

1 **BEFORE THE ARIZONA CORPORATION COMMISSION**

2 MIKE GLEASON
CHAIRMAN
3 WILLIAM A. MUNDELL
COMMISSIONER
4 JEFF HATCH-MILLER
COMMISSIONER
5 KRISTIN K. MAYES
COMMISSIONER
6 GARY PIERCE
COMMISSIONER

7
8 IN THE MATTER OF THE APPLICATION OF
9 CHAPARRAL CITY WATER COMPANY,
10 INC., AN ARIZONA 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.

Docket No. W-02113A-04-0616

12 **NOTICE OF FILING SURREBUTTAL TESTIMONY**

13
14 The Residential Utility Consumer Office ("RUCO") hereby provides notice of filing the
15 Surrebuttal Testimony of Dr. Ben Johnson in the above-referenced matter.

16 RESPECTFULLY SUBMITTED this 7th day of December 2007.
17
18
19

20 _____
Scott S. Wakefield
Chief Counsel

1 AN ORIGINAL AND THIRTEEN COPIES
of the foregoing filed this 7th day
2 of December 2007 with:

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

5 COPIES of the foregoing hand delivered/
6 mailed this 7th day of December 2007 to:

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CHAPARRAL CITY WATER COMPANY, INC.

DOCKET NO. W-02113A-04-0616

SURREBUTTAL TESTIMONY

OF

BEN JOHNSON, PH.D.

ON BEHALF OF

THE

RESIDENTIAL UTILITY CONSUMER OFFICE

DECEMBER 7, 2007

1 up the many mischaracterizations or misunderstandings which further confuse the
2 picture.

3 Rather than engaging in a lengthy point-by-point response, I will focus on the key
4 issue which goes to the heart of the dispute in this proceeding – is a fair return on fair
5 value rate base (FVRB) less than the weighted average cost of capital (WACC)? I will
6 also discuss a few of the many instances where Chaparral has misunderstood or
7 mischaracterized my position throughout its rebuttal testimony. The fact that I do not
8 respond to specific criticisms or statements made by Company witnesses should not be
9 construed as agreement with those statements. In this regard, I would ask the the
10 Commission to carefully compare my direct testimony to the Company's rebuttal.

11

12 **Q. What do you see as the key difference between RUCO's position as described in**
13 **your direct testimony, and Chaparral's position as described in the Company's**
14 **testimony?**

15 **A.** The fundamental difference between our respective positions, and the central issue in this
16 proceeding, is whether the exact same percentage rate of return which would be fair and
17 appropriate for application to an original cost rate base would also be fair and appropriate
18 for application to a fair value rate base – one which is intended to reflect the current fair
19 market value of the utility's property, plant and equipment, taking into account the impact
20 of inflation. Stated more succinctly, is it fair to multiply the Company's weighted
21 average cost of capital (WACC) by its fair value rate base (FVRB), or should some lesser
22 percentage figure be used?

23

1 **Q. Can you succinctly state the Company's position on this issue?**

2 A. Chaparral argues that the “fair rate of return” for application to a fair value rate base
3 should be the same percentage figure that would be applied to an original cost rate base.
4 Therefore, it argues that the Company's WACC should be applied to its fair value rate
5 base. In support of this position Chaparral argues that “[t]he determination of both the
6 return on equity and the overall rate of return on FVRB is independent of the
7 determination of an original cost rate base (OCRB)”. [Zepp Rebuttal, p. 3. Emphasis
8 original]

9
10 **Q. Can you summarize your position on this issue?**

11 A. As I explained in my direct testimony, I disagree with this view. The allowed return in
12 percentage terms and the rate base should be developed in a conceptually consistent
13 manner, so that the final end result is appropriate and reasonable, regardless of what
14 specific methodology is used in developing the rate base.

15 It is well established both as a matter of theory and as a matter of practice, that
16 when the WACC is applied to an original cost rate base the utility is given an opportunity
17 to earn a fair return – a return that fully compensates investors for the actual level of
18 capital costs, without unduly burdening customers. Logically, then, applying that same
19 percentage figure to a significantly larger rate base valuation will result in an unfair
20 return – one that is larger than necessary to compensate investors, and which places an
21 unfair burden on customers.

