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AZ CORP COMMISSION  
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7  
8 IN THE MATTER OF THE APPLICATION OF  
9 ARIZONA PUBLIC SERVICE COMPANY  
10 FOR A HEARING TO DETERMINE THE  
11 FAIR VALUE OF THE UTILITY PROPERTY  
12 OF THE COMPANY FOR RATEMAKING  
13 PURPOSES, TO FIX A JUST AND  
14 REASONABLE RATE OF RETURN  
15 THEREON, TO APPROVE RATE  
16 SCHEDULES DESIGNED TO DEVELOP  
17 SUCH RETURN, AND TO AMEND  
18 DECISION NO. 67744

Docket No. E-01345A-05-0816

Arizona Corporation Commission

**DOCKETED**

OCT 23 2006

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13 IN THE MATTER OF THE INQUIRY INTO  
14 THE FREQUENCY OF UNPLANNED  
15 OUTAGES DURING 2005 AT PALO VERDE  
16 NUCLEAR GENERATING STATION, THE  
17 CAUSES OF THE OUTAGES, THE  
18 PROCUREMENT OF REPLACEMENT  
19 POWER AND THE IMPACT OF THE  
20 OUTAGES ON ARIZONA PUBLIC SERVICE  
21 COMPANY'S CUSTOMERS.

Docket No. E-01345A-05-0826

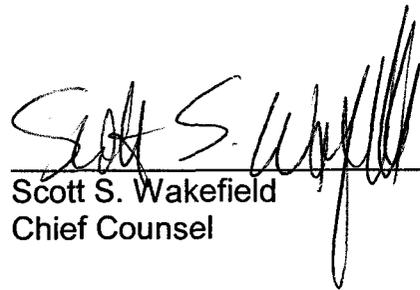
18 IN THE MATTER OF THE AUDIT OF THE  
19 FUEL AND PURCHASED POWER  
20 PRACTICES AND COSTS OF THE  
21 ARIZONA PUBLIC SERVICE COMPANY.

Docket No. E-01345A-05-0827

**NOTICE OF FILING**

21 The Residential Utility Consumer Office ("RUCO") hereby provides notice of filing the  
22 Testimony Summary of Stephen G. Hill in the above-referenced matter.  
23  
24

1 RESPECTFULLY SUBMITTED this 23<sup>rd</sup> day of October 2006.

2  
3  
4   
5  
6 Scott S. Wakefield  
7 Chief Counsel

8 AN ORIGINAL AND SEVENTEEN COPIES  
9 of the foregoing filed this 23<sup>rd</sup> day  
10 of October 2006 with:

11 Docket Control  
12 Arizona Corporation Commission  
13 1200 West Washington  
14 Phoenix, Arizona 85007

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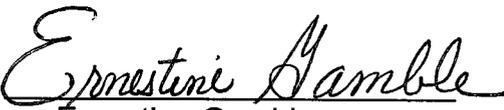
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By   
Ernestine Gamble

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SUMMARY OF TESTIMONY  
OF  
STEPHEN G. HILL

1 Q. PLEASE STATE YOUR NAME, OCCUPATION AND ADDRESS.

2 A. My name is Stephen G. Hill. I am self-employed as a financial consultant, and principal  
3 of Hill Associates, a consulting firm specializing in financial and economic issues in  
4 regulated industries. My business address is P. O. Box 587, Hurricane, West Virginia,  
5 25526 (e-mail:sghill@compuserve.com).

6

7 Q. ARE YOU THE SAME STEPHEN HILL WHO TESTIFIED PREVIOUSLY WITH  
8 REGARD TO CAPITAL STRUCTURE AND COST OF CAPITAL ISSUES ON  
9 BEHALF OF RUCO IN THIS PROCEEDING?

10 A. Yes, I am.

11

12 Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY AT THIS TIME?

13 A. The purpose of my testimony is to provide a summary of my Direct and Rebuttal  
14 Testimony.

15

16 Q. WHAT ARE YOUR RECOMMENDATIONS WITH REGARD TO THE RETURN ON  
17 EQUITY CAPITAL AND THE OVERALL RETURN TO BE ALLOWED IN THIS  
18 PROCEEDING?

