost of equity recommended by Marylee Diaz Cortez.

19

20 Q. Does this conclude your testimony?

21 A. Yes.

22

Rio Verde Utilities, Inc. - **WATER DIVISION**
 Docket No. WS-02156A-00-0321 and WS-02156A-00-0323
 Test Year Ended December 31, 1999

Schedule TJC-1

REVENUE REQUIREMENT

<u>LINE NO.</u>	<u>DESCRIPTION</u>	(A) COMPANY ORIGINAL COST	(B) RUCO ORIGINAL COST
1	Adjusted Rate Base	\$ 4,248,575	\$ 3,278,841
2	Adjusted Operating Income	\$ 202,263	\$ 231,081
3	Current Rate of Return (L2 / L1)	4.76%	7.05%
4	Required Rate of Return	11.45%	10.70%
5	Required Operating Income (L4 * L1)	\$ 486,388	\$ 350,778
6	Operating Income Deficiency (L5 - L2)	\$ 284,125	\$ 119,697
7	Gross Revenue Conversion Factor (Sch. TJC-14)	1.6469	1.7676
8	Required Revenue Increase (L7 * L6)	\$ 467,926	\$ 211,573
9	Adjusted Test Year Revenue	\$ 953,199	\$ 981,916
10	Proposed Annual Revenue (L8 + L9)	\$ 1,421,125	\$ 1,193,489
11	Required Increase in Revenue (%)	49.09%	21.55%
12	Requested Rate of Return on Common Equity (%)	12.75%	11.40%

RATE BASE - ORIGINAL COST

LINE NO.	(A) COMPANY AS FILED	(B) RUCO ADJUSTMENTS	(C) RUCO AS ADJUSTED
1	Plant in Service	\$ 6,619,374	\$ 6,484,448
2	Less: Accumulated Depreciation	1,158,669	982,500
3	Net Plant in Service	<u>\$ 5,460,705</u>	<u>\$ 5,501,948</u>
LESS:			
4	Contributions in Aid of Construction (CIAC)	\$ 1,269,935	\$ 1,269,935
5	Less: Accumulated Amortization	-	-
6	Net CIAC	<u>1,269,935</u>	<u>1,269,935</u>
7	Advances in Aid of Construction (AIAC)	-	886,965
8	Customer Deposits	120,684	120,684
9	Meter Advances	-	-
10	Deferred Income Tax Credits	61,793	131,866
ADD:			
11	Unamortized Finance Charges	12,904	8,801
12	Cash Working Capital (1/8 Method)	98,339	89,535
13	Debt Reserve Fund (proposed CoBank Loan)	129,039	88,007
14	Other Additions	-	-
15	Total Rate Base	<u>\$ 4,248,575</u>	<u>\$ 3,278,841</u>

REFERENCES:

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

Rio Verde Utilities, Inc. - WATER DIVISION
 Docket No. WS-02156A-00-0321 and WS-02156A-00-0323
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SUMMARY OF RATE BASE ADJUSTMENTS