22 In comparing the Commission's fair value approach to rate base valuation with the
23 original cost methodology, it is clear that the fair value method systematically results in

1 higher valuation levels because the forces of inflation tend to outweigh the forces of
2 deflation. Thus, there will be a consistent, systematic discrepancy between the original
3 cost and fair value valuations, with the latter systematically exceeding the former,
4 primarily due to inflation.

5 Given that systematic discrepancy, if the WACC yields appropriate results when
6 applied to the original cost rate base, it follows as a matter of pure logic that multiplying
7 the WACC times a fair value rate base will tend to yield excessive results. Of course that
8 statement of logic is contingent upon a key “if” -- the assumption that the WACC yields
9 appropriate results when applied to the original cost rate base. But, that assumption is
10 hardly controversial – in fact, this is probably the most robustly established principle in
11 the field of public utility regulation – something that has been affirmed and reaffirmed by
12 countless regulators and courts in numerous state and federal jurisdictions.

13

14 **Q. Does Chaparral dispute there is a well-established relationship between the**
15 **weighted average cost of capital and original cost rate base?**

16 A. Apparently so. Yet, in countless proceedings where the OCRB is used, the fair rate of
17 return is almost always computed based upon a composite, or weighted average, of the
18 utility's cost of debt, preferred stock, and equity, with each of these cost rates being
19 calculated with reference to amounts recorded in the utility's accounting records. The
20 consistent application of WACC to OCRB is not coincidental. The WACC is fully
21 consistent with, and directly comparable to, the original cost valuation concept – both the
22 OCRB and the WACC are largely derived from accounting data, except that the cost of
23 equity calculations necessarily rely in part on analyst judgment and stock market data,

1 and in so doing, the equity cost component provides investors with compensation for
2 inflation.

3 Company witnesses Zepp and Bourassa dispute the tight conceptual linkage
4 between the OCRB and the WACC, and they dismiss or ignore the decades of evidence
5 that combining the WACC with OCRB results in a fair return. Yet, their counter
6 arguments are extremely shallow. Dr. Zepp briefly focuses on the cost of equity
7 component of the cost of capital, while Mr. Bourassa focuses on the capital amounts
8 found on the Company's balance sheet.

9

10 **Q. Can you elaborate on how Dr. Zepp disputes the relationship between the WACC**
11 **and OCRB?**

12 A. Dr. Zepp notes that he previously provided equity cost estimates for the Company, and
13 states that those estimates did not depend upon the type of rate base used. "Equity cost
14 estimates are generally determined with market data and thus are independent of the rate
15 base to which they are applied." [Zepp Rebuttal, pp. 10-11] Dr. Zepp also notes that the
16 ACC has a "policy of relying on market-based finance models to estimate the cost of
17 equity..." [Id. p. 11] "Thus, the percentage equity cost ... is independent of whatever
18 formula is used to determine the FVRB". [Id. p. 12]

19 Dr. Zepp is correct in his assertion that a utility's equity cost is often estimated
20 using stock market data. Equity costs cannot be directly observed or measured; they can
21 only be estimated indirectly, by reference to relevant data sets. But, the results of that
22 estimation process are supposed to be fair to both stockholders and customers.

23 The end result of applying the WACC (including an estimate of the cost of equity)

1 to an OCRB is to provide a opportunity to earn a just and reasonable return. The
2 reasonableness of this end result has been confirmed over multiple decades by thousands
3 of carefully reasoned decisions by both regulators and appellate courts throughout the
4 United States. Unless all of these regulators and courts have been wrong all along,
5 applying the WACC to a consistently higher rate base valuation (fair value) will
6 necessarily achieve an unjust and unreasonable result – one that overcompensates
7 stockholders, and unreasonably burdens customers.

8
9 **Q. Can you now elaborate on how Mr. Bourassa disputes the relationship between the**
10 **WACC and OCRB?**

11 A. In addition to noting that the cost of equity is estimated with reference to stock market
12 data, as noted by Dr. Zepp, Mr. Bourassa claims there is no link between the cost of
13 capital and rate base, because "in many cases, the utility's capital structure (debt and
14 equity) does not equal the utility's OCRB". [Bourassa Rebuttal, p. 18] Mr. Bourassa
15 further states:

