

ORIGINAL



0000023659

RECEIVED

1 FENNEMORE CRAIG
Norman D. James (No. 006901)
2 Jay L. Shapiro (No. 014650) 2005 JUL 20 A 11: 39
3003 N. Central Avenue
3 Suite 2600
Phoenix, Arizona 85012 AZ CORP COMMISSION
4 Attorneys for Chaparral City DOCUMENT CONTROL
Water Company, Inc.

6 **BEFORE THE ARIZONA CORPORATION COMMISSION**

7 IN THE MATTER OF THE APPLICATION DOCKET NO. W-02113A-04-0616
8 OF CHAPARRAL CITY WATER
9 COMPANY, INC., AN ARIZONA
10 CORPORATION, FOR A
11 DETERMINATION OF THE CURRENT
FAIR VALUE OF ITS UTILITY PLANT
AND PROPERTY AND FOR INCREASES
IN ITS RATES AND CHARGES FOR
UTILITY SERVICE BASED THEREON.

12
13
14
15
16 **CHAPARRAL CITY WATER COMPANY'S**
17 **REPLY BRIEF**
18
19
20
21
22
23
24
25
26

TABLE OF CONTENTS

		Page
1		
2		
3	I. INTRODUCTION	1
4	II. RATE BASE	3
5	A. Adjustments to Rate Base	3
6	1. Shea Water Treatment Plant Expansion	3
7	2. Fountain Hills Boulevard Main	5
8	B. Other Rate Base Issues.....	6
9	1. Central Arizona Project Hook-Up Fees	6
10	2. Tank Inspection and Cleaning.	8
11	C. Arizona's Constitution Requires the Commission to Find and Use the Fair Value of the Company's Plant and Property to Set Rates	8
12	III. INCOME STATEMENT	11
13	A. Staff's Adjustments to Operating Expenses	11
14	1. Staff's Averaging of Expenses	11
15	B. RUCO's Adjustment to Operating Expenses.....	12
16	1. Depreciation Expense	12
17	2. Adjustment to Property Tax Expense	12
18	3. Wages and Salaries Expense.....	14
19	4. Adjustment to Purchased Power Expenses	14
20	5. Adjustment to Outside Services Expense	14
21	IV. PURCHASED POWER AND WATER ADJUSTMENT MECHANISMS	15
22	A. Purchased Water and Power Costs Are Significant, Beyond the Company's Control, and Are Likely to Increase	15
23	B. The Adjustment Mechanisms Comport With All Constitutional and Legal Requirements	17
24	V. COST OF CAPITAL	19
25	A. Reply to Staff.....	19
26	1. The Methods and Inputs Chosen by Staff are Conceptually Flawed and Depress the Cost of Equity.....	19

TABLE OF CONTENTS
(continued)

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26

		Page
	2. Staff's Criticisms of the Company's DCF Model Equity Cost Estimates Are Unfounded.....	20
	3. Staff's Criticisms of the Risk Premium Method Are Unfounded.....	25
	4. Chaparral City Has Presented Substantial Evidence That It Faces Additional Risk and Therefore Requires a Higher Equity Return.....	29
	B. Reply to RUCO.....	31
VI.	RATE DESIGN.....	34
	A. RUCO's Rate Design Discriminates Against Customers on Larger-Sized Meters.....	34
	B. Staff Continues to Ignore the Impact of an Inverted-Tier Rate Design.....	36
VII.	MISCELLANEOUS ISSUES.....	37

**CHAPARRAL CITY WATER COMPANY
PRE-FILED TESTIMONY**

Pre-Filed Testimony	Hearing Exhibit	Abbreviation
Direct Testimony of Robert N. Hanford	A-1	Hanford Dt.
Rebuttal Testimony of Robert N. Hanford	A-2	Hanford Rb.
Rejoinder Testimony of Robert N. Hanford	A-3	Hanford Rj.
Direct Testimony of Thomas J. Bourassa	A-4	Bourassa Dt.
Rebuttal Testimony of Thomas J. Bourassa	A-5	Bourassa Rb.
Rejoinder Testimony of Thomas J. Bourassa	A-6	Bourassa Rj.
Direct Testimony of Thomas M. Zepp	A-7	Zepp Dt.
Rebuttal Testimony of Thomas M. Zepp	A-8	Zepp Rb.
Rejoinder Testimony of Thomas M. Zepp	A-9	Zepp Rj.
Direct Testimony of Ronald L. Kozoman	A-10	Kozoman Dt.
Rebuttal Testimony of Ronald L. Kozoman	A-11	Kozoman Rb.
Rejoinder Testimony of Ronald L. Kozoman	A-12	Kozoman Rj.

STAFF PRE-FILED TESTIMONY

Pre-Filed Testimony	Hearing Exhibit	Abbreviation
Direct Testimony of Marlin Scott, Jr.	S-1	Scott Dt.
Direct Testimony of Alejandro Ramirez	S-3	Ramirez Dt.
Surrebuttal Testimony of Alejandro Ramirez	S-4	Ramirez Sb.
Direct Testimony of Jamie R. Moe	S-6	Moe Dt.
Surrebuttal Testimony of Jamie R. Moe	S-7	Moe Rb.

RUCO PRE-FILED TESTIMONY

Pre-Filed Testimony	Hearing Exhibit	Abbreviation
Direct Testimony of William Rigsby	R-3	Rigsby Dt.
Surrebuttal Testimony of William Rigsby	R-4	Rigsby Sb.
Direct Testimony of Rodney Moore	R-5	Moore Dt.
Surrebuttal Testimony of Rodney Moore	R-6	Moore Sb.

1 **I. INTRODUCTION**

2 This is rate case in which just and reasonable rates will be established for
3 Chaparral City Water Company (“Chaparral City” or “the Company”). The process and
4 procedures the Commission follows to gather and consider evidence in setting rates are
5 quasi-judicial in character. *State ex rel. Corbin v. Arizona Corporation Comm’n*, 143
6 Ariz. 219, 223-24, 693 P.2d 362, 366-67 (App. 1984). In that case, the Arizona Court of
7 Appeals summarized the procedural requirements for setting rates as follows:

8 It is a [proceeding] which carries with it fundamental
9 procedural requirements. There must be a full hearing. There
10 must be evidence adequate to support pertinent and necessary
11 findings of fact. Nothing can be treated as evidence which is
12 not introduced as such. Facts and circumstances which ought
13 to be considered must not be excluded. Facts and
14 circumstances must not be considered which should not
15 legally influence the conclusion. Findings based on the
16 evidence must embrace the basic facts which are needed to
17 sustain the order. . . .

18 A proceeding of this sort requiring the taking and weighing of
19 evidence, determinations of fact based upon the consideration
20 of the evidence, and the making of an order supported by
21 such findings, has a quality resembling that of a judicial
22 proceeding. Hence it is frequently described as a proceeding
23 of a *quasi judicial* character. The requirement of a ‘full
24 hearing’ has obvious reference to the tradition of judicial
25 proceedings in which evidence is received and weighted by
26 the trier of the facts. The ‘hearing’ is designed to afford the
safeguard that the one who decides shall be bound in good
conscience to consider the evidence, to be guided by that
alone, and to reach his conclusion uninfluenced by extraneous
considerations which in other fields might have play in
determining purely executive action. The ‘hearing’ is the
hearing of evidence and argument.

22 *Id.* at 224, 693 P.2d at 367, citing *Morgan v. United States*, 298 U.S. 468 (1936) (italics
23 in original).

24 Thus, the Commission’s decision must be based on the evidence presented by the
25 parties in this proceeding, with due regard to the credibility of the witnesses and the
26 authorities and precedent supporting the parties’ positions. In this proceeding, only one

1 party, Chaparral City, has presented substantial evidence concerning the contested issues
2 sufficient to sustain a decision based on the record.

3 In their briefs, the Utilities Division (“Staff”) and Residential Utility Consumer
4 Office (“RUCO”) provide arguments that are conclusory and unsupported by the record.
5 Staff, for example, relies on assertions by Jamie Moe, the Staff’s accounting witness, to
6 justify excluding the Company’s Shea water treatment plant (“WTP”) expansion from
7 rate base, even though Mr. Moe is not an engineer and, when cross-examined on the
8 factual basis for his recommendation, could not answer even basic questions about the
9 need for sufficient treatment capacity to ensure reliable service to existing customers. *See*
10 Staff Br. at 3; *compare* Tr. at 703-12.¹ Similarly, Staff criticizes the Company’s cost of
11 capital witness, Dr. Thomas Zepp, for using methods he did not use (e.g., using average
12 stock prices to compute dividend yields) and for using methods that Staff’s witness also
13 used (e.g., forecasts of growth rates). *See* Staff Br. at 4-5; *compare* Tr. at 251-53 and
14 262-63. The record does not support these arguments or, for that matter, much of what is
15 claimed in Staff’s brief.

16 RUCO has likewise failed to support its recommendations with substantial
17 evidence. For example, RUCO continues to claim the new transmission main constructed
18 along Fountain Hills Boulevard, at a cost of nearly \$1 million, should be excluded from
19 rate base because it generates cost savings, even though the two engineers who testified,
20 Robert Hanford and Marlin Scott, both confirmed that the main produces hydraulic
21 efficiencies, not cost savings, because no additional pumping is required. *See* RUCO Br.
22 at 5; *compare* Tr. 636-38. Similarly, on the issue of property tax expense, RUCO argues

23
24 ¹ Citations to the record are made using the same format and abbreviations as in the
25 Company’s Closing Brief. A list of the witnesses’ pre-filed testimony is again provided
26 after the Table of Contents for the Administrative Law Judge’s convenience. Staff’s
Closing Brief is abbreviated as Staff Br.”, RUCO’s Initial Closing Brief is abbreviated as
“RUCO Br.”, and the Company Closing Brief is abbreviated as “Company Br.”

1 in its brief that only RUCO has followed the Arizona Department of Revenue's
2 ("ADOR") formula for computing the Company's full cash value and urges the
3 Commission to adopt that formula, when RUCO's witness admitted that *all* of the parties
4 are using the same ADOR formula. *See* RUCO Br. at 9; *compare* Tr. at 576-78.