LINE NO.	DESCRIPTION	(A) COMPANY AS FILED	(B) ADJ.#1	(C) ADJ.#2	(D) ADJ.#3	(E) ADJ.#4	(F) ADJ.#5	(G) ADJ.#6	(H) RUCO ADJUSTED
PLANT IN SERVICE:									
1	Organization Cost	\$ 1,380							\$ 1,380
2	Franchise Cost	-							-
3	Land and Land Rights	41,512							41,512
4	Structures and Improvements	37,133							37,133
5	Wells and Springs	1,610,304							1,610,304
6	Power Generation Equipment	35,397							35,397
7	Electric Pumping Equipment	973,284							973,284
8	Water Treatment Equipment	12,184							12,184
9	Distribution Reservoirs & Standpipe	360,282							360,282
10	Transmission and Distribution Mains	2,701,140			(26,480)				2,674,660
11	Services	347,232							347,232
12	Meters	81,524							81,524
13	Hydrants	183,259							183,259
14	Plant Structures and Improvements	105,744							105,744
15	Office Furniture and Fixtures	-							-
16	Transportation Equipment	36,684							36,684
17	Tools and Work Equipment	10,269							10,269
18	Laboratory Equipment	7,336							7,336
19	Communications Equipment	63,499							63,499
20	Miscellaneous Equipment	1,083							1,083
21	Other Tangible Plant	10,128							10,128
22	Adjustment for Plant Retirements	-	(108,446)						(108,446)
23									
24	Total Water Plant in Service	\$ 6,619,374	\$ (108,446)		\$ (26,480)				\$ 6,484,448
25	Less: Accumulated Depreciation	1,158,689	(176,169)						982,500
26	Net Plant in Service (L24 - L25)	\$ 5,460,705	\$ 67,723		\$ (26,480)				\$ 5,501,948
LESS:									
27	Contributions in Aid of Construction (CIAC)	\$ 1,269,935							\$ 1,269,935
28	Less: Accumulated Amortization	-							-
36	Net CIAC (L27 - L28)	\$ 1,269,935						\$ 886,965	\$ 1,269,935
30	Advances in Aid of Construction (AIAC)	-							-
31	Customer Deposits	120,684							120,684
32	Meter Advances	-							-
33	Deferred Income Tax Credits	61,793	70,073						131,866
ADD:									
34	Unamortized Finance Charges	12,904		(4,103)					8,801
35	Cash Working Capital Allowance	98,339						\$ (8,804)	89,535
36	Debt Reserve Fund (proposed CoBank Loan)	129,039				(41,032)			88,007
37	Other Additions	-							-
38	Total Rate Base	\$ 4,248,575	\$ (2,350)	\$ (4,103)	\$ (26,480)	\$ (41,032)	\$ (8,804)	\$ (886,965)	\$ 3,278,841

Adjustment #:
 1. Plant Retirements
 2. Unamortized Finance Charges
 3. Plant Held for Future Use (Effluent Piping), per RUCO DR #4.4, 5.3, and JACA-17.

Adjustment #:
 4. Debt Reserve Fund Adj.
 5. Cash & Working Capital
 6. Advance in Aid of Construction

Reference:
 Sch. MDC-1
 Sch. TJC-4

Reference:
 Sch. TJC-3
 Sch. TJC-6
 Sch. MDC-2

Rio Verde Utilities, Inc. - **WATER DIVISION**
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Schedule TJC-4

RATE BASE ADJUSTMENT #2

ADJUSTMENT TO UNAMORTIZED FINANCE CHARGES TO REFLECT RUCO's RECOMMENDED LOAN

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>REFERENCE</u>
1	RUCO Recommended Loan	\$ 880,068	TJC-15
2	Finance Rate Charge	1.00%	DR# WAR #5-22
3	Finance Charges per RUCO	8,801	Line 1 X Line 2
4	Finance Charge per Company's Rate Filing	12,904	Schedule B-1, page 1
5	RUCO's Recommended Adjustment	(4,103)	Line 3 minus Line 4

RIO VERDE UTILITIES - WATER DIVISION
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TEST YEAR ENDED DECEMBER 31, 1999
RATE BASE ADJUSTMENT #4
DEBT RESERVE FUND - RUCO PROPOSED LOAN

Schedule TJC-5

LINE NO.	DESCRIPTION	AMOUNT
1	RUCO Recommended New Loan	\$ 880,068
2	% Debt Reserve Requirement	10%
3	Debt Reserve Requirement	88,007
4	Debt Reserve Requirement per Company	129,039
5	Debt Reserve Fund Requirement Adjustment	(41,032)

RIO VERDE UTILITIES - WATER DIVISION
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TEST YEAR ENDED DECEMBER 31, 1999
RATE BASE ADJUSTMENT #5
WORKING CAPITAL