16
17 None of the parties made an attempt to match the total capital in
18 Chaparral City's capital structure to the amount of its OCRB until
19 Staff did so in this remand proceeding. The amounts of debt and
20 equity capital in the capital structure simply provided the inputs
21 used to calculate the weighted cost of capital. In the instant case,
22 those inputs were 41.3 percent debt and 58.8 percent equity. The
23 cost of each input, 5.1 percent for debt and 9.3 percent for equity,
24 were then multiplied by the percentage weights to calculate the rate
25 of return, 7.6 percent. The actual amounts of debt and equity
26 weren't relevant - only their percentages. [Id., p. 19. Emphasis
27 original]

1 **Q. Does the fact that a utility's invested capital may not equal its OCRB as determined**
2 **in a rate case, prove that there is no relationship between the two concepts?**

3 A. No. I am not contending that the dollar amount of the OCRB exactly equals the dollar
4 amount of investor supplied capital used in developing the WACC. However, there is a
5 fundamental consistency between these two concepts – beginning with the fact that both
6 amounts are developed directly from the utility's balance sheet. There are numerous
7 reasons why the total amount of investor supplied capital may not equal the OCRB. For
8 example, most utilities have non-utility investments – they own assets which are not
9 appropriately included in the rate base. Some assets may be utility-related, but they may
10 have been excluded from the rate base because they were determined to be imprudent or
11 otherwise disallowed for ratemaking purposes. Similarly, construction work in progress
12 is often excluded from the rate bases, yet it is financed with debt and equity funds that are
13 included in the WACC calculations. This doesn't mean that investors are prevented from
14 earning a fair return on their investment in construction work in progress – just that the
15 return is deferred until the plant has been placed into service. The fact that the two dollar
16 amounts differ does not change the fact that both the WACC and the OCRB are derived
17 directly from the firm's historical accounting records, and that there is an inherent
18 consistency between these two concepts – a consistency that is lacking when comparing
19 the WACC to the FVRB.

20

21 **Q. You have explained why you believe WACC is an appropriate return to apply to an**
22 **original cost rate base, and noted that the end result of this approach has been**
23 **found reasonable by numerous regulators and appellate courts. Can you briefly**

1 **elaborate on why you believe it would not be equally appropriate to apply WACC to**
2 **a FVRB?**

3 A. First and foremost, if the end result of multiplying WACC times OCRB is just and
4 reasonable, then the the end result of multiplying WACC times FVRB will be excessive,
5 if the FVRB is systematically higher than OCRB (as it is under the Commission's rate
6 base methodology).

7

8 Second, the Court of Appeals recognized that the fair rate of return can vary based
9 on the type of rate base used. [Chaparral City Water v. ACC, f.n. 5, p. 5] There is nothing
10 in the Court of Appeals decision which requires this Commission to overcompensate
11 stockholders, or to burden customers with paying rates which are excessive.

12 Third, if the rate base value grows over time, due to inflation, the fair rate of
13 return will logically be lower than in jurisdictions where the rate base is not tied to
14 inflation. In jurisdictions where OCRB is used regulators have found that the WACC
15 approach provides a reasonable result – since the cost of equity includes adequate
16 compensation for the effects of inflation and no further compensation is needed. In
17 contrast, where the rate base is growing with inflation, because it is partly tied to
18 reproduction cost, the utility's income will be systematically growing with increases in
19 reproduction cost, and thus a reasonable result can best be achieved by using a lower
20 percentage return – thereby avoiding overcompensating for inflation.

21 In this regard, it is important to realize that there is widespread agreement
22 concerning the economic purpose of rate regulation, as well as the basic standards which
23 should be used in judging how well the goal of regulation is being achieved. Most

1 theorists agree that the primary objective of regulation was, and still is, to produce results
2 in the utility sectors of the economy which parallel those that would be obtained under
3 conditions of competition. If application of the WACC to OCRB achieves results that are
4 consistent with this objective benchmark, then application of that same percentage figure
5 to FVRB will obviously deviate from the competitive benchmark, effectively
6 overcompensating for inflation. Any given level of capital costs can be recovered using a
7 lower percentage figure if the percentage figure will be applied to a rate base valuation
8 that is growing over time as a result of increases in reproduction costs.

