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BEFORE THE ARIZONA CORPORATION C

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AZ CORP COMMISSION
DOCUMENT CONTROL

IN THE MATTER OF THE APPLICATION OF ARIZONA PUBLIC SERVICE COMPANY FOR A HEARING TO DETERMINE THE FAIR VALUE OF THE UTILITY PROPERTY OF THE COMPANY FOR RATEMAKING PURPOSES, TO FIX A JUST AND REASONABLE RATE OF RETURN THEREON, TO APPROVE RATE SCHEDULES DESIGNED TO DEVELOP SUCH RETURN, AND TO AMEND DECISION NO. 67744.	DOCKET NO. E-01345A-05-0816
IN THE MATTER OF THE INQUIRY INTO THE FREQUENCY OF UNPLANNED OUTAGES DURING 2005 AT PALO VERDE NUCLEAR GENERATING STATION, THE CAUSES OF THE OUTAGES, THE PROCUREMENT OF REPLACEMENT POWER AND THE IMPACT OF THE OUTAGES ON ARIZONA PUBLIC SERVICE COMPANY'S CUSTOMERS.	DOCKET NO. E-01345A-05-0826
IN THE MATTER OF THE AUDIT OF THE FUEL AND PURCHASED POWER PRACTICES AND COSTS OF THE ARIZONA PUBLIC SERVICE COMPANY.	DOCKET NO. E-01345A-05-0827 **STAFF'S NOTICE OF FILING**

Staff hereby provides notice of filing its Surrebuttal Testimony in this Docket. An original and thirteen copies are submitted of the Prefiled Surrebuttal Testimony of Matthew J. Rowell, Barbara E. Keene, Erinn A. Andreasen, Jerry D. Anderson, James R. Dittmer, David C. Parcell and John Antonuk.

RESPECTFULLY SUBMITTED this 27th day of September, 2006.

Arizona Corporation Commission
DOCKETED
SEP 27 2006
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BEFORE THE
ARIZONA CORPORATION COMMISSION

IN THE MATER OF THE APPLICATION OF ARIZONA PUBLIC SERVICE COMPANY FOR A HEARING TO DETERMINE THE FAIR VALUE OF THE UTILITY PROPERTY OF THE COMPANY FOR RATEMAKING PURPOSES, TO FIX A JUST AND REASONABLE RATE OF RETURN THEREON, TO APPROVE RATE SCHEDULES DESIGNED TO DEVELOP SUCH RETURN, AND TO AMEND DECISION NO. 67744	) DOCKET NO. E-01345A-05-0816

SURREBUTTAL TESTIMONY

OF JAMES R. DITTMER

ON BEHALF OF THE
UTILITIES DIVISION STAFF

SEPTEMBER 27, 2006

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JAMES R. DITTMER

SURREBUTTAL TESTIMONY
OF
JAMES R. DITTMER

ARIZONA PUBLIC SERVICE COMPANY
DOCKET NO. E-01345A-05-0816

Q. Please state your name and address.

A. My name is James R. Dittmer. My business address is 740 Northwest Blue Parkway, Suite 204, Lee's Summit, Missouri 64086.

Q. By whom are you employed?

A. I am a Senior Regulatory Consultant with the firm of Utilitech, Inc.

Q. Have you previously presented testimony within this docket?

A. Yes. I filed direct testimony on behalf of the Arizona Corporation Commission ("ACC" or "Commission") Utilities Division Staff ("Staff") in this docket on August 18, 2006.