Schedule TJC-6

LINE NO.	DESCRIPTION		Total Amount
1	Total Operating Expense		\$ 750,835
2	Less: Income Tax	\$ 59,370	
3	Property Tax	31,185	
4	Depreciation	153,930	
5	Rate Case Expense	11,460	
6	Purchased Power	156,637	412,582
			<u>338,252</u>
7	1/8th Operating Expenses		42,282
	<u>ADD:</u>		
8	Purchased Power/24		<u>6,527</u>
9	Cash Working Capital RUCO Recommends		<u>\$ 48,808</u>
	<u>ADD:</u>		
10	Prepayments	39,823	
11	Material & Supplies	904	<u>40,727</u>
12	RUCO's Proposed Working Capital		<u>\$ 89,535</u>
13	Cash Working Capital per Company's Filing		<u>98,339</u>
14	RUCO's Recommended Adjustment		<u>\$ (8,804)</u>

RIO VERDE UTILITIES - WATER DIVISION
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TEST YEAR ENDED DECEMBER 31, 1999
RATE BASE ADJUSTMENT #5
WORKING CAPITAL

Schedule TJC-6

LINE NO.	DESCRIPTION		Total Amount
1	Total Operating Expense		\$750,835
2	Less: Income Tax	\$ 59,370	
3	Property Tax	31,185	
4	Depreciation	153,930	
5	Rate Case Expense	11,460	
6	Purchased Power	156,637	412,582
			338,252
7	1/8th Operating Expenses		42,282
	<u>ADD:</u>		
8	Purchased Power/24		6,527
9	Cash Working Capital RUCO Recommends		\$ 48,808
	<u>ADD:</u>		
10	Prepayments	39,823	
11	Material & Supplies	904	40,727
12	RUCO's Proposed Working Capital		\$ 89,535
13	Cash Working Capital per Company's Filing		98,339
14	RUCO's Recommended Adjustment		\$ (8,804)

Rio Verde Utilities, Inc. - WATER DIVISION

Schedule TJC-7

Docket No. WS-02156A-00-0321 and WS-02156A-00-0323

Test Year Ended December 31, 1999

OPERATING INCOME - TEST YEAR AND RUCO PROPOSED

LINE NO.	DESCRIPTION	[A] COMPANY TEST YEAR AS FILED	[B] RUCO TEST YEAR ADJUSTMENTS	[C] RUCO TEST YEAR AS ADJUSTED	[D] RUCO PROPOSED CHANGES	[E] RUCO RECOMMENDED
REVENUES - WATER:						
1	Residential	\$ 278,575	\$ 3,092	\$ 281,667	\$ 211,073	\$ 492,740
2	Commercial	44,687	-	44,687		44,687
3	Industrial	-	-	-		-
4	Irrigation	589,663	-	589,663		589,663
5	Hook Up Fees	35,000	25,000	60,000		60,000
6	Misc. Service Revenues	5,274	625	5,899	500	6,399
7	C.A.P. Surcharge	-	-	-		-
8	Total Operating Revenues	\$ 953,199	\$ 28,717	\$ 981,916	\$ 211,573	\$ 1,193,489
OPERATING EXPENSES:						
9	Salaries & Wages	\$ 104,146	\$ (14,411)	\$ 89,735		\$ 89,735
10	Purchased Power	156,637	-	156,637		156,637
11	SRP Ground Water Charge	9,525	-	9,525		9,525
12	CAP Purchased Water	52,528	-	52,528		52,528
13	DWR Surcharge	5,329	-	5,329		5,329
14	Maintenance	86,213	(2,200)	84,013		84,013
15	Chemicals	1,007	-	1,007		1,007
16	Administrative Office	12,009	-	12,009		12,009
17	Automotive	4,712	-	4,712		4,712
18	RVUI Lab Operations	2,003	-	2,003		2,003
19	Outside Lab	7,134	-	7,134		7,134
20	Supplies	11	-	11		11
21	Postage/Express/UPS	1,804	-	1,804		1,804
22	Office Supplies	1,575	-	1,575		1,575
23	Payroll Taxes	11,504	-	11,504		11,504
24	Employee Benefits	7,399	-	7,399		7,399
25	Taxes & Licenses	41,820	(10,635)	31,185		31,185
26	Telephone	3,800	-	3,800		3,800
27	Insurance	7,539	-	7,539		7,539
28	Legal Fees	739	-	739		739
29	Professional Fees	6,248	-	6,248		6,248
30	Education & Training	205	-	205		205
31	Travel & Entertainment	593	-	593		593
32	Security Charges	862	-	862		862
33	Outside Services	27,839	-	27,839		27,839
34	Miscellaneous	139	-	139		139
35	Rate Case Expense	12,000	(540)	11,460		11,460
36	Depreciation	162,599	(8,669)	153,930		153,930
37	Income Taxes	23,017	36,353	59,370	91,876	151,246
38						
39	Total Operating Expenses	\$ 750,936	\$ (101)	\$ 750,835	\$ 91,876	\$ 842,711
40	Operating Income (Loss)	\$ 202,263	\$ 28,818	\$ 231,081	\$ 119,697	\$ 350,778