9
10 **Q. How has Chaparral responded to those arguments?**

11 A. Chaparral has submitted more than a hundred pages of rebuttal testimony from four
12 different witnesses, yet none of these witnesses fully refute this line of reasoning. The
13 witness who seems most responsible for addressing the issue is Dr. Zepp. However, even
14 he never fully addresses the issue head on. For example, in his rebuttal he testifies at
15 length about the constitutional requirement that in Arizona rates must be based upon a
16 FVRB – a fact that isn't in dispute. [See, e.g. pp. 5-10] After discussing that undisputed
17 fact, he concludes that the ACC should develop rates "that provide a fair rate of return on
18 the fair value of a utility's property at the time of inquiry, i.e., its FVRB". [Id., p. 10] Yet,
19 he never explains what steps the Commission should take to to ensure that the return is
20 fair to customers as well as stockholders – as if the only concern is ensuring fairness from
21 a stockholder perspective.

22 In fact, Dr. Zepp does not provide the Commission with any guidance regarding
23 how to determine a “fair” return in this context. He skips over the problem of ensuring

1 fairness to customers, as well as the problem of overcompensating for inflation, and
2 simply concludes that the Commission should "determine operating income by
3 multiplying the FVRB by the rate of return previously determined by the Commission in
4 this case, which is 7.6%". [Id., p. 4]

5 He doesn't address the fact that the fair value rate base valuation is growing due to
6 inflation (through the reproduction cost calculations) and that the 7.6% WACC figure
7 includes full compensation for the effects of inflation (built into the cost of equity
8 estimates), and thus he ignores the fact that combining WACC with FVRB will tend to
9 overcompensate for inflation.

10 Since both the FVRB methodology and the WACC methodology provide
11 compensation for inflation, unless there is some offsetting reduction to the WACC in
12 developing the final rate of return which is applied to the FVRB, stockholders will
13 receive a windfall. Such a windfall would not be fair to customers, nor would it be
14 consistent with the competitive benchmark. In a competitive market if investors were to
15 be overcompensated for the effects of inflation, the industry would expand in response to
16 these higher-than-necessary returns, leading to an overall increase in supply relative to
17 demand, which in turn would drive down prices and profits, until they reached more
18 reasonable levels, and thus the windfall would be short-lived. In contrast, Dr. Zepp is
19 proposing to provide a windfall that would not end – a much higher rate of return would
20 be provided, with no mechanism to bring it back to a fair level in line with investors'
21 actual requirements or the returns that are earned in competitive industries.

22

23 **Q. Does Chaparral dispute that a windfall would occur from applying the WACC to a**

1 **FVRB that is greater than OCRB?**

2 A. Yes. Dr Zepp's responds by claiming such an argument presumes

3

4 that a rate of return designed to provide investors a market-
5 determined return on the equity portion of the FVRB and recovery
6 of embedded costs of debt provides a higher return on investment
7 than investors require. ... [I]nvestors should expect to earn a return
8 on the "value of the property used at the time it is being used" as
9 the U.S. Supreme Court said in *Bluefield*, and "the value of
10 properties at the time of inquiry" as the Arizona Supreme Court
11 said in *Simms*. That dollar return will be either higher or lower -
12 and would only be the same return by accident - than the return
13 earned on OCRB, and thus there is no windfall gain. [Id., pp. 15-
14 16]

15

16 Dr. Zepp seems to be arguing that the WACC is the "fair rate of return" regardless
17 of the rate base to which it is applied, and therefore there can never be a "windfall" under
18 any circumstances. In other words, he seems to suggest (though he does not explicitly
19 state) that since the WACC is always the "fair rate of return", this same percentage figure
20 can appropriately be applied to rate bases of varying magnitude, based on widely
21 differing methodologies, and that the resulting widely varying income levels must all be
22 reasonable. This simply cannot be true.

23

24 The fundamental premise of the return on rate base approach to ratemaking is to
25 allow utilities with an opportunity to recover their actual costs, including their actual cost
26 of capital, consistent with what occurs in competitive industries. Those costs are what
27 they are, and thus the amounts to be recovered do not vary widely merely on the basis of
28 details of the ratemaking process. Widely varying dollar amounts of income cannot all
 result in recovery of the same level of actual capital costs; to the contrary, an excessive

1 return will result in over-recovery of capital costs. Unless some reasonable downward
2 adjustment is made in translating the WACC to into a fair return for application to the
3 FVRB, utility investors will be overcompensated, and customers will be burdened with
4 unreasonably high prices.

5

6 **Q. What else does Dr. Zepp say regarding your windfall argument?**

7 A. Dr. Zepp states that such an analysis

8 implies that the "correct" rate base is the OCRB, and that if the
9 utility's operating income is not based on OCRB, then the
10 authorized operating income is erroneous. [Dr. Johnson] admits the
11 requirement to use FVRB in Arizona is unique, but he is unwilling
12 to acknowledge that the correct rate base - the FVRB - should be
13 used. [Id.]