Q. On whose behalf are you providing this surrebuttal testimony?

A. Like my direct testimony, this surrebuttal testimony is being presented on behalf of the ACC Staff.

Q. What is the purpose of your surrebuttal testimony?

A. I will be responding to a number of arguments and comments offered in the rebuttal testimony of various Arizona Public Service Company ("APS" or

"Company") rebuttal witnesses. Specifically, I will be providing surrebuttal testimony addressing the following topics and responding to the following APS rebuttal witnesses:

Company Witness	Topic/Issue
Steven Wheeler	Overview of Company's Rebuttal Case
Steven Wheeler	Criticism Of Staff's "End Results" And APS' Request for an Attrition Adjustment in the Event the Commission Adopts any of Staff's or Other Intervenors' Revenue Requirement Proposals
Steven Wheeler	Staff's Recommendation Regarding Continuation Of The Interim PSA Adjustor
	Staff's Revised Recommendations Resulting From Updated, Corrected And APS-Conceded Adjustments
Don Brandt	Accelerated Recovery Of Underfunded Pension Liability
Laura Rockenberger	Deferred Bark Beetle Remediation Costs
Chris Froggatt	Investment Tax Credits As A Ratebase Offset
Fred Balluff	Cash Working Capital – Lead Lag Study Development
Peter Ewen	Sundance Operations and Maintenance Expense

I note that APS has addressed a few adjustments within its rebuttal testimony that I proposed within my direct testimony that I am not addressing with this surrebuttal testimony. The fact that I am not filing surrebuttal testimony on an issue should not be construed as acquiescence of the adjustment. Rather, in those cases, it is believed that those issues have been adequately addressed in direct testimony.

OVERVIEW OF COMPANY'S REBUTTAL CASE

Q. Please provide your overall understanding of the Company's rebuttal position regarding the Staff's revenue requirement recommendations as presented within Staff's direct testimony and exhibits filed on August 18, 2006.

A. My understanding is that APS has conceded a number of adjustments included within Staff's and the Residential Utility Consumer Office's testimony that, when considered in isolation, would have the impact of *reducing* APS' rate request as filed on January 31, 2006. However, the Company has upwardly revised its adjustment for annualized fuel and purchased power expense in an amount that is nearly identical to the sum of all other concessions that it has made. Additionally, the Company has accepted Staff's recommendation to increase the annual Environmental Improvement Charge in the amount of $4.25 million. The end result, as reflected within Attachment SMW-1RB affixed to Mr. Steven Wheeler's testimony, is that the Company is now requesting a $451.3 million increase (21.21%) in base plus adjustor rates as opposed to its January 2006 requested increase of $453.9 million (21.34%).

CRITICISM OF STAFF'S "END RESULTS" AND APS' REQUEST FOR AN ATTRITION ADJUSTMENT IN THE EVENT THE COMMISSION ADOPTS ANY OF STAFF'S OR OTHER INTERVENORS' REVENUE REQUIREMENT PROPOSALS

Q. Please summarize your understanding of APS witness Mr. Steven Wheeler's testimony as it addresses Staff's overall rate recommendations.

A. Mr. Wheeler is highly critical of Staff's overall recommendations. He indicates that financial results stemming from Staff and RUCO's revenue requirement recommendations are "clearly disturbing" and that adoption of Staff's adjustments "would represent a step backward from the level of regulatory support heretofore provided by this Commission." Further, Mr. Wheeler characterizes Staff's failure to perform "any analysis....of the likely consequences of their overall revenue requirement recommendation" as "equally disturbing."

Finally, Mr. Wheeler appears to advocate adoption of an "attrition adjustment" that would be equivalent on a dollar-for-dollar basis to the sum of all Staff, RUCO or other intervenor adjustments that this Commission might adopt that would otherwise reduce the Company's requested overall increase of approximately $450 million. Or stated more specifically, Mr. Wheeler is advocating that for each dollar of "disallowance" of the Company's requested rate increase that this Commission might adopt that it concurrently authorize a dollar of an attrition allowance adjustment that would bring the increase being granted exactly back to the level that the Company is now requesting.

The entire basis for Mr. Wheeler's request for an attrition adjustment that would offset dollar-for-dollar any "disallowance" adjustment this Commission might adopt is the Company's financial forecasts for years 2006, 2007 and 2008 that indicate that the Company *must* receive every dollar of its requested $451.2

million increase in order to maintain financial ratios that will allow it to retain its investment grade credit rating.