Rio Verde Utilities, Inc. - WATER DIVISION
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 Test Year Ended December 31, 1999
Summary of Operating Adjustments

LINE NO.	DESCRIPTION	COMPANY PROFORMA	ADJ. #1	ADJ. #2	ADJ. #3	ADJ. #4	ADJ. #5	ADJ. #6	ADJ. #7	ADJ. #8	ADJ. #9	ADJ. #10	RUCO ADJUSTED
REVENUES:													
1	Water - Residential	\$ 278,575	3,092										281,667
2	Water - Commercial	44,687											44,687
3	Water - Irrigation	589,663											589,663
4	Water - Hook-Up Fee	35,000		25,000									60,000
5	Miscellaneous Service Revenues	5,274			625								5,899
6	C.A.P. Surcharge												
7	Total Revenues	\$ 953,199	\$ 3,092	\$ 25,000	\$ 625	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 981,916
OPERATING EXPENSES:													
8	Salaries & Wages	\$ 104,146											\$ 89,735
9	Purchased Power	156,637											156,637
10	SRP Ground Water Charge	9,525											9,525
11	CAP Purchased Water	52,528											52,528
12	DWR Surcharge	5,329											5,329
13	Maintenance	86,213											84,013
14	Chemicals	1,007											1,007
15	Administrative Office	12,009											12,009
16	Automotive	4,712											4,712
17	RVUI Lab Operations	2,003											2,003
18	Outside Lab	7,134											7,134
19	Supplies	11											11
20	Postage/Express/UPS	1,804											1,804
21	Office Supplies	1,575											1,575
22	Payroll Taxes	11,504											11,504
23	Employee Benefits	7,399											7,399
24	Taxes & Licenses	41,820											31,185
25	Telephone	3,800											3,800
26	Insurance	7,539											7,539
27	Legal Fees	739											739
28	Professional Fees	6,248											6,248
29	Education & Training	205											205
30	Travel & Entertainment	593											593
31	Security Charges	862											862
32	Outside Services	27,839											27,839
33	Miscellaneous	139											139
34	Rate Case Expense	12,000											11,460
35	Depreciation	162,589											153,930
36	Income Taxes	23,017											59,370
42													
43	Total Expenses	\$ 750,936	\$ -	\$ -	\$ -	\$ (2,200)	\$ (10,635)	\$ (14,411)	\$ -	\$ (540)	\$ (8,669)	\$ 36,353	\$ 750,835
44	Operating Income	\$ 202,263	\$ 3,092	\$ 25,000	\$ 625	\$ 2,200	\$ 10,635	\$ 14,411	\$ -	\$ 540	\$ 8,669	\$ (36,353)	\$ 231,981