5 In sum, the Commission is faced with a choice: The Commission either can either
6 accept the unsupported assertions of Staff and RUCO, and ignore the record and the
7 precedent supporting the Company's recommendations, or the Commission can be
8 guided by the record and precedent, adopt the Company's recommendations and
9 authorize rates that will actually produce a reasonable rate of return on the Company's
10 rate base.

11 **II. RATE BASE**

12 **A. Adjustments to Rate Base.**

13 **1. Shea Water Treatment Plant Expansion.**

14 There is no better illustration of Staff's strained and unsupported arguments than
15 its position on the Shea WTP expansion. That project was completed 3 months after the
16 test year, and was intended to ensure adequate service to existing customers. On this
17 issue, Chaparral City met its burden of proof by presenting the testimony of Robert
18 Hanford, a professional engineer with more than 25 years experience working with water
19 utilities. Hanford Dt. at 1. Mr. Hanford is Chaparral City's District Manager and is
20 responsible for managing all of the Company's Arizona operations. Mr. Hanford has
21 personal knowledge of the operation of the Shea WTP before and after the expansion.

22 Mr. Hanford testified that the Shea WTP was built to enhance and improve system
23 reliability. Tr. at 55-56, 63-66; Hanford Rb. at 2-3; Hanford Rj at 2-5. During the test
24 year, Chaparral City's peak day demand was 10.3 million gallons. Ninety percent of the
25 Company's water supply comes from the CAP, and before March 2004, the Company
26 was unable to treat more than 8 million gallons of CAP water per day. *Id.* Moreover, if

1 one of the two treatment modules then operating was out of service for maintenance,
2 repair or emergency, the Company would be able to meet no more than half its peak day
3 demand with CAP water. Tr. at 63-66. The Company's lack of adequate water treatment
4 capacity to meet peak demands during an emergency was contrary to sound engineering
5 principles. This is true, Mr. Hanford testified, even if the number of customers never
6 exceeded the test year level. Tr. at 46. In other words, the test year customers were
7 intended as and are the beneficiaries of this capital project.

8 Staff disagrees and argues that the Shea WTP was not necessary to serve test year
9 customers. Staff Br. at 3. That argument is not based on the testimony of its engineering
10 witness, Marlin Scott, Jr. Nowhere in the record does Mr. Scott take issue with the
11 Company's evidence showing that the Shea WTP was necessary to serve test year
12 customers. See Scott Dt.; Tr. at 631-42. Instead, Staff relies solely on the testimony of
13 its rate analyst, Jamie Moe. As Mr. Moe repeatedly testified, however, he is not an
14 engineer. Therefore, he could not legitimately dispute Mr. Hanford's testimony that the
15 Shea WTP is necessary to reliably meet peak demand measured by test year customer
16 levels. Tr. at 686, 701-02. Nor could he legitimately dispute Mr. Hanford's testimony
17 that before the Shea WTP expansion the Company's lacked sufficient operational
18 flexibility to do routine repairs and maintenance or address emergencies. Tr. at 690.
19 Finally, he could not legitimately dispute Mr. Hanford's testimony that the Shea WTP is
20 necessary even if no customers were added after the test year. Tr. at 712.

21 Having failed to present competent evidence that the Shea WTP was not necessary
22 to meet demand from and improve service to test year customers, Staff did not and cannot
23 rebut the evidence presented by the Company, let alone meet its own burden of proof. By
24 including the Shea WTP in rate base, the Commission will continue to send the message
25 that public service corporation should "proactively address system reliability needs."
26 *Bella Vista Water Co.*, Decision No. 65350 (Nov. 1, 2002) at 11. Therefore, the Shea

1 WTP should be included in rate base in this proceeding.

2 **2. Fountain Hills Boulevard Main.**

3 RUCO's position on inclusion of the Main in rate base is also unsupported by
4 competent evidence. RUCO insists that the installation of the Main resulted in cost
5 savings that must be "matched" before the Main can be included in rate base. RUCO Br.
6 at 4.² RUCO argues that the evidence of cost savings is "overwhelming." *Id.* at 5. This
7 assertion has no support in the record.

8 RUCO's "evidence of cost savings" appears to start with the testimony of Mr.
9 Hanford during the hearing. On page 5 of its brief, RUCO offers several citations to Mr.
10 Hanford's testimony, yet nowhere does RUCO provide evidence that Mr. Hanford
11 testified the Main has or will result in cost savings. In fact, Mr. Hanford testified that the
12 Main is *not* expected to result in cost savings. Tr. at 36-39. *See also* Hanford Rj. at 6-7.
13 The Main was constructed to increase the "robustness" of the system by allowing the
14 Company to deliver more water more efficiently in Zone 1, the system's lowest pressure
15 zone. Tr. at 37 and 39. *See also* Hanford Dt. at 9; Hanford Rj. at 7.

16 RUCO also claims that it has proved cost savings through Exhibit R-9. On its
17 face, Exhibit R-9 is a 1997 feasibility study on several potential projects for Chaparral
18 City, which the Company provided RUCO in response to data requests concerning the
19 need for the Shea WTP and Main. Obviously, the 1997 study contains nothing more than
20 projections of what could occur if certain additional facilities were built in the future.
21 While some pumping cost savings are projected in the 1997 study, RUCO made failed to
22 identify any connection between the cost savings estimated in 1997 for several different
23 projects and the Main completed in 2004. Accordingly, all the Commission is left with

24 _____
25 ² This Commission has previously held that the mere possibility of a mismatch does not
26 bar inclusion of post test year plant in rate base. *Bella Vista Water Co.*, Decision No.
65350 (Nov. 1, 2002) at 11.

1 the testimony of RUCO's rate analyst, Rodney Moore, who testified that he believed
2 there must be cost savings because the Main increases efficiency. Tr. at 533-34. Mr.
3 Hanford, however, was clearly referring to *hydraulic* efficiency, not cost savings. Tr. at
4 37.

5 Staff's engineer agreed with Mr. Hanford. Specifically, Mr. Scott testified that
6 there are no pumping cost savings from the Main because the water is not pumped – it
7 goes through treatment in Zone 2 and is then gravity fed into Zone 1. Staff Br. at 10,
8 *citing* Tr. at 635-36. The Main simply allows more water to move to the end of the zone.
9 *Id.* While RUCO attempts to discredit Mr. Scott, who has evaluated numerous water
10 utility companies, calling his testimony “incredible” (RUCO Br. at 5, n. 1), RUCO cannot
11 overcome the fact that its position rests solely on the speculation of its rate analyst. Mr.
12 Moore's guesswork is simply insufficient to overcome the evidence presented by the
13 Company (and supported by Staff's engineer) that there are no cost savings to “match” to
14 the Main. Like the Shea WTP, the Main was proactive effort by the Company to improve
15 system reliability, and should be included in rate base. *See* Decision No. 65350 at 11.³

16 **B. Other Rate Base Issues.**

17 **1. Central Arizona Project Hook-Up Fees.**

18 RUCO's adjustment to reduce Chaparral City's rate base by roughly \$220,000, the
19 amount of hook up fees collected during the test year, is simply another example of
20 RUCO's failure to support its position with substantial evidence and/or precedent. In the
21

22 ³ Another way to evaluate the validity of RUCO's claim is to consider the Company's
23 existing commodity rates, which are \$2.16, \$2.29 and \$2.49 per 1,000 gallons in Zones 1,
24 2 and 3, respectively Kozoman Dt. at 4-5. The three pressure zones are based on the
25 elevation of the customer's service location, and take into account the additional cost of
26 pumping water to Zones 2 and 3. *Id.* at 5. The Main is located in Zone 1, the portion of
the system with the lowest elevation and where no additional pumping is required to
maintain system pressure. Accordingly, there is no basis to assume that the Main reduces
pumping costs.

1 Company's last rate case, the Commission ordered the collection of hook-up fees and the
2 treatment of those fees as *revenue*. Decision No. 57395 (May 23, 1991) at 5-6. In fact,
3 one-half of the revenue requirement was to come from the collection of hook-up fees. *Id.*
4 All parties agree that hook up fees should be treated as CIAC on a going-forward basis.
5 Only one party, RUCO, goes further and recommends that test year hook-up fees be
6 *retroactively* converted to contributions in aid of construction ("CIAC").

7 In support of its recommendation, RUCO asserts that only one thing matters: "it is
8 ratepayers who pay the hook-up fees and it is the ratepayers who should get recognition
9 for paying the hook-up fees." RUCO Br. at 6. As a preliminary matter, it is common
10 knowledge that real estate developers and home builders generally pay hook up-fees, not
11 ratepayers. In any case, RUCO's argument completely misses the point. The hook-up
12 fees are revenue, indistinguishable from revenue collected from ratepayers for metered
13 water sales. Tr. at 831-32. Revenue can be used for any purpose, including payment of
14 operating expenses, funding new plant construction or paying shareholder dividends. *Id.*
15 There is nothing in Decision No. 57395 (or anywhere else in the record) suggesting the
16 Commission believed the hook-up fees are different from any other revenues collected by
17 the Company, and therefore no basis to account for hook-up fees in a manner that differs
18 from other types of revenues.

19 According to RUCO, however, when revenues paid by ratepayers are used for
20 plant construction, CIAC should be increased, decreasing rate base. Taken to its illogical
21 conclusion, this would include revenues from metered water sales, which customers must
22 pay each month to receive utility service. Obviously, this is ludicrous. When customers
23 pay their monthly water bills, the Company, like any other public service corporation,
24 may choose to reinvest a portion of its revenue in plant. Even RUCO does not suggest
25 that this paid-in-capital should be reclassified as CIAC. Since revenues from hook-up
26 fees are indistinguishable from revenues from metered water sales, they should be treated

1 no differently for ratemaking purposes. Therefore, RUCO's recommendation must be
2 rejected.

3 **2. Tank Inspection and Cleaning.**

4 RUCO opposes the Company's proposal to amortize and recover the costs of tank
5 inspection and cleaning. RUCO Br. at 16.⁴ RUCO does not claim these costs are not
6 necessary, nor does RUCO claim that ratepayers do not benefit from them. Rather,
7 according to RUCO, these costs were recovered through 2003 operating revenues. *Id.*
8 However, RUCO's witness recognizes that this is the first time these costs occurred. *Id.*
9 Thus, it is difficult to imagine how he concluded that they were recovered in 2003
10 through rates set in 1991. Additionally, if RUCO's recommendation were adopted, the
11 Company would have no means of recovering these costs. Since these costs are a
12 necessary expense, they should be recovered. Bourassa Rj. at 15 The Company's
13 proposal allows for recovery in a manner that is fair and equitable, as costs are spread
14 over the life of the intended benefit.