14

15 This is one of many instances in which Company witnesses mischaracterize or
16 misinterpret my testimony. In my testimony, I never said or implied that the only
17 appropriate rate base is OCRB, and I certainly don't believe that to be the case. There are
18 many different ratemaking methodologies which can be, and have been, appropriately
19 used by regulators, including both FVRB and OCRB. However, what I am asserting is
20 that while the details of specific rate setting procedures can vary, and the year-to-year and
21 company-to-company results may vary somewhat from method to method, in order to be
22 valid all ratemaking methodologies should be consistent with the underlying purpose of
23 regulation. Regardless of the technical details, customers should be protected from
24 monopoly power, and the overall end result of the rate making process should be
25 reasonable to both customers and shareholders.

26 It is Dr. Zepp who seems unwilling to make a proper acknowledgment – he fails

1 to acknowledge that the rate of return must be fair to both investors and customers. An
2 appropriate percentage return is one that fairly compensates the utility for its actual
3 capital costs, but does not overcompensate for those costs; what that appropriate
4 percentage figure is must necessarily be tied, at least in part, to the principles underlying
5 the rate base – since the capital costs that are supposed to be recovered through the return
6 on rate base mechanism are not a function of the ratemaking methodology, but are a fact
7 that exists independent of the regulatory process.

8 While the Arizona Constitution requires this Commission to use a FVRB, it leaves
9 many other details of the ratemaking process, including the method to be used in
10 developing a fair rate of return, to the Commission's discretion. While the Commission
11 may have considerable latitude in exercising this discretion, it would be improper to
12 overcompensate for inflation, or to greatly deviate from the basic principle of allowing
13 investors to recover the actual, prudent costs incurred in providing service, including the
14 cost of capital. Yet that inappropriate result is exactly what would happen if Chaparral's
15 position were accepted, and it were suddenly (and permanently) allowed to recover
16 substantially more than its actual costs.

17

18 **Q. Can you point to another example where the Company's witnesses misunderstood or**
19 **mischaracterized your testimony?**

20 A. Yes. There are many such instances. A good example occurs on page 30 of Dr. Zepp's
21 testimony. In response to my proposed inflation adjustment, he states: "Dr. Johnson
22 contends FVRB is expected to increase and designs his method to offset that increase in
23 value. His assumption is factually incorrect". [Id. p. 30] Dr. Zepp then cites Handy-

1 Whitman reports to assert that "the average index of all geographical regions for Total
2 Gas Plant" decreased during 2006. This small slice of Dr. Zepp's rebuttal testimony is,
3 unfortunately, typical of the whole – he misstates my position, then attempts to refute that
4 misstatement. Unfortunately, it will take more than a sentence or two to clear up the
5 confusion.

6 First, Dr. Zepp is comparing a general expectation to a small part of the historical
7 data. I never contended or assumed that inflation, or the reproduction cost of utility plant,
8 must consistently increase in each and every year – whether in the past, or in the future.
9 My direct testimony included an extensive discussion of how investors respond to
10 inflationary expectations, primarily focusing on the familiar example of housing and
11 other real estate markets. The key points I made in this discussion of real estate investors
12 remain true regardless of whether or not real estate prices happen to decrease in some
13 years, and I never suggested that real estate values always and everywhere increase from
14 year to year.

15 Just because housing and other real estate prices sometimes experience a
16 downward correction doesn't in any way negate the underlying principles I set forth in
17 my direct testimony. While I didn't focus on the exceptions that make the rule – instances
18 where real estate prices decrease, rather than increase, I was well aware of the fact that
19 exceptions occur from time to time. In fact, I specifically stated in my direct testimony
20 that "the annual change in any one measure of inflation can vary widely from one year to
21 the next; as well there are variations between the various data series." Yet, Dr. Zepp
22 points to an anomalous decrease in a single data series during a single year – as if that bit
23 of evidence somehow refuted my point, which is that investors have a reasonable

1 expectation of inflation in the future, based in part on the reality that inflationary forces
2 have generally outweighed deflationary forces in most sectors of our economy
3 throughout the past 40 or more years.