Adjustment #:

- Reverse Company's Adj. #12 - Annualized bill count.
- Increase Water Hook-up Fee - maintain 60 customers.
- Meter Tests tariffed and performed but not charged.
- Canyon State Oil/Y2K Fuel Tank Rental.
- Property Taxes

Reference:
 TJC Testimony
 Sch. TJC-9

Adjustment #:

- Payroll Adjustment
- Not used
- Over Estimated Rate Case Exp.
- Depreciation & Amortization
- Income Taxes

Reference:
 Sch. TJC-11
 Sch. TJC-12
 Sch. TJC-13
 Sch. TJC-14

Rio Verde Utilities, Inc. - WATER DIVISION
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OPERATING ADJUSTMENT #2
RUCO's PROPOSED HOOK-UP FEE ADJUSTMENT

Schedule TJC-9

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>REFERENCE</u>
1	Proposed <u>Water</u> Hook-Up Fee Per RUCO Recommendation	\$ 1,000	Proposed by RUCO
2	Number of <u>Water</u> Hook-Ups Reflected as Revenue	60	Current Tariffed Amount
3	Hook-Up Revenue Allowed by RUCO's Proposal	60,000	Line 1 X Line 2
4	Proposed Hook-Up Fee Revenue per Company's Rate Application	35,000	Schedule C-1, page 1
5	RUCO's Proposed Increase in Revenue Hook-Up Fees	\$ 25,000	Line 3 - Line 4

Rio Verde Utilities, Inc. - **WATER DIVISION**
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OPERATING ADJUSTMENT #5
RUCO's Property Tax Adjustment

Schedule TJC-10

LINE NO.	DESCRIPTION	AMOUNT
1	Property Taxes per Company's Rate Application	\$ 39,083
2	Actual 2000 Water Property Tax Bills	28,448
3	RUCO's Adjustment	<u>(10,635)</u>

References:

Line 1 - Schedule C-1, page 1; Test Year Adjusted Results	\$ 41,820
LESS: 2/24/99 - ADHS	500
3/24/99 - ACC	22
6/1/99 - State of Arizona	15
12/1/99 - Maricopa County - Permit	<u>2,200</u>
Company's Projected Test Year Property Taxes per Application	39,083
Line 2 - Company's Actual Tax Bills and response to RUCO's DR #4.7.....	<u>28,448</u>
RUCO's Recommended Adjustment	<u>\$ (10,635)</u>

Rio Verde Utilities, Inc. - **WATER DIVISION**
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 Test Year Ended December 31, 1999

Schedule TJC-11

OPERATING ADJUSTMENT #6
PAYROLL ADJUSTMENT

LINE NO.	DESCRIPTION	AMOUNT	REFERENCE
1	General Manager	\$ 60,000	Staff letter dated 11/13/2000
2	Assistant Operator I	34,320	Staff letter dated 11/13/2000
3	Assistant Operator II	27,560	Staff letter dated 11/13/2000
4	Lab Technician	<u>10,200</u>	Staff letter dated 11/13/2000
5	Payroll Subtotal	132,080	Summation of Line #1, 2, 3 and 4
6	Assistant General Manager	42,000	Testimony TJC
	Hours Overtime Pay:		
7	Assistant Operator I	4,412	RUCO DR# 6.1
8	Assistant Operator II	<u>979</u>	RUCO DR# 6.1
9	Total Payroll	179,471	Summation of Line #5, 6, 7 and 8
10	Water Division - RUCO's Payroll Recommendation	<u>89,735</u>	Water Division - 50% of Line #9
11	Payroll per Company's Application - Water	<u>104,146</u>	Company's Schedule C-1, page 1
12	RUCO's Recommended Adjustment - Water	<u>(14,411)</u>	Line #10 less Line #11