Q. Has the Staff reviewed the impact of its overall revenue requirement recommendation upon forecasted results?

A. No.

Q. Why not?

A. APS' currently requested increase – up until the time of filing its rebuttal testimony – was based exclusively upon the adjusted historic test year ending September 30, 2005. In this base rate proceeding Staff has focused its review on the Company's proposed adjusted test year cost of service that, prior to the rebuttal stage of this proceeding, was the sole support for its requested increase.

In the 1980s and early 1990s, as APS was undertaking its extensive construction program of the three Palo Verde units, APS occasionally sought new rate proposals based upon financial integrity concerns – concerns that were supported in part by financial forecasts. The data in our files from those very dated cases are limited. But from memory and a brief review of limited testimony from files still retained, I believe in those old cases that APS was requesting *within its initial direct filing of testimony and exhibits* new rate proposals that were driven, in part, by cash flow and interest coverage concerns. Some of the issues and rate proposals driven by cash flow/coverage concerns were requests for full tax normalization of book/tax timing differences, requests to include construction work in progress in rate base, and the testing of the impact of phase-in plans being suggested. Additionally, in the last Palo Verde-driven rate case, the Staff was contemplating significant disallowances of the Palo Verde units based upon a prudence review as well as an excess capacity study. The Staff had concerns of what the impact of its disallowance might be upon the Company's overall financial conditions – and its ability to maintain access to capital markets at reasonable rates.

Since the last Palo Verde rate case undertaken in the early 1990s, Utilitech has not been requested to review, and has not undertaken a review of, the impact of Staff's overall revenue requirement recommendations upon forecasted operating results in any rate case in which it has been involved on behalf of the ACC Staff.

In Staff's view, this rate case has been driven primarily by significantly rising fuel and purchased power costs, and a previously-approved Power Supply Adjustor that imposed restrictions upon the timing and amounts of pass through of such costs. Accordingly, significant resources were devoted in this proceeding to assessing the reasonableness of fuel cost increases being incurred, and to revisiting the mechanics of the PSA to assess its effectiveness in passing through costs – balanced with needs to provide proper incentives to APS and to obtain assurances that costs being passed through have been, and prospectively would be, reasonably incurred.

In summary, Staff did not undertake an analysis of the impact of its recommendations on forecasted operating results because such analyses simply have not been undertaken for a number of years – since the completion of APS' significant production construction program in the early 1990s. Additionally, there were no unique rate proposals included within APS' direct case that were specifically linked to forecasted financial ratios, similar to those that triggered forecast analyses in the 1980s and early 1990s. Further, an analysis of the Company's forecast, even at a fairly high review level, is resource intensive. This case was primarily driven by increasing fuel and purchased power costs – and Staff has directed significant resources to addressing this significant cost of service component. Without a forewarning in the Company's direct case that APS believed the revenue requirement to be granted should ultimately be driven by *financial forecasts* rather than *the adjusted historic test year cost of service,* and with competing resource requirements for other elements of the case (i.e., fuel costs and PSA modifications), the thought of undertaking a resource-intensive review of the Company's forecast was simply not considered.

Q. Mr. Wheeler is highly critical of Staff's failure to assess the impact of its recommendations upon the Company's financial integrity. Do you have any response to such criticism?

A. Yes. First, it has been my experience that the type of analysis that Mr. Wheeler is suggesting has not been undertaken for any APS proceeding for approximately 15 years. Second, to the best of my knowledge, the type of analysis that Mr. Wheeler is suggesting be undertaken, and which Staff did undertake during the years when APS was under going the significant construction program related primarily to the Palo Verde Units, were all predicated by unique rate proposals included within APS' direct case that were being driven by financial integrity concerns. No such forewarning was included with APS' current rate filing. Third, in old cases where forecasted financial ratios were addressed, we undertook at least a high level review of the Company's forecast. Even with only a "high level" review, we sometimes made correcting or updating adjustments to the Company's forecast. The important point being that we did not in prior cases acquiesce to, nor would we recommend in the instant case, blind adherence to the Company's financial forecast. Specifically, in a base rate proceeding there should be at least some level of scrutiny of a Company forecast before discretionary rate decisions are based upon the forecast results.