15 **C. Arizona's Constitution Requires the Commission to Find and Use the**
16 **Fair Value of the Company's Plant and Property to Set Rates.**

17 As discussed above, Staff and RUCO disagree with the Company concerning the
18 fair value of Chaparral City's utility property, primarily due to differences in treatment of
19 post test year plant. The parties also disagree over what to do with fair value once it is
20 determined.

21 Consistent with the Arizona Constitution and over half a century of jurisprudence,
22 Chaparral City asserts that the Commission must not only find a the fair value of the
23 utility's plant and property, but must use that finding as the rate base ("FVRB") to
24

25 ⁴ Staff did not address this issue in its Closing Brief, and presumably agrees with
26 Chaparral City's recommendations.

1 determine the Company's revenue requirement and resulting rates. Arizona Constitution,
2 Article 15, Section 14; *Phelps Dodge Corp. v. Ariz. Electric Power Coop.*, 207 Ariz. 95,
3 83 P.2d 573 (App. 2004) (review denied); *US WEST Communications, Inc. v. Arizona*
4 *Corp. Comm'n*, 201 Ariz. 242, 245, 34 P.3d 351, 355 (2001); *Ariz. Corp. Comm'n v.*
5 *Arizona Public Serv. Co.*, 113 Ariz. 368, 370, 555 P.2d 326, 328 (1976); *Simms v. Round*
6 *Valley Light & Power Co.*, 80 Ariz. 145, 151, 294 P.2d 378, 382 (1956). As recognized
7 by the court in *US WEST*, fair value must play a role in the determination of rates and the
8 Commission is not free to ignore its fair value finding once made. *US WEST*, 201 Ariz.
9 at 246, 34 P.3d at 355. Moreover, in a monopoly setting, Arizona courts have repeatedly
10 required the use of the FVRB to set rates, requiring the FVRB to be multiplied by the rate
11 of return to yield the revenue requirement. *Id.* at 245, 34 P.3d at 354.

12 Chaparral City does not dispute that the Commission has discretion in setting
13 rates. Staff Br. at 8, *citing US WEST*. Nor does the Company dispute that the
14 Commission has often applied the weighted cost of capital to the original or historic cost
15 of the utility's plant ("OCRB") to determine the revenue requirement. RUCO Br. at 4.
16 In doing so, however, the Commission has acted illegally, as the Arizona courts have
17 made clear. Fair value must be the "base" used to determine rates; rates that bear no
18 relationship to fair value are unjust and unreasonable. *Simms*, 80 Ariz. at 151, 294 P.2d
19 at 382.

20 In this case, both Staff and RUCO attempt to argue in their briefs that their
21 recommendations use FVRB. For example, RUCO asserts that under the Commission's
22 traditional approach, a special "fair value rate of return" is computed to apply to the
23 FVRB.⁵ RUCO Brief at 3. Likewise, Staff asserts:

24 _____
25 ⁵ The truth is that RUCO has computed a revenue requirement, then divided it by the
26 FVRB to compute the fair value rate of return. Moore Sb. at 3. No rate of return is ever
directly "applied" to FVRB to determine operating income or revenue requirement.

1 Staff has considered and recommended a finding of fair value
2 and a fair rate of return on that fair value. In order to ensure
3 that the utility is given the opportunity to earn a fair rate of
4 return on the fair value, Staff has proposed a weighted
5 average cost of capital, which, when applied to the utility's
6 OCRB yields just and reasonable rates. Staff's recommended
7 FVRB similarly provides the utility an opportunity to earn its
8 cost of capital. This relationship results in just and reasonable
9 rates. Allowing a higher rate of return on the FVRB than that
10 recommended by Staff would provide the opportunity to earn
11 windfall profits and would not yield just and reasonable rates,
12 as required by Article XV, Section 3 of the Arizona
13 Constitution.

14 Staff Br. at 8.

15 Besides being confusing and conclusory, Staff's argument fails to explain how it
16 used FVRB to determine just and reasonable rates. What Staff does say, however, is that
17 it applied the weighted cost of capital to OCRB. *Id.* During the hearing, Staff witness
18 Moe likewise admitted that Staff determined the revenue requirement first and then
19 calculated a "fair value rate of return." Tr. at 722-23. RUCO follows the same approach.
20 Moore Sb. at 3. This means the revenue requirement remains constant no matter what
21 rate base is used. It is the rate of return that fluctuates. *Id.*; Tr. at 723-26. *Compare Ariz.*
22 *Corp. Comm'n v. Citizens Utilities Co.*, 120 Ariz. 184, 190 n. 5, 584 P.2d 1175, 1181 n. 5
23 (App. 1978) (Staff's cost of capital witness violated the fair value requirement "by
24 pegging his opinion as to rate of return to the finding of fair value," resulting in a
25 "fluctuating rate of return"). In other words, as the Company has asserted, FVRB is
26 meaningless to the revenue requirement under the approach advocated by Staff and
RUCO.⁶

In contrast, under the Company's approach, the revenue requirement is determined

⁶ Despite all the rhetoric from Staff and RUCO concerning the "original cost rate of return" and the "fair value rate of return," all three cost of capital witnesses recommended one return on equity using market-based finance models. So-called "fair value" or reconstruction cost rates of return are determined by Staff and RUCO's rate analysts using a calculator after the recommended cost of capital is applied to OCRB. See Moore Sb. at 3; Moe Dt. at 23.

1 “windfall.” Staff Br. at 8. RUCO agrees and claims the Company seeks to overstate its
2 operating income. RUCO Br. at 4. Both assertions simply miss the point. “It is well
3 established that values of utility properties fluctuate, and that owners must bear the
4 decline and are entitled to the increase.” *McCardle v. Indianapolis Water Co.*, 272 U.S.
5 400, 411 (1926). *See also Bluefield Waterworks & Improvement Co. v. Pub. Serv.*
6 *Comm’n of West Va.*, 262 U.S. 679, 690 (1923) (“If the property . . . has increased in
7 value since it was acquired, the company is entitled to the benefit of such increase.”).
8 Therefore, like any other property owner, while the current value of a utility’s property
9 may be greater (or less) than its historic cost, the utility is entitled to earn a return on that
10 value, not on the property’s historic cost. *E.g.*, *Bourassa Rj.* at 5-11 (explaining the use of
11 fair value does not result in a “windfall”); *Duquesne Light Co. v. Barasch*, 488 U.S. 299,
12 308-09 (1989) (explaining the fair value standard “mimics the operation of the
13 competitive market” and “gives utilities strong incentive to manage their affairs well and
14 to provide efficient service to the public”).

15 **III. INCOME STATEMENT**

16 **A. Staff’s Adjustments to Operating Expenses.**

17 **1. Staff’s Averaging of Expenses.**

18 Staff’s brief includes roughly a page and a quarter attempting to justify its use of
19 three-year averages to replace four categories of test year operating expenses, office
20 supplies, outside services, transportation and miscellaneous expenses. Staff Br. at 9-10.
21 In short, Staff’s use of three year averages is based exclusively on its inexperienced
22 accounting witness’ unsubstantiated conclusion that, when compared to 2001 and 2002,
23 the test year expenses are unusual or that some extenuating circumstances exist. *Id.* Staff
24 completely ignores the evidence submitted by the Company demonstrating that the 2001
25 and 2002 levels for those expenses are irregular, not the test year. *See Hanford Rb.* at 7-
26 9; *Hanford Rj.* at 7-9. In fact, Staff made virtually no effort to challenge this evidence

1 during the hearing. *See* Tr. at 46-54.

2 Additionally, Staff's use of three-year averages is not sound ratemaking. Staff's
3 recommended expense levels are not based on the test year or known and measurable
4 changes to test year expenses. Bourassa Rb. at 33. Moreover, Staff made no effort to
5 determine whether its recommended expense levels reflect the expected expenses that
6 will be incurred during the 2006-2008 period, when new rates will be in effect. Tr. at
7 729-31. For all these reasons, Staff's rejection of the test year expense levels for these
8 expense items should not be adopted by the Commission.

9 **B. RUCO's Adjustment to Operating Expenses.**

10 **1. Depreciation Expense.**

11 According to RUCO, only its depreciation rates are appropriate for the Company
12 to utilize on a going-forward basis. RUCO Br. at 7-8. Once again, this is an engineering
13 issue on which RUCO offers the testimony of its rate analyst. The depreciation rates
14 proposed by Staff and the Company were developed by the Commission's Engineering
15 Division consistent with Commission decisions adopting depreciation rates specific to
16 individual NARUC accounts. Staff Br. at 10-11; Scott Dt., Exhibit MSJ at 7. These rates
17 are designed as typical and customary rates for water utility facilities because they reflect
18 the expected lives of the assets as closely as possible. Tr. at 639-40. In contrast,
19 RUCO's recommended depreciation rates were created by its rate analyst who simply
20 averaged depreciation rates for 25 different water systems, ignoring the fact that a
21 number of those depreciation rates were composite rates rather than depreciation
22 developed for specific asset types. Tr. at 554. RUCO made no effort whatsoever to
23 determine whether its calculated depreciation rates bear any relationship to the expected
24 lives of the Company's assets. *Id.*

25 **2. Adjustment to Property Tax Expense.**

26 RUCO's arguments regarding property tax expense are also unsupported. RUCO

1 has advanced the same methodology utilized in this case on eight other occasions. *See*,
2 *e.g.*, Exhibit A-31, *Arizona Water Company (Western Group)*, Docket No. W-01445A-
3 04-0650. RUCO's methodology has already been rejected six times. *Id.*⁷ Nevertheless,
4 RUCO insists on increasing rate case expense and wasting the time of the parties and the
5 Commission reiterating the same argument.