Rio Verde Utilities, Inc. - **WATER DIVISION**
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 Test Year Ended December 31, 1999
OPERATING ADJUSTMENT #8
RUCO's RATE CASE EXPENSE ADJUSTMENTS

Schedule TJC-12

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>REFERENCES</u>
1	Company Estimated Rate Case Expense - Water	\$ 60,000	Schedule C-2, page 6
LESS:			
2	Over Estimates	5,400	NOTE (A): RUCO DR #3.6
3	Amount Allocated to Water Division - 50%	<u>50%</u>	
4	Amount to be Amortized	2,700	Line 2 X Line 3
5	Estimated Amortization Period in Years	<u>5</u>	Schedule C-2, page 6
6	Annual Adjustment Recommended by RUCO	<u>\$ (540)</u>	Line 4 X Line 5

NOTE (A):

"Per Legal Expense Estimate of Sallquist & Drummond, P.C."

	<u>AMOUNT</u>
Line 65 - Prepare Opening Brief.....	2,700
Line 66 - Review Other Parties Opening Briefs.....	900
Line 67 - Prepare Reply Brief.....	1,260
Line 68 - Review Hearing Officer's Recommended Order and Prepare Exceptions.....	540
	<u>5,400</u>

Rio Verde Utilities, Inc. - **WATER DIVISION**
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Test Year Ended December 31, 1999

Schedule TJC-13

OPERATING ADJUSTMENT #9
Depreciation & Amortization Expense Adjustment - Water

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>REFERENCES</u>
1	Total Plant	\$ 6,441,556	TJC-3
2	Depreciation Rate	<u>3.064119%</u>	Schedule C-2, page 4
3	Depreciation Expense	197,377	Line 1 X Line 2
4	Total CIAC	1,417,924	Company's G/L, page 104
5	Amortization Rate	<u>3.064119%</u>	Schedule C-2, page 4
6	Amortization Income	43,447	Line 4 X Line 5
7	Net Depreciation & Amortization	153,930	Line 3 minus Line 6
8	Net Depreciation & Amortization per Company	<u>162,599</u>	Schedule C-1, page 1 - Test Year Adjusted Results
9	RUCO's Recommended Adjustment	<u>(8,669)</u>	Line 7 minus Line 8

OPERATING ADJUSTMENT #10
INCOME TAX EXPENSE

LINE NO.	DESCRIPTION	[A]	[B]	[C]	[D]
<i>Calculation of Arizona Income Tax</i>					
1	Operating Income (Schedule TJC-7, Column (C), L40)	\$ 231,081			
2	Income Taxes Used to Calculate Operating Income (Schedule TJC-7, L37)	\$ 59,370			
3	Operating Income Before Income Taxes (L1 + L2)		\$ 290,452		
4	Less: Synchronized Interest (L23)		\$ 116,978		
5	Arizona Taxable Income (L3 - L4)			\$ 173,474	
6	Arizona State Income Tax Rate			8.00%	
7	Arizona Income Tax (L5 X L 6)				\$ 13,878
<i>Calculation of Federal Income Tax</i>					
8	Operating Income Before Income Taxes (L3)			\$ 290,452	
9	Less: Arizona Income Tax (L7)			\$ 13,878	
10	Less: Synchronized Interest (L23)			\$ 116,978	
11	Federal Taxable Income (L8 + L9 + L10)			\$ 159,596	
		<u>Taxable Income</u>	<u>Tax Rate</u>	<u>Tax</u>	
12	Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15%	\$ 50,000	15.00%	\$ 7,500	
13	Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 25%	\$ 25,000	25.00%	\$ 6,250	
14	Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34%	\$ 25,000	34.00%	\$ 8,500	
15	Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39%	\$ 59,596	39.00%	\$ 23,242	
16	Federal Tax on Fifth Income Bracket (\$335,001 to \$10 million) @ 34%	\$ -	34.00%	\$ -	
17	Total Federal Income Tax (Shown in Column (D))	\$ 159,596			\$ 45,492
18	Combined Federal and State Income Tax - RUCO(L7 + L17)				\$ 59,370
19	Income Tax - Company (Company Schedule C-1)				23,017
20	RUCO Adjustment				\$ 36,353
<i>Calculation of Interest Synchronization</i>					
21	Rate Base (Schedule TJC-2, Col. (C), Line 15)	\$ 3,278,841			
22	Weighted Average Cost of Debt (Schedule TJC-17, Col. [F], L1 + L2)		3.57%		
23	Synchronized Interest (L21 X L22)	\$ 116,978			

GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
<i>Calculation of Gross Revenue Conversion Factor:</i>					
1	Revenue	1.0000			
2	Less: Combined Federal and State Tax Rate (Line 10)	0.4343			
3	Subtotal (L1 - L2)	0.5657			
4	Revenue Conversion Factor (L1 / L3)	1.7676			

<i>Calculation of Effective Tax Rate:</i>					
5	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
6	Arizona State Income Tax Rate	8.0000%			
7	Federal Taxable Income (L5 - L6)	92.0000%			
8	Applicable Federal Income Tax Rate (Line 32)	38.5057%			
9	Effective Federal Income Tax Rate (L7 x L8)	35.4252%			
10	Combined Federal and State Income Tax Rate (L6 +L9)	43.4252%			

11	Required Operating Income (Schedule TJC-1, Column (B), Line 5)	\$ 350,778			
12	Adjusted Test Year Operating Income (Loss) (Schedule TJC-7, Line 40)	\$ 231,081			
13	Required Increase in Operating Income (L11 - L12)		\$ 119,697		
14	Income Taxes on Recommended Revenue (Col. (D), L31)	\$ 151,246			
15	Income Taxes on Test Year Revenue (Col. (B), L31)	\$ 59,370			
16	Required Increase in Revenue to Provide for Income Taxes (L14 -L15)		\$ 91,876		
17	Total Required Increase in Revenue (L13 + L16)		\$ 211,573		

	Test Year	RUCO Recommended	
18	Revenue (Schedule TJC-8, Col.(C), Line 8 & Sch. TJC-1, Col. (B), Line 9)	\$ 981,916	\$ 1,193,489
19	Less: Operating Expenses Excl. Inc. Tax (Sch TJC-7, Col. (C), L9 thru L36)	\$ 691,464	\$ 691,464
20	Less: Synchronized Interest (L35)	\$ 116,978	\$ 116,978
21	Arizona Taxable Income (L18 - L19 - L20)	\$ 173,474	\$ 385,046
22	Arizona State Income Tax Rate	8.00%	8.00%
23	Arizona Income Tax (L21 x L22)	\$ 13,878	\$ 30,804
24	Federal Taxable Income (L21 - L23)	\$ 159,596	\$ 354,243
25	Federal Tax on First Income Bracket (\$1 - \$50,000) @ 15%	\$ 7,500	\$ 7,500
26	Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 25%	\$ 6,250	\$ 6,250
27	Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34%	\$ 8,500	\$ 8,500
28	Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 39%	\$ 23,242	\$ 91,650
29	Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34%	\$ -	\$ 6,543
30	Total Federal Income Tax	\$ 45,492	\$ 120,443
31	Combined Federal and State Income Tax (L23 + L30)	\$ 59,370	\$ 151,246
32	Applicable Federal Income Tax Rate [Col. (D), L30 - Col. (B), L30] / [Col. (C), L24 - Col. (A), L24]		38.5057%

<i>Calculation of Interest Synchronization:</i>					
33	Rate Base (Schedule TJC-2, Col. (C), Line 15)	\$ 3,278,841			
34	Weighted Average Cost of Debt (Schedule TJC-17, Col. [F], L1 + L2)	3.57%			
35	Synchronized Interest (L33 X L34)	\$ 116,978			