19 A. I recommend that the company be allowed a return on its equity capital that is equal to its  
20 cost. The cost of equity capital for an electric utility operation with similar risks to that  
21 of the applicant, Arizona Public Service Company (APS, the Company), currently falls in  
22 the range of 9.25% to 9.75%, the mid-point of which is 9.50%. However, because APS  
23 has lower financial risk than the sample group of electric utilities, an appropriate return  
24 on equity for APS should fall at the lower end of the market-determined cost of equity  
25 capital for the sample of publicly-traded electric utility companies. Therefore, I  
26 recommended that the Commission set rates for APS so that the Company is allowed the  
27 opportunity to earn an 9.25% return on a reasonable level of equity capital investment.



1 Capital Asset Pricing Model (CAPM) analyses. Fifth, I address the deficiencies in the  
2 Company's equity cost estimation methodologies, showing that the Company's requested  
3 equity return is overstated.

4  
5 Q. PLEASE BRIEFLY DISCUSS EACH SECTION OF YOUR DIRECT TESTIMONY.

6 A. A brief synopsis of each section of my testimony is provided below:

7 • **Section I, Investor Expected Returns.** In the initial section of my testimony I  
8 provide objective evidence available in the marketplace, as well as recent research in  
9 financial economics that indicates that a cost of equity capital in the 9.25% to 9.75%  
10 range for electric utilities is reasonable and represents a reasonable approximation of  
11 investors' expected return (the cost of equity capital). The evidence presented is as  
12 follows:

- 13 ○ The returns on common equities in the US market included in APS's  
14 pension fund projections are well below 10%.
- 15 ○ Investor services (AG Edwards, Value Line) currently project single-  
16 digit returns for utility investments.
- 17 ○ Utility industry analysts as well as other financial media indicate that  
18 equity return expectations are in the 8.5% to 9.5% range.
- 19 ○ Current academic research related to the expected return on stocks  
20 over that of bonds (the risk premium) indicates that single-digit returns  
21 are reasonable expectations.
- 22 ■ Long-term historical studies (Dimson, et al, Siegel) indicate a  
23 risk premium above long-term Treasury bonds of 3.4% to 5%,  
24 and that expected risk premiums are likely to be lower than  
25 those experienced historically.
- 26 ■ Forward-looking studies, i.e., studies that are based on either a  
27 historical analysis of forward-looking returns or of surveys of

1 risk premium expectations (Fama and French, and Graham and  
2 Harvey) show expected equity returns to be only 2.5% to 4.5%  
3 above long-term T-bonds.

- 4 ○ Even at the upper end of an expected risk premium range, 5%, given a  
5 current T-Bond yield of about 5%, the recent research cited in my  
6 testimony indicates an investor-expected return on the stock market,  
7 generally, of about 10% [5% T-Bond yield + 5% risk premium].  
8 Because utilities have less investment risk than stocks, these data  
9 indicate that my 9.25% equity return for APS is reasonable.

10 • **Section II, Economic Environment.** In this section of my testimony I provide  
11 evidence available in the marketplace, which indicates that a cost of equity capital in the  
12 9.25% to 9.75% range for electric utilities is reasonable and represents a fair return to  
13 investors.

14 First, the general level of capital costs remains near a 40-year low, as evidenced  
15 by current interest rate levels. Although the Federal Reserve has pushed up short-term  
16 rates to slow down the economy and ward off inflation, long-term rates (most closely  
17 related to the cost of equity) have remained relatively steady over the past two years.  
18 Second, Value Line's economic forecasts expect the economy to expand moderately,  
19 inflation to remain in check, and supporting the continuation of moderate capital costs.  
20 Also, as the economy has slowed recently, long-term rates have declined (as I note in my  
21 Surrebuttal Testimony). Third, long-standing and widely-understood relationships  
22 between utility market price, book value and expected equity return indicate that equity  
23 returns below 10% are reasonable. In sum, the objective evidence available to investors  
24 in the capital marketplace today confirms the reasonableness of the 9.25% to 9.75%  
25 range of equity capital costs for electric utilities presented in this testimony.

26 • **Section III, Capital Structure.** The manner in which the Company has been  
27 capitalized historically is very different from the capital structure requested by the

1 Company in this proceeding. According to the Company's 2004 S.E.C. Form 10-K,  
2 Arizona Public Service Company was capitalized at year-end 2003 and 2004 with an  
3 average capital structure that consisted of approximately 45% common equity and 55%  
4 long-term debt.<sup>2</sup> During the time that APS was capitalized with a 45% common equity  
5 ratio, it maintained investment-grade bond ratings.<sup>3</sup> The Company has maintained an  
6 investment-grade bond rating with a 45% common equity ratio and, now, requests that  
7 rates be set using a much more expensive capital structure containing about 55%  
8 common equity. That increase in common equity, alone, if included in rates would cost  
9 Arizona ratepayers \$58 Million annually.