6 As discussed in the Introduction, RUCO now argues that only it has utilized the
7 ADOR formula in determining the level of property tax expense. RUCO Br. at 8. The
8 truth is, all parties are using the ADOR formula. Tr. at 577-78; Bourassa Rb. at 16. The
9 only difference is the inputs used, *i.e.*, the annual revenue amounts used in the formula.
10 Staff and the Company have utilized projected revenues consistent with Commission
11 precedent. *E.g.*, *Rio Rico Utilities*, Decision No. 67279 at 8; *Arizona Water Company*,
12 Decision No. 64282 at 12-13; *Bella Vista Water Company*, Decision No. 65350 (Nov. 1,
13 2002) at 16; *Arizona-American Water Company*, Decision No. 67093 (June 30, 2004) at
14 9-10. RUCO refuses to do so.

15 RUCO's argument that the ADOR formula is sufficiently forward looking is
16 wrong. RUCO Br. at 9. RUCO has provided no explanation of how "doubling the three-
17 year historical average of operating revenues" inherently projects an "increase in the
18 operating revenues." In fact, ADOR simply does what it says in computing a full cash
19 value. Two years from now (or five years from now), ADOR will still double the three-
20 year historical average. However, if revenues increase, the resulting amount will be
21 higher. The effect of the doubling is merely to compute the full cash value, not estimate
22 future revenues. Bourassa Rb. at 16.

23 The Commission is engaged in ratemaking, not tax assessment, and the
24 methodology employed by Staff and the Company utilizes the revenues recommended in

25 ⁷ No decision on property taxes was rendered in the other two proceedings. *Id.*
26

1 this ratemaking proceeding. As the Commission has found again and again, this is the
2 most accurate means of setting a level of property tax expense on a going-forward basis.
3 As a consequence, RUCO's recommendation should be rejected once again.

4 **3. Wages and Salaries Expense.**

5 All parties account for the 2004 wage increases. However, RUCO uses the wrong
6 capitalization rates. In fact, RUCO is actually using the coded-default percentages from
7 the Company's payroll system, which were inadvertently provided in a data request
8 response and later corrected. Bourassa Rb. at 30; Bourassa Rj at 19. RUCO simply
9 refuses to correct the error in its recommendations and, as a result, ends up capitalizing
10 approximately 31% of wages. The evidence shows that for both 2003 and 2004 the
11 capitalization rate was approximately 17%. Bourassa Rb. at 30.

12 **4. Adjustment to Purchased Power Expenses.**

13 Staff and the Company have recommended an adjustment to account for recent
14 increases in power costs. Bourassa Rj. at 17; Moe Sb. at 16. Although RUCO opposed
15 this adjustment in prefiled testimony, it did not address the issue in its closing brief.
16 Given that RUCO has proposed an adjustment to Arizona Water Company's purchased
17 power expense in the pending rate case for that company's Western Group, the Company
18 assumes RUCO now agrees with the Company on this issue.

19 **5. Adjustment to Outside Services Expense.**

20 RUCO reduces the Company's outside services expense level by removing certain
21 legal fees from the test year. RUCO Br. at 16. RUCO is correct that the specific legal
22 matters are not likely to reoccur. However, the amount of legal fees incurred during the
23 test year reflects the legal fees the Company will incur annually during the period rates
24 will be in effect, which is the issue. Bourassa Rj. at 22.

25
26

1 **IV. PURCHASED POWER AND WATER ADJUSTMENT MECHANISMS**

2 **A. Purchased Water and Power Costs Are Significant, Beyond the**
3 **Company's Control, and Are Likely to Increase.**

4 Chaparral City is requesting authority to implement automatic adjustment
5 mechanisms that will permit its rates to be adjusted up or down in relation to increases or
6 decreases in two, narrowly defined operating expenses: purchased water and purchased
7 power. *E.g.*, Bourassa Dt. at 15-22. Purchased water and purchased power are two of
8 Chaparral City's most significant operating expenses, collectively totaling \$1.3 million
9 (as adjusted) during the test year. Bourassa Rj., Rejoinder Schedule C-1. In contrast,
10 Chaparral City's proposed net operating income (i.e., profit) is approximately \$1.2
11 million. *Id.* Relatively modest increases in the rates for water and power will have a
12 significant impact on Chaparral City's ability to earn its authorized rate of return.

13 Moreover, rates for water and power fluctuate. Chaparral City's two water
14 providers, the Central Arizona Water Conservation District ("CAWCD"), which operates
15 the Central Arizona Project, and the Central Arizona Groundwater Replenishment
16 District (which is also administered by CAWCD), adjust their rates for water and
17 groundwater replenishment services each year. Hanford Dt. at 6-7; Bourassa Rj. at 24.
18 Salt River Project ("SRP"), one of the Company's two electric service providers, is
19 unregulated and has increased its rates five times since 2000. Bourassa Rb. at 39.
20 Arizona Public Service Company ("APS"), the Company's other electric service
21 provider, was granted an automatic adjustment mechanism in Decision No. 67744 (April
22 7, 2005), allowing that utility to adjust its rates to recover increases in fuel costs. *Id.* at
23 38. Therefore, rates for water and power will change annually, if not more frequently.

24 In their respective briefs, Staff and RUCO argue that Chaparral City's purchased
25 water and power costs are not volatile and that the projected increases in those costs are
26 small when compared to the Company's total operating expenses. Staff Br. at 7; RUCO

1 Br. at 11. These arguments are misleading.

2 First, in evaluating the significance of a particular expense, the appropriate
3 comparison is not to total operating expenses, but to the Company's *income*. As
4 explained in the Company's Closing Brief, the purpose of an automatic adjustment
5 mechanism is to pass on increases or decreases in specific operating expenses so that the
6 utility's net income (i.e., profit) remains relatively constant. This protects the utility's
7 earnings when costs increase, while ensuring the utility does not over-earn when costs
8 decrease. Company Br. at 25, *quoting Residential Utility Consumer Office v. Ariz. Corp.*
9 *Comm'n*, 199 Ariz. 588, 591-92, 20 P.3d 1169, 1172-73 (App. 2001) (hereinafter,
10 "RUCO").

11 Second, there is no requirement that a particular expense be "volatile" to qualify
12 for recovery under an adjustment mechanism, only that the expense changes on a regular
13 basis and is subject to the control of a third party. Here, there is no dispute that rates for
14 water are adjusted by CAWCD annually and are trending upward. By 2008, purchased
15 water costs will increase over the adjusted test year levels by more than \$50,000, which
16 amounts to over \$100,000 of unrecovered purchased water costs from 2006 through
17 2008. Bourassa Rb. at 24. Similarly, purchased power costs are trending upward, as
18 evidenced by the fact that SRP's rates have increased five times since 2000 and twice in
19 the last 12 months. Although APS's adjustment mechanism is capped at four-tenths of a
20 cent per kilowatt-hour, APS is allowed to pass through increased fuel costs equivalent to
21 a 5% revenue increase. Bourassa Rb. at 38.⁸ Certainly, Chaparral City's costs for
22 purchasing power are as volatile as APS' costs of producing that power, which volatility
23 led the Commission to approve a fuel adjustment mechanism for APS. In sum, when
24

25 ⁸ By comparison, in Decision No. 67744, APS was granted a base revenue increase of
26 4.21%. *Id.*

1 combined with projected increases in purchased water costs, the impact on the
2 Company's earnings will certainly exceed \$100,000, and will likely approach \$200,000
3 during the 2006 to 2008 period.

4 Finally, Staff argues that if the adjustment mechanisms are approved, the
5 Company would have no incentive to minimize these costs. Staff Br. at 7. As explained
6 in the Company's Closing Brief, however, there is no evidence that Chaparral City does
7 not operate in an efficient manner. Company Br. at 27. Once again, this is an
8 engineering issue, and Staff's engineering witness, Mr. Scott, did not address it in his
9 report.

10 **B. The Adjustment Mechanisms Comport With All Constitutional and**
11 **Legal Requirements.**

12 RUCO also claims that Chaparral City's proposed adjustment mechanisms "do not
13 meet the constitutional fair value requirement or qualify as an adjustor mechanism under
14 *Scates*." RUCO Br. at 14, *citing Scates*. That argument has no legal basis and, indeed,
15 directly conflicts with the discussion of *Scates* and *RUCO* found on page 10 of RUCO's
16 brief. In both of those cases, the Arizona Court of Appeals explicitly recognized that
17 mechanisms "to permit rates to adjust automatically, either up or down, in relation to
18 fluctuations in certain, narrowly defined, operating expenses" are permissible, provided
19 that they are approved in a general rate case in which the fair value of the utility's
20 property is determined and used to set rates. *Scates*, 118 Ariz. at 535, 578 P.2d at 616;
21 *see also Residential Utility Consumer*, 199 Ariz. at 591-92, 20 P.3d at 1172-73.

22 In *Scates*, the Commission approved increased charges for the installation, moving
23 and changing of telephones, which amounted to an annual revenue increase of
24 approximately 2% per year, without any determination of the fair value of the utility's
25 utility plant and the impact of the increased charges on the rate of return on fair value.
26 *Scates*, 118 Ariz. at 533, 578 P.2d at 614. The court explained:

1 We find no material similarity between the procedure used in
2 this case by the Commission and the adoption of an automatic
3 adjustment clause. The Commission did not consider all of
4 the utility's costs when it approved this raise. The elements
5 of cost which it did consider were not easily segregated costs
of specific purchased items such as fuel or electricity; rather
they included all the operating expenses underlying moving,
installation and changing of telephones. The effect of the
increase on the rate of return was ignored.

6 *Id.*, 118 Ariz. at 536, 578 P.2d at 617. Similarly, in *RUCO*, the court found that the
7 surcharge at issue was not an automatic adjustment mechanism because it was not
8 previously approved in the context of a general rate case in which the fair value of the
9 utility's plant was determined. 199 Ariz. at 593, 20 P.3d at 1174. ("The Commission
10 appears to argue that it can *sua sponte* declare a rate increase based on an increase in the
11 cost to a utility of a specific operating expenses without there having been consideration
12 or approval of an automatic adjustment clause.").