4 A price decrease in any one year does not disprove the fact that the value of a
5 utility's plant in service can be expected to increase (relative to original cost) if that value
6 is measured in part based on reproduction cost data. Nor does it disprove the fact that
7 investors will require a lower percentage return on assets that are expected to appreciate
8 over time than they would require on those same assets that are not expected to increase
9 in value.

10 Second, while Dr. Zepp claims that I designed my recommended method “to
11 offset that increase in value” (referring to the year-to-year increases in rate base value),
12 that is simply not true. While I asserted that the fair return must be less than the WACC, I
13 never suggested that the differential between the WACC and the fair rate of return must
14 be equivalent to the year-to-year increases in rate base value, or that the differential in
15 returns must exactly offset any and all increases in rate base value. To the contrary, even
16 a cursory review of the actual methodology I proposed shows that my recommended
17 method is not designed to do that. I recommended arriving at a fair rate of return by
18 subtracting an inflation factor from the WACC – and that subtraction would be based
19 upon general expectations concerning inflation, not the specific change in rate base
20 values of an specific utility.

21 Frankly, I don't understand how Dr. Zepp could misunderstand this aspect of my
22 testimony, since I stated quite clearly that the differential between the WACC and the fair
23 return is “a matter of judgment,” and I indicated that the Commission “can exercise

1 sound discretion in determining the most appropriate inflation factor to subtract from the
2 weighted average cost of capital.” (Johnson Direct, p. 34). At no point did I suggest or
3 imply that the inflation factor should be “designed” to offset the specific dollar increase
4 in rate base value which a specific utility has experienced, or is expected to experience in
5 the future. To the contrary, the thrust of my testimony was clearly focused on avoiding
6 overcompensation for general inflation – inflation that is recognized by equity investors
7 generally, because such inflation is already compensated for within the cost of equity
8 capital.

9
10 Accordingly, I recommended that the Commission review and consider several
11 data series that are publicly available, including data for annual changes in the Gross
12 Domestic Product Deflator, as well as annual changes in consumer prices and various
13 measures of producer prices. Needless to say, none of these suggested data series are
14 designed to offset year to year increases (or decreases) in a utility's specific rate base
15 value, as incorrectly suggested by Dr. Zepp.

16
17 **Q. You've mentioned there are many instances in which the Company witnesses**
18 **misunderstood or mischaracterized your testimony. Can you provide one more**
19 **example – preferably one that you can dispose of a bit more succinctly?**

20 A. Yes. Another example occurs on page 30 of Dr. Zepp's testimony, where he states: "Dr.
21 Johnson and I agree that the appropriate return on Chaparral City's FVRB is 7.6%".
22 Needless to say, this simply isn't correct. To the contrary, if 7.6% is assumed to be an
23 appropriate return on OCRB, then the fair return on FVRB must logically be significantly

1 lower than 7.6%.

2 Frankly, it's hard to understand how Dr. Zepp could have become confused about
3 my position, considering that I not only stated my opinion in considerable depth, but I
4 summarized the essence of my position using a very simple numerical example – albeit
5 using 7.5% rather than 7.6% as the WACC:

6 A rate of return that is fair to both customers and stockholders can
7 be derived from the weighted average cost of capital by simply
8 subtracting an amount related to the rate of inflation. For example,
9 assume the weighted average cost of capital is 7.50%, and the
10 relevant inflation rate is 2.5%, then a fair return on the fair value
11 rate base would be 5.00%, or thereabouts.

12 Since the dollar magnitude of the fair value rate base is
13 larger than an original cost rate base, reflecting past growth in the
14 value of the utility's property, and since the future income stream
15 can reasonably be expected to increase in the future, due to
16 inflation and other factors which tend to push up property values as
17 time passes, a 5.00% return on fair value is likely to provide
18 investors with as large a total return (over time) as a 7.50% return
19 applied to an original cost rate base. The exact amounts received
20 by investors may differ somewhat, and they certainly will differ
21 during any specific year, but the key point is that investors will
22 have as strong an opportunity to recover their capital costs and to
23 earn a competitive return through the application of a 5.00% return
24 on fair value as with a 7.50% return on original cost. The
25 regulatory goal of simulating the effects of competitive markets
26 can be achieved either way. [Id., pp. 28-29]

27

28 **Q. Does this conclude your surrebuttal testimony that was prefiled on December 5th,**
29 **2007?**

30 **A. Yes, it does.**