10 The current common equity ratio will not be sustained. In its Filing Schedule D-1,  
11 APS indicates that by year-end 2007, its common equity ratio will decline by almost  
12 three percentage points from the currently requested level. Those data indicate that  
13 following the rate case, the Company's common equity ratio will trend downward from  
14 its currently elevated levels. Also, the Company's riskier parent, Pinnacle West Capital  
15 Corporation is capitalized with approximately 50% common equity in its capital  
16 structure. Therefore, an appropriate ratemaking common equity ratio for its regulated  
17 subsidiary, APS, should not be higher than that utilized by the unregulated parent  
18 company. To do so would be to allow financial cross-subsidization of the parent by the  
19 regulated subsidiary.

20 Finally, the 50% equity, 50% debt capital structure I recommend contains  
21 considerably more common equity than that utilized on average by the electric utility  
22 industry, 44%. Therefore, I recommend that the Commission set rates for APS using a  
23 capital structure consisting of 50% common equity and 50% long-term debt.

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<sup>2</sup> Pinnacle West 2004 S.E.C. Form 10-K, p. 131. December 31, 2003 capital structure: 45.66% common equity, 54.34% long-term debt. December 31, 2004 capital structure: 45.09% common equity and 54.91% long-term debt.

<sup>3</sup> S.E.C. Form 10-K, 2003, 2004, 2005.

1           • **Section IV, Methods of Equity Cost Evaluation.** In this section of my Direct  
2 Testimony, I describe in detail the DCF analysis I perform using the market data of a  
3 sample of electric utility companies. A sample of electric distributors was chosen as a  
4 basis for determining the cost of equity capital because those companies were generally  
5 similar in risk to Southwest. In addition, I describe the theory and the mechanics of three  
6 other cost of equity estimation techniques I use to corroborate my DCF results—the  
7 Modified Earnings-Price Ratio Analysis, the Market-to-Book Ratio Analysis and the  
8 Capital Asset Pricing Model Analysis. The results of those analyses are as shown in the  
9 Table below:

<u>METHOD</u>	<u>Electric Utility Companies</u>
DCF	9.44%
CAPM	9.23%/10.56%
MEPR	9.13%/8.79%
MTB	9.31%/9.38%

11  
12 My estimate of the cost of equity capital for the electric utilities included in the sample  
13 group, presented in my Direct Testimony, ranges from 9.25% to 9.75%, with a mid-point  
14 of 9.25%.

15           In the conclusion of the third section of my Direct Testimony, I discuss the fact  
16 that the ratemaking equity ratio of APS is higher than the sample of electric utilities I  
17 studied in my equity cost analysis. Using accepted methods to quantify the cost of equity  
18 impact of that financial risk difference indicates that, with a 50% common equity ratio,  
19 APS's cost of equity would be approximately 50 basis points below that of the sample  
20 group. Therefore, a reasonable return on common equity for Southwest would fall at the  
21 lower end of a reasonable range—9.25%. I also provide several reasons why it is not

1 appropriate to make an explicit adjustment to the cost of equity capital to account for  
2 issuance expenses related to sales of new common equity by the Company.

3 • **Section V, Company Cost of Capital Analysis.** In the final section of my  
4 Direct Testimony, I discuss the practical and theoretical deficiencies contained in of the  
5 cost of capital testimony of Dr. William Avera, the Company's cost of capital witness.  
6 APS witness Avera utilizes DCF, Capital Asset Pricing Model, Risk Premium and  
7 Comparable Earnings analyses to estimate the equity capital cost of the Company.  
8 Company witness Avera recommends an 11.5% return on equity for APS based on his  
9 analysis, which was undertaken about a year ago.

10 Dr. Avera devotes a portion of his testimony to the "reliability" of DCF cost of  
11 equity estimates. The DCF is now, and has for over thirty years, been the pre-eminent  
12 equity cost estimation methodology used in regulation for a very simple reason—it  
13 works, and it works well. This Commission has, as have most others in the U.S.,  
14 traditionally relied on the DCF to determine the cost of equity in rate proceedings and  
15 should not be dissuaded from doing so on the basis of Dr. Avera's testimony in this  
16 proceeding.