13 In short, an automatic adjustment mechanism must initially be approved in the
14 context of a general rate case, in which the fair value of the utility's plant is found and
15 used in setting rates. "The reasonableness and justness of the rates must be related to this
16 finding of fair value." *RUCO*, 199 Ariz. at 591, 20 P.3d at 1172, quoting *Simms*, 80 Ariz.
17 at 151, 294 P.2d at 382. Here, Chaparral City has requested authority to implement
18 purchased water and power adjustment mechanisms in the context of this general rate
19 case, in which rates are established on the basis of a fair value determination. Therefore,
20 Chaparral City has complied with the requirements identified in *Scates* and *RUCO*.
21 *RUCO*'s argument that the Company's request fails to meet "a constitutional fair value
22 requirement" or otherwise fails to satisfy the criteria discussed in *Scates* and *Residential*
23 *Utility Consumer* is erroneous.⁹

24 ⁹ Staff and *RUCO* are correct in indicating that the Company relies on A.R.S. § 40-370 as
25 a general statement of policy supporting the approval of adjustment mechanisms for
26 water utilities, as opposed to imposing a legal obligation on the Commission to
mechanically approve them. As noted in the Company's Closing Brief, the Commission
has expressed approval of A.R.S. § 40-370, and has indicated that its policy "is to support

1 **V. COST OF CAPITAL**

2 **A. Reply to Staff.**

3 **1. The Methods and Inputs Chosen by Staff are Conceptually**
4 **Flawed and Depress the Cost of Equity.**

5 Staff claims its cost of equity analyses are “superior” to the approaches used by
6 two government agencies, the Federal Energy Regulatory Commission (“FERC”) and the
7 California Public Utility Commission (“PUC”) staff, which the Company’s expert, Dr.
8 Thomas Zepp, adopted in this case. Staff Br. at 1 and 8. The Staff witness, Mr. Ramirez,
9 relied on the same methods and inputs developed by former members of the Staff. *E.g.*,
10 Tr. at 424. Those methods and inputs depress Staff’s cost of equity estimates, in turn
11 reducing the cost of capital/rate of return and, ultimately, lowering Chaparral City’s
12 revenue requirement.

13 With respect to Staff’s estimates using discounted cash flow (“DCF”) constant
14 growth and multi-stage models, Staff has made the following inappropriate choices:

- 15 • Staff has given 50% weight to historic growth rates, some of which
16 result in an indicated equity cost *below the cost of debt*. In contrast,
17 the FERC relies on forward-looking estimates of growth, and
18 eliminates from consideration any individual utility equity cost
19 estimate that is not at least 40 basis points above the cost of
20 investment grade bonds.
- 21 • Staff has relied on geometric averages instead of conceptually
22 correct arithmetic averages in implementing both the constant
23 growth and the multi-stage DCF models. The use of geometric
24 averages lowers the resulting equity cost estimates.
- 25 • Staff obtained forward-looking estimates of growth and considered
26 those growth rates (albeit giving them only 50% weight) in its
constant growth DCF model estimate, but chose to ignore them in its
multi-stage DCF model, lowering the equity cost estimate produced

appropriate pass-throughs.” Decision No. 62993 (Nov. 3, 2000) at 6. The Commission,
of course, must ultimately decide whether a particular adjustment mechanism is
appropriate and how it is designed.

1 by that model.

2 Zepp Rb. at 9-14; Company Brief at 33-41.

3 With respect to Staff's capital asset pricing model ("CAPM") estimates, Staff
4 again used inputs that are inappropriate and depress the resulting equity cost estimates:

- 5 • Staff has used one interest rate as its "risk-free" rate and another
6 interest rate to estimate the market risk premium, which creates an
7 improper mismatch and reduces Staff's CAPM equity cost estimate
8 by 40 to 60 basis points.
- 9 • Staff has ignored known empirical studies of the CAPM, which
10 show that the returns estimated for low beta stocks (like the water
11 utility sample group) are too low relative to required returns for
12 average risk stocks, and has used the average yield on intermediate-
13 term Treasury Securities as the risk-free rate. That choice is
14 theoretically unsound and reduces the equity cost estimate.
- 15 • Staff uses an extremely volatile method of estimating the current
16 market risk premium, resulting in CAPM equity cost estimates that
17 move in the *opposite* direction of interest rates and beta risk, as
18 shown on page 44 of the Company's Closing Brief.

14 Zepp Rb. at 14-21; Company Brief at 41-46.

15 As the Company has shown, all of these problems result from Staff's deliberate
16 choice of inputs that depress the cost of equity. Ultimately, Staff's recommended equity
17 return is too low to be comparable to returns expected to be earned by other equally risky
18 investments and will discourage investment instead of attracting it. In short, Staff's
19 analyses can hardly be called "superior" to the methods employed by the FERC and
20 California PUC.

21 **2. Staff's Criticisms of the Company's DCF Model Equity Cost**
22 **Estimates Are Unfounded.**

23 Staff's criticisms of Chaparral City's equity cost estimates based on the FERC 1-
24 step (constant growth) and 2-step (multi-stage) DCF models suggest that Staff has not
25 bothered to read Dr. Zepp's testimony and schedules. First, Staff claims that Dr. Zepp's
26 calculation of the dividend yield is inappropriate because it was not based on the current

1 “spot” stock price. Staff Br. at 4. In his Direct Testimony, Dr. Zepp explained that the
2 FERC uses an average stock price to calculate the stock’s dividend yield to ensure that
3 the dividend yield is not distorted by the price of the stock on a particular day. Zepp Dt.
4 at 23-24. However, Dr. Zepp used Mr. Ramirez’s spot prices in implementing both
5 FERC DCF models in his Rebuttal Testimony and his Rejoinder Testimony. Zepp Rb. at
6 9-11 and Rebuttal Tables 5 and 6; Zepp Rj. at 4-5 and Rejoinder Tables 3 and 4. Dr.
7 Zepp also explained during the hearing that he used Mr. Ramirez’s spot prices to
8 compute the dividend yield used in both FERC models and in restating Mr. Ramirez’s
9 DCF equity cost estimates. Tr. at 251-53. Because Dr. Zepp used spot prices, Staff’s
10 argument is irrelevant.

11 Staff also criticizes the FERC for relying on analysts’ forecasts in its 1-step and 2-
12 step DCF models. That criticism is misleading and misplaced for several reasons. First,
13 Staff also relies on analysts’ forecasts in estimating dividend growth in both of its DCF
14 models. In its constant growth DCF model, Staff gives 50% weight to forward-looking
15 growth rates forecast by Value Line and 50% weight to historic (i.e., backward-looking)
16 growth rates. *E.g.*, Ramirez Sb., Schedules AXR-3, AXR-4 and AXR-6; Tr. at 262-63
17 and 451-55. Moreover, in its multi-stage DCF model, Staff relies exclusively on Value
18 Line’s projected dividend growth rate to determine near-term growth. Ramirez Dt. at 24.
19 In short, all of the cost of capital witnesses use analysts’ forecasts in their models.

20 Second, there is substantial empirical evidence that financial analysts’ forecasts of
21 growth rates provide a sound basis for estimating equity returns:

22 Published studies in the academic literature demonstrate that
23 growth forecasts made by security analysts represent an
24 appropriate source of DCF growth rates, are reasonable
25 indicators of investor expectations and are more accurate than
26 forecasts based on historical growth. These studies show that
investors rely on analysts’ forecasts to a greater extent than
on historic data only. . . .

Cragg and Malkiel . . . presented detailed empirical evidence

1 that the average analyst's expectation is more similar to
2 expectations being reflected in the marketplace than are
3 historical growth rates, and that they represent the best
4 possible source of DCF growth rates. Cragg and Malkiel
5 showed that historical growth rates do not contain any
6 information that is not already impounded in analysts' growth
7 forecasts. . . . Empirical studies have also been conducted
8 showing that investors who rely primarily on data obtained
9 from several large reputable investment research houses and
10 security dealers obtain better results than those who do not.
11 Thus, both empirical research and common sense indicate that
12 investors rely primarily on analysts' growth rate forecasts
13 rather than on historical growth rates alone.

14 Roger A. Morin, *Regulatory Finance: Utilities' Cost of Capital* 154-55 (1994).¹⁰

15 Third, in any case, as Dr. Zepp pointed out (Zepp Rb. at 26-27), if investors rely
16 on such EPS forecasts – as David Dreman, the authority Staff relies on, says they do –
17 dividend yields would reflect such forecasts and equity cost estimates based on analysts'
18 EPS forecasts would reflect the cost of equity. In this case, Dr. Zepp used growth rate
19 forecasts from four widely-followed analysts, Zacks, Thompson First Call, Standard &
20 Poor's and Value Line. Zepp Rj., Rejoinder Table 1. Staff used forecasts from Value
21 Line. *E.g.*, Ramirez Dt. at 15, 16, 17 and 18 (discussing use of various Value Line
22 forecasts).

23 The real issue, however, is *not* the FERC's use of analysts' forecasts, but Staff's
24 use of historic data in its constant growth DCF model. As explained in the Company's
25 Closing Brief, the majority of Mr. Ramirez's constant growth DCF model estimates using

26 ¹⁰ The published studies cited by Dr. Morin on this point include S.G. Timme and P.C. Eiseman, "On the Use of Consensus Forecast Growth in the Constant Growth Model: The Case of Electric Utilities," *Financial Management* 23-35 (Winter 1989); J.H. Vander Weide and W.T. Carleton, "Investor Growth Expectations: Analysts vs. History," *The Journal of Portfolio Management* 78-87 (Spring 1988); J.G. Cragg and B.G. Malkiel, "Expectations and the Structure of Share Prices," National Bureau of Economic Research (University of Chicago Press 1982); L. Stanley, W. Lewellen and G. Schlarbaum, "Further Evidence on the Value of Professional Investment Research," *Journal of Financial Research* 1-9 (Spring 1981); L.D. Brown and N.S. Rozeff, "The Superiority of Analyst Forecasts as Measures of Expectations: Evidence from Earnings," *Journal of Finance* 1-16 (March 1978). Clearly, a substantial body of empirical evidence supporting the use of analysts' forecasts exists.