ADJUSTMENT TO REQUESTED NEW DEBT FINANCING BY RIO VERDE UTILITIES

LINE NO.	ACCOUNT NO.	ACCOUNT NAME	(A) TOTAL PLANT ADDITIONS 1998 & 1999	(B) COMPANY REQUESTED PLANT AMOUNT TO BE FINANCED	(C) LESS AMOUNT FINANCED WITH CIAC	(D) RUCO RECOMMENDED LOAN AMOUNT TO BE APPROVED
1	311	Electric Pumping Equipment	\$ 302,085	\$ 302,085	\$0	\$ 302,085
2	331	Transmission & Distribution Mains	1,115,417	988,304	537,434	577,983
TOTAL AMOUNT OF DEBT FINANCING REQUESTED BY COMPANY				\$ 1,290,389		
TOTAL AMOUNT OF DEBT FINANCING RECOMMENDED BY RUCO.....						\$ 880,068
RUCO RECOMMENDED ADJUSTMENT ON DEBT FINANCING.....				<u>\$ (410,321)</u>		

NOTE:

- Column (A): Refer to Company's Rate Case Filing - Schedule B-2 pages 2c & 2d - 1998 & 1999 Plant Additions.
- Column (B): Company's response to RUCO's Data Request #1.30, marked DR-1.
- Column (C): Data was obtained from the Company's response to RUCO's Data Request #2.7 - Contributed Plant.
- Column (D): Column (A) minus Column (C).

COST OF DEBT - PROPOSED LOAN ADJUSTMENT

<u>LINE</u> <u>NO.</u>	<u>DESCRIPTION</u>	<u>AMOUNT</u>	<u>TOTALS</u>
1	Total Amount of RUCO Recommended New Loan - Water	\$ 880,068	
2	Fixed APR on New Proposed CoBank Loan	X 9.75%	
3	Total Annual Interest Expense on RUCO's Recommended Loan Amount		\$ 85,807
LESS:			
4	CoBank's Required Debt Reserve Fund - 10% of Original Loan Principal Line 1 X 10%.....	\$ 88,007	
5	Interest Earnings on RUCO's Recommended Proposed CoBank Loan	X 4.50%	
6	Total Annual Interest Earnings on CoBank's Required Debt Reserve		- 3,960
7	Interest Attributable to New Loan Net of 10% Debt Reserve Fund Earnings		\$ 81,846
ADD:			
8	Annual Amortization of New Loan, 1% Finance Charge - Amortized over 20 yrs.		440
9	Total Annual Effective Interest on New Loan		<u>\$ 82,286</u>
10	Effective Interest Rate - Line 9 / Line 1		<u>9.35%</u>

RIO VERDE UTILITIES - WATER DIVISION
Docket No. WS-02156A-00-0321 and WS-02156A-00-0323
TEST YEAR ENDED DECEMBER 31, 1999
COST OF CAPITAL

Schedule TJC-17

<u>LINE NO.</u>	<u>DESCRIPTION</u>	<u>(A) AMOUNT</u>	<u>(B) ADJUSTMENT</u>	<u>(C) ADJUSTED BALANCE</u>	<u>(D) CAPITAL RATIO</u>	<u>(E) COST</u>	<u>(F) WEIGHTED COST</u>
1	Long-Term Debt: Second Rio Verde Co. Loan	\$ 566,223		\$ 566,223	14.66%	9.80%	1.44%
2	CoBank Proposed Loan	1,290,389	(410,321)	880,068	22.79%	9.35%	2.13%
3	Equity	2,415,521		2,415,521	62.55%	11.40%	7.13%
4	TOTAL	<u>\$ 4,272,133</u>		<u>\$ 3,861,812</u>	<u>100.00%</u>		<u>10.70%</u>