17 Many of the firms used in Dr. Avera's sample group have substantial unregulated  
18 operations. Unregulated operations are generally riskier operations than utility operations.  
19 Therefore, reliance on the market-based cost of equity of firms that have substantial  
20 unregulated operations, such as those included in Dr. Avera's sample group, will lead to a  
21 cost of equity estimate that overstates the cost of equity for a utility like APS—even if the  
22 equity cost estimation methods are accurate.

23 Dr. Avera's DCF equity cost estimate produced a result of 9.0%. As I show in my  
24 Direct Testimony, updating his DCF analysis produces an equity cost estimate ranging  
25 from 8.8% to 9.8%, with a mid-point of 9.53%. My DCF equity cost estimate in this

1 proceeding is 9.44%. An update of Dr. Avera's DCF methodology tends to confirm my  
2 own equity cost estimate in this proceeding.<sup>4</sup>

3 Dr. Avera used three different types of risk premium analyses to estimate the cost  
4 of equity capital. In each of those analyses he adds a risk premium to current bond yields  
5 and projected bond yields. However, only the current bond yield provides an estimate of  
6 the current cost of equity capital. Relying on projected bond yields in a risk premium  
7 analysis to estimate the current cost of equity would be like relying on projected stock  
8 prices in a DCF analysis—a procedure Dr. Avera does not recommend.

9 While Dr. Avera elects, in this proceeding, to place primary emphasis on risk  
10 premium results, he has testified previously that it would not be advisable for regulatory  
11 bodies to place such heavy reliance on risk premium equity cost estimates.

12 Dr. Avera's first risk premium analysis, shown in his WEA-5, measures the  
13 difference between the return on utility stocks and utility bonds. That analysis also  
14 underscores one of the main problems with risk premium methods—the volatility  
15 inherent in the historical data indicate that the determination of the historical period  
16 effectively determines the outcome of the analysis. As shown on page 62 of my Direct,  
17 the historical risk premium shown in Dr. Avera's data declines dramatically from the 4%  
18 risk premium he reports as the study period approaches more current data. Since 1966,  
19 the return differential between utility stocks and bonds has averaged about only 1%.

20 In my direct Testimony (Appendix D) in this proceeding, I discussed in detail the  
21 shortcomings of the CAPM analysis when used in cost of equity analysis as rationale for  
22 reliance on that equity cost estimation methodology as a corroborative method rather than  
23 a primary indicator of equity costs in regulatory proceeding. Therefore, I did not revisit  
24 all of those issues in detail in the discussion of Dr. Avera's CAPM analysis.

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<sup>4</sup> It is important to note that Dr. Avera did not update his DCF equity cost estimate when he filed Rebuttal Testimony in this proceeding, and elected not to discuss the update of his DCF contained in my Direct Testimony.

1           The primary flaw in Dr. Avera's CAPM analyses is the risk premium. Dr. Avera  
2 utilized two different CAPM methods. His 7.2% market risk premium is based on the  
3 historical Ibbotson data base and his 9.0% risk premium is based on a projected equity  
4 return for the S&P 500. Both of those estimates are well above the current forward-  
5 looking risk premium, as evidenced in the Company's own pension fund equity return  
6 expectations as well as the preponderance of the current research on the topic in the  
7 academic financial community, which I cite in Section I of my Direct Testimony. Even  
8 Ibbotson's projected market risk premium 4% - 6%, which is on the high end of the  
9 current consensus, is well below the market risk premiums used by Dr. Avera in his  
10 testimony.

11           The final risk premium analysis used by Dr. Avera is based on allowed returns by  
12 other regulatory bodies to other utility operations, in combination with what Dr. Avera  
13 perceives to be an inverse relationship between interest rates and risk premiums. I show  
14 in my testimony that there is other research on the subject of the relationship between  
15 interest rates and risk premiums, not mentioned by Dr. Avera, which indicates that, if  
16 there is an inverse relationship between interest rates and the market risk premium, the  
17 impact on the current cost of equity capital is much smaller than that postulated by Dr.  
18 Avera. Also there is other, more current research by prominent scholars, that indicates the  
19 opposite relationship holds. That is, risk premiums are positively related to interest rates,  
20 and the lower the interest rates, the lower the risk premium expectation. Finally, data  
21 from Dr. Avera's historical allowed return series tends to support that more recent  
22 academic finding, namely that risk premiums over the past thirty years, have declined at  
23 more rapid rate than have interest rates.