1 historical data to estimate dividend growth approach or, in some cases, are below the cost
2 of debt:

	<u>Staff ROE Based on Historic DPS Growth</u>	<u>Staff ROE Based on Historic EPS Growth</u>
3 American States	4.7%	5.8%
4 California Water	4.7%	5.2%
5 Connecticut Water	5.3%	6.4%
6 Middlesex Water	6.1%	4.7%

7
8
9 Exhibit A-23 at 2. Incredibly, while Staff suggests that the analysts' forecasts used by
10 the parties (including Staff) are "overly optimistic" (Staff Br. at 4), Staff's equity cost
11 estimates using historic growth rates indicate that two-thirds of Staff's sample water
12 utilities have an equity cost that is equivalent to an investment grade bond or, in some
13 cases, a Treasury security. As explained in the Company's brief, the FERC would not
14 use data producing the foregoing results.

15 Staff's criticisms of the FERC 2-step DCF model are similarly misplaced. Staff
16 notes that in his testimony, Mr. Ramirez has accused Dr. Zepp of modifying "Staff's
17 multi-stage DCF analysis by introducing a supernormal growth stage between the first
18 and second stages of growth." Staff Br. at 5, ls. 1-2 (quoting Ramirez Sb. at 10). Of
19 course, the FERC *2-step* DCF model has only *two* stages. The third, "supernormal"
20 growth stage does not exist. *See, e.g.,* Zepp Dt. at 30-32 (describing the FERC 2-step
21 DCF model and comparing that model to Staff's multi-stage DCF model); Zepp Rj.,
22 Rejoinder Table 4 (showing two growth rates, the near-term growth rate and the long-
23 term growth rate)).¹¹

24
25 ¹¹ It appears that Mr. Ramirez not only used the same methods that were used by prior
26 Staff cost of capital witnesses (Tr. at 424), but also plagiarized their testimony. For
example, the statement quoted in Staff's brief is found in pre-filed testimony presented by
Joel Reiker in the Arizona-American Water Company rate case. Surrebuttal Testimony

1 Similarly, Staff claims that the FERC 2-step DCF analysis “assumes the
2 impossibility that the water industry will grow indefinitely at a rate that outpaces the
3 historical Gross Domestic Product (“GDP”) growth.” Staff Br. at 4, ls. 27-28. This is
4 misleading. The FERC model (like Staff’s model) has two growth stages, near-term
5 growth and long-term growth. This is shown, for example, in Rejoinder Table 4,
6 attached to Dr. Zepp’s Rejoinder Testimony. “Near-term” growth (i.e., the initial growth
7 stage) is the updated average of projected growth rates, which range from 4.7% for
8 American States Water to 9.7% for Aqua America, and average 7.1%. In contrast, Staff’s
9 projected growth rates, shown on Surrebuttal Schedule AXR-6, average 7.5%.

10 “Long-term” growth (i.e., the second or terminal growth stage) is assumed to be
11 equal to the past arithmetic average GDP growth rate. As shown on Rejoinder Table 4,
12 that growth rate is 6.8% for all of the water companies. In other words, *in the near-term*
13 dividends will grow, on average, at a rate that is slightly higher than the historic GDP
14 growth rate, and then grow at a rate that is equal to the historic GDP growth rate. That
15 scenario is not particularly surprising, much less an “impossibility,” as claimed by Staff
16 in its brief.

17 Staff also claims in its brief that it “prefers to rely on the GDP instead of analysts’
18 forecasts,” quoting from a speech given by Dr. Myron Gordon. Staff Br. at 5, ls. 6-9.
19 This is not true. Had Staff actually relied on the GDP, the indicated cost of equity would
20 be 10.1% (dividend yield (3.3%) + GDP growth rate (6.8%)). Staff instead used
21 analysts’ forecasts in calculating the near-term growth rate. Ramirez Dt. at 24. The
22

23
24 of Joel M. Reiker, Docket No. WS-01303A-02-0867, et al. (Oct. 31, 2003) at 16. In past
25 rate cases, including the Arizona-American Water Company rate case, Dr. Zepp has
26 presented a more complex, three-stage DCF model. As previously explained, however,
Dr. Zepp has chosen to use the FERC 2-step DCF model in this case rather than the
methods he would personally prefer.

1 problem is that Staff chose to rely solely on projected DPS growth and to ignore EPS
2 growth and intrinsic (sustainable) growth, despite the fact that all three growth rates were
3 available and were used by Staff in its constant growth DCF model estimate. See
4 Ramirez Sb., Schedule AXR-6 (listing growth rates). This is an example of how Staff
5 has deliberately chosen inputs that depress the cost of equity. See Zepp Rj. at 13-14.¹²

6 In short, Staff's discussion of the approaches used by Staff and the Company in
7 implementing the DCF model is erroneous and misleading. Staff claims that the
8 Company failed to use spot prices in computing dividend yields, when in fact the
9 Company did so. Staff claims that analysts' forecasts are overly optimistic, when there is
10 a substantial body of empirical evidence showing otherwise and, in any case, Staff also
11 relied on analysts' forecasts. At the same time, Staff used historic growth rates that
12 produce an equity cost below the cost of debt. Staff accuses the Company's witness of
13 using a three-stage DCF model, when the FERC 2-step model contains two growth
14 stages, just like Staff's model. Finally, Staff claims it relied on the GDP growth rate
15 instead of analysts' forecasts, when in fact Staff, like the Company, used analysts'
16 forecasts to derive the near-term growth rate in its multi-stage DCF model.

17 3. Staff's Criticisms of the Risk Premium Method Are Unfounded.

18 In its brief, Staff has ignored the theoretical and application problems associated
19 with its CAPM estimate, which are summarized on pages 41 through 46 of the
20 Company's Closing Brief, and, instead, attacks the Risk Premium method used by the
21 California PUC in water utility rate cases, which is the method Dr. Zepp has used. E.g.,

22 ¹² For example, if Staff had used the average of its three projected growth rates shown on
23 Schedule AXR-6 (and restated on page 34 of the Company's Closing Brief) as its near-
24 term growth rate, and used the conceptually correct *arithmetic* average GDP growth rate
25 of 6.8% as the long-term growth rate in its multi-stage DCF model, the indicated cost of
26 equity would be 10.5%, assuming equal weight were given to near-term and long-term
growth. By comparison, Dr. Zepp's updated equity cost estimate using the FERC 2-step
DCF model is 10.4%. Zepp Rj., Rejoinder Table 4.

1 Zepp Dt. at 4-5 and 33-34 (explaining method). Once again, Staff's criticisms are
2 inconsistent with, and misstate, the evidence in the record.

3 As a preliminary matter, Staff claims that "allowed ROEs" are used to estimate
4 the cost of equity. In fact, the California PUC uses *realized* equity returns. *E.g.*, Zepp
5 Rj. at 6 and Rejoinder Table 6 (updated Risk Premium estimates). Dr. Zepp believes the
6 use of realized equity returns is conservative and understates the cost of equity because in
7 recent years, on average, the water utilities in the sample group have been unable to
8 actually earn their authorized returns. *Id.* However, the California PUC uses realized,
9 rather than authorized, returns on equity, so Dr. Zepp used that approach. As shown on
10 Rejoinder Table 6, the resulting equity cost estimates range from 10.5% to 10.7%.

11 The primary difference between CAPM and the Risk Premium approach is that the
12 Risk Premium method *directly* estimates the risk premium for the sample group of
13 companies, while under the CAPM, the risk premium is measured indirectly and requires
14 more assumptions to be made, leading to a higher likelihood of error (e.g., an erroneous
15 beta estimate). Zepp Dt. at 5 and 34; Tr. at 227-29.

16 Staff further contends that the California PUC's method "is flawed" because there
17 is "information" "suggesting that investors' actual cost of equity is lower than historical
18 or book ROE." Staff Br. at 5, ls. 21-22. Frankly, this argument is muddled at best. Staff
19 appears to contend, first, that because its models, which rely on inputs that depress the
20 cost of equity, produce low equity cost estimates, the investment community must expect
21 the same low returns. This self-serving argument ignores other, readily available
22 information influencing investor expectations, including the fact that authorized, realized
23 and projected returns on equity are all greater than 10%. *E.g.*, Zepp Rb. at 6-9 and
24 Rebuttal Tables 1 and 2; Exhibits A-15 and A-24. Moreover, interest rates and the
25 estimated betas of the water utilities in Staff's sample group are increasing. *E.g.*, Exhibit
26 A-21. These circumstances would lead an investor to anticipate higher equity returns, as

1 opposed to equity returns that stagnate around 9.0%.

2 Staff also believes the cost of equity is less than the returns authorized by utility
3 commissions in other states, such as California, because the current prices of the stock of
4 the water utilities in Staff's sample group are greater than the book value of the stock.
5 Staff Br. at 5. That argument is wrong and, in any case, irrelevant. First, market-to-book
6 ratios are determined by the marketplace. Morin, *supra*, at 266 (included in Exhibit A-
7 16). See also Staff Br. at 6, l. 6 ("capital markets determine the cost of equity, not
8 regulatory Commissions"). As Mr. Ramirez explains, "the current stock price includes
9 investors' expectations of future returns and is the best indicator of those expectations."
10 Ramirez Dt. at 15. Mr. Ramirez also states "the cost of equity to a firm is the investors'
11 expected rate of return." Ramirez Dt. at 7. See also *id.* at 9. There is no dispute that the
12 stock prices of the water utilities in the sample group have been increasing. See, e.g.,
13 Rigsby Dt. at 47-49. Investors would not bid up the price of the stock of a regulated
14 utility if they believe a utility is earning more than its "actual" cost of equity and,
15 therefore, may have its authorized return reduced in the future. In short, if market price
16 of the water utilities' stock exceeds book value, investors must believe water utilities'
17 returns on equity will increase.¹³

18 Second, under the comparable earnings standard, Chaparral City's authorized
19 return on equity should be commensurate with the returns being earned on investments in
20 other firms (regulated and unregulated) having comparable risks. E.g., *Fed. Power*
21 *Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944). See also Zepp Dt. at 6-7.
22 There is no dispute regarding this fundamental requirement. Rigsby Dt. at 5-6; Tr. at
23 271-73 and 357. If Staff's sample water utilities are currently earning returns on equity
24

25 ¹³ Dr. Zepp also provides a number of reasons why a utility's stock may trade at a price
26 above book value. Zepp Dt. at 27-28 and n. 4.

1 greater than 10%, then Chaparral City is entitled to rates that produce a return greater
2 than 10%, regardless of the comparable utilities' market-to-book ratios.