24           In summary, Dr. Avera's risk premium analyses do not provide information that  
25 would be useful to this Commission in its task of determining the cost of equity capital  
26 for Arizona Public Service Company's electric utility operations.

27



1 Q. PLEASE BRIEFLY SUMMARIZE THE ISSUES RAISED IN YOUR SURREBUTTAL  
2 TESTIMONY.

3 A. I initially respond to Mr. Brandt's concerns regarding my overall return recommendation  
4 in this proceeding. Mr. Brandt claims in rebuttal that RUCO did not assess the impact of  
5 its overall return recommendation on APS in this proceeding. However, that is not the  
6 case. I noted that my recommended return, if earned, would afford the Company an  
7 opportunity to achieve a pre-tax coverage of its interest expense that is substantially  
8 greater than its has achieved on average over the past three years.

9 I also discuss Mr. Brandt's income statement projections that are used to create  
10 the "RUCO projection" included in his rebuttal exhibit, Attachment DEB-3RB. Those  
11 projections incorporate significantly more debt capital than the 50% equity, 50% debt  
12 capital structure RUCO recommends in this proceeding. Therefore, his projections are  
13 not in line with RUCO's actual recommendations in this proceeding and do not  
14 accurately represent the outcome of those recommendations.

15 I also discuss the fact that it is not unusual during a construction phase for a utility  
16 to earn a return that is lower than the return allowed, but that difference will be  
17 eliminated when the balance between the utility plant and the number of customer is  
18 restored. That re-balancing will occur either through another rate proceeding, or some  
19 other recognition of the additional rate base in rates, or through the number of customers  
20 increasing more rapidly than the rate base additions. Additionally, I note that while it is  
21 reasonable to consider administrative solutions to the difference between test year and  
22 actual rate base, it is not reasonable to simply "throw money" at the problem through the  
23 use of an attrition allowance, i.e., purposely allowing the company to earn a return greater  
24 than its cost of capital. That would not solve any of the regulatory/administrative  
25 problems and would be unfair to ratepayers.

26 Mr. Brandt, in his Rebuttal, also discusses my recommended ratemaking capital  
27 structure for APS. In response to Mr. Brandt' capital structure rebuttal, I note that capital

1 structures are not static and just because the Company has a 55% common equity ratio at  
2 one point in time does not mean that its will continue to be capitalized in that manner  
3 during its construction period. The Company projects that it's common equity ratio will  
4 decline substantially by 2007. Also the shift from 45% equity to 55% equity in APS's  
5 capital structure occurred immediately prior to the filing of this rate case and the current  
6 equity ratio is unrepresentative of the manner in which APS has been capitalized in the  
7 past. Finally, the use of a hypothetical ratemaking capital structure, which balances the  
8 interests of ratepayers and investors, has recently been accepted by this Commission as a  
9 reasonable ratemaking strategy (Docket No. G-01551A-04-0876).

10 Mr. Brandt also claims in rebuttal that the capital structure of Pinnacle West is  
11 irrelevant because the unregulated operations of Pinnacle West are small relative to APS  
12 and, therefore, the parent and the regulated subsidiary have similar business risk. My  
13 response to that logic is that, in outlining this position, Mr. Brandt is simply providing  
14 additional rationale to use a capital structure similar to that of Pinnacle West (50%  
15 equity/50% debt) to set rates for APS. Similar risk companies should be capitalized  
16 similarly.

17  
18 Q. BOTH MR. BRANDT AND DR. AVERA ADDRESS THE ISSUE OF APS'S  
19 PENSION FUND SINGLE-DIGIT EQUITY RETURN EXPECTATIONS. HOW DO  
20 YOU RESPOND TO THAT ISSUE IN YOUR SURREBUTTAL?

21 A. First, Mr. Brandt fails to respond directly to the issue raised in my Direct Testimony,  
22 namely that the Company's portfolio investment manager projects an equity return  
23 expectation well below 10%. Instead, he focuses on what the Company uses to determine  
24 its current portfolio return expectations, which, although derived from the lower  
25 investment manager projections, includes an additional return attributable to the ability to  
26 "beat the market." My reference was to the market return expectation, which shows my  
27 recommended 9.25% return for a utility operation to be reasonable.

1           Second, even if we assume that Mr. Brandt is correct and all equity investors  
2 expect the market to earn a 10.5% return (Mr. Brandt's Attachment DEB-15RB), that  
3 implies that Dr. Avera's 11.5% return for APS is substantially overstated and a 9.25% for  
4 a lower-risk utility is a more reasonable expectation.

5           Third, Dr. Avera indicates that the Company's portfolio equity return expectation  
6 is somehow different from the investor-expected return we seek to determine in cost of  
7 capital analysis. That is not a reasonable claim and Dr. Avera has provided no support for  
8 his position that the cost of capital in the general equity market is fundamentally different  
9 from what investors like APS's pension fund expect.

10           Fourth, Dr. Avera cites a portion of one footnote in the portfolio investment  
11 advisors' report that I cite and attempts to confuse the issue by citing it. However, an  
12 examination of the data and the entire report indicate that his "concerns" regarding the  
13 treatment of the historical data are misplaced because APS's investment manager makes  
14 it quite clear that its equity return expectations are based on many factors in addition to  
15 the actual historical earned returns.

16           In summary, the equity returns included in the Company's retirement portfolio are  
17 directly related to investors' expected returns and the cost of equity capital. Moreover,  
18 they show that RUCO's equity return recommendation in this proceeding, 9.25%, is  
19 reasonable, and Dr. Avera's equity cost estimate, 11.5% is substantially overstated.

20  
21 Q. WHAT IS YOUR SURREBUTTAL RESPONSE TO DR. AVERA'S REBUTTAL?

22           Initially, I respond to Dr. Avera's claims that I have selectively cited evidence regarding  
23 the expectation for relatively low market risk premiums. However, in the recent research  
24 on the market risk premium, there are no serious academic studies that show that the  
25 historical Ibbotson risk premium data is understated. The recent research shows that the  
26 historical Ibbotson data (the lowest of Dr. Avera's risk premiums) substantially overstates  
27 the current expectation in the marketplace.

1 Dr. Avera cites a study by Mehra, which he believes supports his position.  
2 However, as I explain in my Surrebuttal, that paper cited by Dr. Avera examines a  
3 different field of study altogether, and does not support his rebuttal thesis. In addition, Dr.  
4 Avera incorrectly uses data from the article to create a false market return approximating  
5 14% in an attempt to support his equity return recommendation. However, assuming that  
6 the historical return difference between stocks and bonds is an accurate representation of  
7 investors' current expectations<sup>5</sup>, an appropriate application of the data in the Mehra  
8 article indicates a market return expectation of 10.4%. That accurate representation of the  
9 Mehra data again shows that Dr. Avera's 11.5% for an electric utility substantially  
10 overstates the return expected on the equity market in general, while RUCO's 9.25%  
11 recommendation is more reasonable for a lower-risk utility operation.

12 Dr. Avera, in rebuttal, makes reference to a multi-stage DCF analysis that was  
13 used recently by an A.C.C. Staff witness in a water utility rate proceeding and uses that  
14 method to derive a DCF result much higher than the DCF he presents in his own  
15 testimony. I show that the key assumption in that analysis, i.e., that long-term utility  
16 growth will equate GDP growth, is not a reasonable assumption. I provide historical  
17 evidence which shows that average utility growth is about half of GDP. Using that  
18 relationship, (long-term utility growth = 1/2 long-term GDP growth), the multi-stage  
19 DCF adopted by Dr. Avera in rebuttal, produces a DCF result of 8.0% for APS.

20 I also address Dr. Avera's concerns related to my reliance on market-to-book  
21 ratios and expected book equity returns, as well as the corroborative equity cost  
22 estimation methods I utilize, as indicators of the cost of equity capital, showing through  
23 simple examples that those concerns are without merit. With regard to the corroborative  
24 methods I utilize, I note in my Surrebuttal that Dr. Avera has failed to provide any

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<sup>5</sup> Most of the current research indicates that current market risk premium expectations are below historical averages.

1 theoretical rationale as to why those methods should not be used as support for and to  
2 temper a DCF equity cost estimate.

3 In sum, Dr. Avera's equity cost estimate, 11.5%, is fundamentally flawed, relies  
4 far too heavily on risk premium analyses (which he, himself, has advised regulators to  
5 avoid) and substantially overstates the cost of equity capital of the electric utility  
6 operations of Arizona Public Service.

7

8 Q. DOES THIS CONCLUDE THE SUMMARY OF YOUR DIRECT AND  
9 SURREBUTTAL TESTIMONIES?

10 A. Yes, it does.

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