3 Finally, Staff attacks the California PUC's use of forecasts of interest rates,
4 claiming they are "biased." Staff Br. at 5, l. 28. Staff does not explain how or why they
5 "biased" (which would undoubtedly surprise the Office of the Ratepayer Advocate,
6 whose approach Dr. Zepp has adopted). In reality, the evidence presented shows that
7 consensus forecasts of interest rates are unbiased. Zepp Rj. at 20 (comparing forecasts of
8 the Aaa bond rate by Blue Chip Financial Forecasts to actual rates that Staff presented in
9 a past case).

10 New rates for Chaparral City will be established this Fall, and will be in effect
11 during 2006 and 2007, and perhaps longer. The issue, therefore, is what is the best
12 available evidence to forecast what interest rates will be during that period. Staff claims
13 actual interest rates in April 2005 provide the best estimate. Staff Br. at 6. This is
14 another example of Staff's backward-looking approach. Interest rates have increased
15 since 2003 (when they were at unusually low levels), and they are likely to be higher in
16 2006 and subsequent years, when new rates will be in effect.

17 Given that rates set by regulators are likely to remain in effect
18 for several years, the allowed rate of return should reflect this
19 circumstance and should not reflect day-to-day fluctuations in
20 interest rates and current spot circumstances. In the early
21 1980s when long-term interest rates were extraordinarily
22 high, when DCF -- Risk Premium -- CAPM results were
23 accordingly high, allowed rates of return were not set
24 correspondingly, but rather were set at a lower level so as to
25 keep a longer-term perspective. The same rationale should
26 prevail when interest rates are low.

23 Morin, *supra*, at 244.

24 In his Rejoinder Testimony, Dr. Zepp presented updated forecasts of Treasury
25 security rates for 2006 from three reputable investment services, DRI, Blue Chip
26 Consensus Forecasts and Value Line. Zepp Rj., Rejoinder Table 5. Those forecasts were

1 used to develop updated Risk Premium equity cost estimates, based on the approach used
2 by the California PUC staff, shown in Rejoinder Table 6. Staff has presented no credible
3 evidence that this equity cost estimation approach is theoretically unsound, and the
4 indicated equity cost, 10.5% to 10.7%, is consistent with the results of the FERC DCF
5 models. See Zepp Rj., Rejoinder Table 9. In contrast, Staff's CAPM equity cost
6 estimate, 9.2%, is the same as the equity cost estimate produced by Staff's model two
7 years ago, when interest rates were lower and the betas of the sample water utilities were
8 lower. Exhibit A-21. This can hardly be called a "superior analysis."

9 **4. Chaparral City Has Presented Substantial Evidence That It**
10 **Faces Additional Risk and Therefore Requires a Higher Equity**
11 **Return.**

12 Staff claims Chaparral City failed to present any evidence that the Company has
13 more "systematic" (market) risk than the sample group of publicly traded water utilities.
14 Staff Br. at 6. As a preliminary matter, Staff has presented no evidence that Chaparral
15 City's systematic risk is the same as its water utility sample group. According to Staff,
16 systematic risk is measured by beta (Ramirez Dt. at 10), and Chaparral City has no beta
17 because its stock is not publicly traded.¹⁴ Therefore, the term "systematic risk" is not
18 appropriate when referring to the particular business and regulatory risks faced by
19 Chaparral City.

20 Ignoring Staff's improper terminology, the real issue is whether Chaparral City
21 faces risks that would affect the return required by an investor holding Chaparral City's
22 stock. The United States Supreme Court has recognized that public utilities face unique
23 risks resulting from the particular methods used by regulatory commissions to set rates.
24 *Duquesne Light*, 488 U.S. at 314-15 (quoted in the Company's Closing Brief at pages 29-

25 ¹⁴ Beta measures a security's volatility in relation to the market in which it is traded. See,
26 e.g., Morin, *supra*, at 63-64.

1 30). Chaparral City's witnesses have identified a number of aspects of Arizona rate-
2 setting system that affect cash flows and make it more difficult for Chaparral City to
3 actually earn its authorized rate of return. These include:

- 4 • Use of an historic test period with limited out-of-period adjustments,
5 which delays recovery of costs associated with new utility plant. In
6 this case, for example, Staff and RUCO oppose the inclusion of
7 nearly \$3 million of plant in Chaparral City's rate base (15% of its
8 FVRB), even though the plant was placed in service in 2004. *See*
9 *Company Br. at 12-15.*
- 10 • The exclusion of construction work in progress in rate base. In this
11 case, Chaparral City's Shea WTP expansion was substantially
12 completed at the end of the test year, yet Staff opposes including any
13 portion of the utility's investment in rate base. *See Company Br. at*
14 *11-13.*
- 15 • Lack of automatic adjustment mechanisms and balancing accounts
16 that allow Chaparral City to promptly recover increases in
17 significant operating expenses beyond the utility's control. In this
18 case, Staff and RUCO oppose mechanisms that would allow
19 Chaparral City to pass on increases in purchased water and power
20 costs, even though those expenses total \$1.3 million annually,
21 constitute nearly 80% of operating income and are likely to increase
22 during the next three years, eroding the Company's earnings. *See*
23 *Company Br. at 22-28.*
- 24 • The imposition of inverted-tier declining block rate structures on
25 water utilities to conserve water, without any adjustment to the
26 utilities' revenues to account for changes caused by reduced
consumption. *See Company Br. at 53-59.* In this case, Staff's
inverted-tier rate design is extremely risky, and will likely lead to
reductions in revenue from water sales if approved. *Kozoman Rb. at*
18-19; Kozoman Rj. at 4-8.

20 *See also Zepp Dt. 14-20 (identifying specific risks faced by Chaparral City).* None of the
21 water utilities in Staff's sample group do business in Arizona (other than American
22 States, which owns Chaparral City), and they are not exposed to the rate-setting policies
23 and methods customarily employed in this jurisdiction. *See Exhibit A-15.* As Dr. Zepp
24 explains, these policies reduce cash flow, increase risk, and would be priced by investors.
25 *Zepp Rb. at 25.*

1 **B. Reply to RUCO.**

2 RUCO recommends an equity return of 9.45% based on the result of Mr. Rigsby's
3 DCF analysis. Rigsby Dt. at 7. As discussed in the Company's Closing Brief, Mr.
4 Rigsby has used the constant growth DCF model to estimate the cost of equity for a
5 sample group of publicly traded water utilities, American States Water, Aqua America
6 and California Water Service. *Id.* at 17. Mr. Rigsby selected those three utilities because
7 he believes they face "the same types of risk that Chaparral City faces" (*id.*), and Value
8 Line provides "forward-looking information (i.e. long-term estimates on return on
9 common equity and share growth)" for those utilities (*id.* at 18). *See also* Tr. at 279-80.
10 This forward-looking information is necessary because Mr. Rigsby has used the
11 sustainable growth method to estimate dividend growth. Tr. at 292-93; Rigsby Dt. at 14-
12 15. Unfortunately, as explained by Dr. Zepp and as discussed in the Company's Closing
13 Brief, Mr. Rigsby failed to use the information reported in his schedules, and substituted
14 his own subjective views in estimating dividend growth, resulting in an unreasonably low
15 equity cost estimate. *E.g.*, Company Br. at 36-39.

16 RUCO presents four arguments to support its recommended 9.45% cost of
17 common equity, none of which has any merit. First, RUCO claims that its
18 recommendation is reasonable "given the current environment of low inflation and low
19 interest rates." RUCO Br. at 15, ls. 5-6. Although interest rates are at relatively low
20 levels, they have increased since mid-2003, as graphically depicted on Chart 1, found on
21 page 8 of Mr. Ramirez's Direct Testimony. As shown on Exhibit A-21, the average of
22 intermediate-term Treasuries was only 3.3% at the time Staff prepared its CAPM model
23 estimates in the Arizona Water Company Eastern Group rate case (Docket No. W-
24 01445A-02-0619) and in the Arizona-American Water Company rate case (Docket No.
25 WS-01303A-02-0867). More importantly, interest rates are projected to increase in 2006.
26 Zepp Rj., Rejoinder Table 5 (forecasts of Treasury rates for 2006). In contrast, RUCO's

1 DCF model estimate in this case is only 27 basis points greater than RUCO's DCF model
2 estimate in the Arizona Water Company rate case and 34 basis points greater than its
3 DCF model estimate in the Arizona-American Water Company rate case. *See* Decision
4 No. 66849 (March 19, 2004) at 21; Decision No. 67093 (June 30, 2004) at 27.

5 Second, RUCO suggests that a downward adjustment could have been made to its
6 DCF model estimate because the Company's capital structure has slightly more equity
7 than the average capital structure of the three publicly traded water utilities in RUCO's
8 sample group. RUCO Br. at 15. This is nonsense. RUCO states in its brief that
9 Chaparral City's capital structure contains 59% equity, while the capital structures of the
10 three utilities in RUCO's sample group contain, on average, 56% equity. *Id.* As a
11 practical matter, there is no difference in the amount of leverage. Mr. Rigsby himself
12 testifies this difference "is too small to warrant such a downward adjustment." Rigsby
13 Dt. at 28.

14 Third, RUCO claims that the growth rates estimated by Mr. Rigsby, based on his
15 own subjective views, exceed the estimates of independent securities analysts by 49 to 60
16 basis points. RUCO Br. at 15. However, the projected EPS growth rates shown on
17 Schedule WAR-6 (including Zacks' projection for California Water) average 8.8%, as
18 compared to Mr. Rigsby's sustainable growth rate of 6.5%. Moreover, those growth rates
19 were based on information available to Mr. Rigsby in January 2005. Dr. Zepp presented
20 more current forecasts of future earnings growth in his Rejoinder Testimony, which
21 included forecasts from Zacks, Thompson First Call, Standard & Poor's and Value Line.
22 The average for American States Water, Aqua America and California Water Service is
23 7.6%, again substantially higher than Mr. Rigsby's sustainable growth rate estimate using
24 subjective inputs. Zepp Rj. at 22 and Rejoinder Table 1.

25 Finally, RUCO notes that its 9.45% recommended equity return is very close to
26 Value Line's projected return on equity for American States Water. RUCO Br. at 15.

1 Chaparral City agrees with RUCO's general premise that the Commission should
 2 consider actual and projected returns on equity for the publicly traded water utilities to
 3 determine a reasonable return on equity in this case. *E.g.*, Zepp Rb. at 6-7 (comparing
 4 the equity returns recommended by Staff and RUCO to the equity returns currently being
 5 earned by the water utilities sample); Zepp Rj. at 23 (comparing Value Line's projections
 6 for the water utilities in RUCO's sample to Dr. Zepp's restatements of Mr. Rigsby's
 7 equity cost estimates). Indeed, as Mr. Rigsby has acknowledged, the comparable
 8 earnings standard established by the United States Supreme Court in decisions such as
 9 *Bluefield Water Works*, 262 U.S. at 692-93, and *Hope Natural Gas*, *supra*, arguably
 10 requires use of the returns earned by enterprises of comparable risk as a measure of a fair
 11 equity return for Chaparral City.

12 While Chaparral City and RUCO are in general agreement on this point, however,
 13 RUCO's comparable earnings analysis is circular and ignores useful information
 14 developed by Mr. Rigsby. It is circular because RUCO considers only the equity return
 15 projected for American States Water, the parent of Chaparral City. Mr. Rigsby states in
 16 his testimony that an "advantage to using a sample of companies is that it reduces the
 17 possible impact that any undetected biases, anomalies, or measurement errors." Rigsby
 18 Dt. at 17. Accordingly, the projected equity returns for the *entire* sample should be
 19 considered, as opposed to simply looking at American States Water. Those returns are:

<u>Company</u>	<u>2005</u>	<u>2006</u>	<u>2008-10</u>	<u>Average</u>
Aqua America	12.0%	12.5%	13.0%	12.5%
California Water	10.0%	10.5%	11.0%	10.5%
American States	<u>9.0%</u>	<u>9.5%</u>	<u>12.0%</u>	<u>10.2%</u>
Average	10.3%	10.8%	12.0%	11.1%
Industry Composite	11.0%	11.5%	12.0%	11.5%

26 Exhibit A-15 (Value Line, April 29, 2005). The foregoing table places the parties'

1 recommendations in perspective. Chaparral City is requesting a return on equity of
2 10.4% if its requested purchased water and power adjustment mechanisms are approved,
3 and a return on equity of 11.0% if they are not. Those returns are certainly reasonable in
4 light of Value Line's projections. Conversely, RUCO's recommended return of 9.45%
5 (as well as Staff's recommended return of 9.2%) is well below the foregoing forecasts
6 and, as a result, would not be commensurate with returns on investment in other
7 enterprises with corresponding risk.

8 **VI. RATE DESIGN**

9 **A. RUCO's Rate Design Discriminates Against Customers on Larger-**
10 **Sized Meters.**

11 RUCO claims that its proposed rate design, consisting of a three-tier, inverted
12 commodity rate, "does not discriminate between class or meter size. It is a fair rate
13 design because, stated simply, each customer pays the same commodity rate for the same
14 level of usage." RUCO Br. at 14, ls. 21-23. For the reasons set forth in the Company's
15 Closing Brief, RUCO is wrong.

16 RUCO proposes break-over points at 8,000 gallons and 73,000 gallons applicable
17 to *all* customers regardless of customer class and meter size. Customers using smaller-
18 sized meters, which includes the bulk of the Company's residential customers, will have
19 a substantial portion of their usage fall in RUCO's initial, low-priced commodity rate
20 block, and little, if any, of their usage, fall in the upper, highest price commodity rate
21 block. *E.g.*, Kozoman Rb. at 3. Customers using larger sized meters, in contrast, will
22 have the bulk of their usage fall in RUCO's second and third tiers, without regard to
23 whether those customers' water usage is excessive or wasteful. Ultimately, RUCO's rate
24 design is simply a device to shift revenue recovery away from residential customers.

25 In his Rebuttal Testimony, Mr. Kozoman provides a hypothetical illustrating this
26 point:

1 For example, assume two hypothetical customers. One is a
2 residential customer on a 3/4 inch meter in zone 1 and the
3 other is a commercial customer on a 4 inch meter in zone 1.
4 The residential customer uses, on average 20,000 gallons of
5 water per month as compared to average use of 7,656 gallons
6 per month for residential customers in zone 1 on 3/4 inch
7 meters. The commercial customer uses, on average, 120,000
8 gallons per month, as compared to average use of 142,250
9 gallons per month for commercial customers in zone 1 on 4
10 inch meters. Even though the residential customer is using
11 nearly three times his class' average water use, 60% of the
12 residential customer's water use falls into RUCO's second
13 rate tier and none of his usage falls into RUCO's upper rate
14 tier. In contrast, even though the commercial customer in this
15 example is using 22,000 gallons less than the average usage
16 of the commercial 4 inch class, 54% of his usage falls into
17 RUCO's second rate tier and 39% of his usage falls into
18 RUCO's upper rate tier. The result is that the commercial
19 customer will pay a substantially higher cost per unit of water
20 served, in addition to a substantially higher monthly
21 minimum charge.

22 Kozoman Rb. at 6. In this example, the hypothetical residential customer's monthly bill
23 under RUCO's rate design would be \$57.17, or an average cost of \$2.86 per 1,000
24 gallons of water. The commercial customer's monthly bill, in contrast, would be \$519.84
25 or an average cost of \$4.33 per 1,000 gallons – about 1.5 times the average cost per 1,000
26 gallons paid by the residential customer. *Id.* at 6-7.

In short, RUCO's rate design is not equitable. In the example given above, each
customer does pay the same commodity rate for the same level of usage. However, the
customer on the larger sized meter is already paying a substantially larger monthly
minimum service charge, and will have a substantially larger portion of his monthly
water usage fall into the upper commodity rate blocks, even though that customer's water
usage may be reasonable relative to other commercial customers. Conversely, a
residential customer on a small meter may use up to 73,000 gallons of water in a month
without having any of her usage fall into RUCO's upper commodity rate block. If the
primary goal of designing rates is equity, then RUCO should have proposed rates that are

1 based on a cost of service study or, at a minimum, simply used a single, uniform
2 commodity rate.

3 **B. Staff Continues to Ignore the Impact of an Inverted-Tier Rate Design.**

4 In its Closing Brief, Chaparral City discussed at some length the inconsistent
5 position Staff takes on the issue of rate design. On the one hand, Staff contends a
6 substantial spread between commodity rates is necessary to send the appropriate “price
7 signal” to customers. On the other hand, Staff contends this “price signal” will have no
8 impact on existing customers’ water use. The discussion of rate design in Staff’s brief
9 contains this same fundamental contradiction.

10 First, Staff states:

11 Staff’s rate design includes commodity rates which are spread
12 far enough apart to send the appropriate price signals to
13 customers regarding the importance and value of water,
14 which is a limited resource in the state of Arizona. Mr. Moe
15 testified that “there is no point to really doing a three-tier
[commodity rates] that actually sends a message.” [Tr.] at
802. If Staff’s design is approved, customers who use more
water will pay more for water.

16 Staff Br. at 4, ls. 1-6. In other words, according to Staff, the Company’s proposed rate
17 design will not send the “appropriate price signals” to customers because customers using
18 large volumes of water will not be required to pay enough under the Company’s rate
19 design.

20 Second, Staff states:

21 Mr. Moe testified that “under any rate design, the goal should
22 be that the Company has a fair opportunity to earn a rate of
23 return as . . . decided by the Commission.” [Tr.] at 785.
24 Thus, Staff’s position is that its rate design allows Chaparral
City a fair opportunity to earn Chaparral City’s authorized
rate of return.

25 Staff Br. at 4, ls. 15-17. The Company’s revenue requirement (i.e., operating expenses
26 plus the authorized return on rate base) is based on test year water use levels. None of

1 the parties, including Staff, has proposed any adjustment to test year revenues to account
2 for reductions in water usage caused by inverted-tier rates. In effect, Staff maintains that
3 its rate design, while sending the "appropriate price signals" and causing "customers who
4 use more water" to "pay more for water," will have no impact on revenues from water
5 sales. This defies common sense.

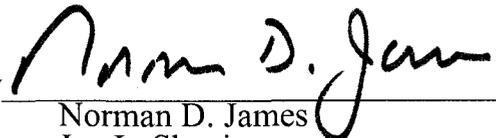
6 Chaparral City does not oppose inverted-tier rates. It recognizes the importance of
7 encouraging water conservation, including the use of rate design (i.e., pricing) to
8 encourage customers to implement conservation measures and reduce their water use.
9 Chaparral City does object to Staff's myopic approach, which ignores the impact of
10 inverted-tier rates on the Company's ability to actually earn its authorized rate of return.
11 It makes no sense to advocate the use of inverted-tier rates on the basis of conservation,
12 while simultaneously claiming, without any study or analysis, that such a rate design has
13 no impact on existing customers' water use patterns and will have no impact on the
14 Company's ability to earn its authorized rate of return.

15 **VII. MISCELLANEOUS ISSUES**

16 There is no disagreement between the Company and Staff on the miscellaneous
17 issues identified in the Company's Closing Brief. *Compare* Company Br. at 59-61 *with*
18 Staff Br. at 10-11.

19 RESPECTFULLY SUBMITTED this 20th day of July, 2005.

20 FENNEMORE CRAIG

21
22 By 
23 Norman D. James
24 Jay L. Shapiro
25 3003 North Central Ave., Suite 2600
26 Phoenix, Arizona 85012
Attorneys for Chaparral City
Water Company

1 ORIGINAL and 13 copies of the foregoing
2 delivered for filing this 20th day of July, 2005, to:

3 Docket Control
4 Arizona Corporation Commission
5 1200 W. Washington St.
6 Phoenix, AZ 85007

6 COPY hand-delivered this 20th day of July, 2005, to:

7 Teena Wolfe, Esq.
8 Administrative Law Judge
9 Hearing Division
10 Arizona Corporation Commission
11 1200 West Washington
12 Phoenix, AZ 85007

11 David Ronald, Esq.
12 Legal Division
13 Arizona Corporation Commission
14 1200 West Washington
15 Phoenix, AZ 85007

15 Dan Pozefsky, Esq.
16 Residential Utility Consumer Office
17 1110 W. Washington, Ste. 220
18 Phoenix, AZ 85007

19
20 By: Mary L House

21 1685754.1

22

23

24

25

26