Q. Do you understand that this Commission based its decision in the APS emergency proceeding held earlier this year, at least in part, based upon the Company's forecasted financial results?

A. That is my understanding. In the context of an emergency rate proceeding there typically is not adequate time or resources to analyze a Company's forecast in any detail. However, importantly, the emergency or interim increase granted is subject to refund. Further, the emergency increase was requested after APS had filed this current base rate case, and accordingly, it was a certainty that a more thorough review would be undertaken in the very near future.

Q. Given the APS-claimed dire consequences of Staff's recommendations stated within Company testimony, are you or Staff recommending that the Commission accept any of the forms of attrition adjustments that the Company is recommending in the event any of Staff's adjustments are adopted by this Commission?

A. No. At the outset, I would first state that I encourage the Commission to decide every issue presented based upon the evidence and merits of each individual issue. If the Commission adopts any Staff adjustments – as I certainly hope that it does for reasons stated within the various Staff witnesses' testimony – I would strongly recommend it not concurrently and blindly adopt an offsetting attrition adjustment as suggested within Mr. Wheeler's testimony. As noted, Staff has not reviewed APS' forecasts for years 2006, 2007 and 2008 in any meaningful detail because APS had not previously based its requested rate increase upon these forecasts. Staff has, obviously, reviewed the information presented by APS in its rate filing – its adjusted test year cost of service – in detail. That review has lead to a number of significant adjustments – many of which have been agreed to by APS. Unless a reasonably detailed review of the Company's forecast is undertaken, I would strongly urge rejection of attrition adjustments based upon its results. Just as mistakes and oversights occurred in APS' preparation of its adjusted test year cost of service, it is entirely possible, and perhaps likely, that similar mistakes or oversights may have occurred in the preparation of the Company's financial forecast. Additionally, even in the absence of clear mistakes, forecasts can be prepared with results skewed toward pessimistic or optimistic results. Accordingly, before rate decisions are based upon their results, financial forecasts must be given some level of review.

Second, I would note that APS has recommended a number of "alternative" rate proposals to be adopted in the event the Commission is inclined to adopt *any* of Staff's recommendations regarding accounting issues or rate of return. Mr. Wheeler loosely lumps these alternatives together in a discussion regarding "attrition." However, it should be clearly understood that some Company proposals would offset earnings attrition, while other proposals would do very little to alleviate earnings attrition, but would nonetheless, enhance cash flow to the Company that would, in turn, improve cash flow metrics that would assist in maintaining the Company's credit ratings.

Q. Please further explain the distinction between pure "attrition adjustments" versus rate proposals that simply enhance cash flow.

A. Earnings attrition occurs when the increase in the cost of providing electric service begins to outpace the increase in margins derived from growth in sales. Relative to electric utilities nationwide, APS is experiencing – and predicts to continue to experience – high growth in retail sales. The noted growth is creating a demand to add transmission and distribution plant, as well as to find new sources of generation capacity and energy to meet such load growth. Currently, and in all likelihood for at least the next several years under the 2004 Settlement Agreement, APS will meet the need for generation capacity and energy through additional purchased power arrangements. With the PSA APS is permitted to pass through not only purchased power *energy* charges, but importantly, *demand* charges. The purchased capacity being paid for through demand charges included in purchased power transactions replaces the need to build generating capacity otherwise required to meet growth in customer electric requirements. Inclusion of demand charges in automatic fuel adjustment clauses – similar to the APS PSA – does not always occur. Specifically, demand charges are often excluded from automatic fuel adjustment clauses inasmuch it is recognized that growth in retail sales – and attendant margins above fuel costs – will be available to "pay for" incremental demand costs being incurred. I am not suggesting or recommending that demand charges be prospectively excluded from APS' PSA. However, I would note and emphasize that the APS PSA is more beneficial to shareholders than some automatic fuel adjustment clauses, and the inclusion of demand charges in the PSA should be considered a huge "plus" to APS in its challenges regarding attrition.

Because attrition for the production function cost of service is significantly alleviated with the PSA that includes recovery of demand charges, growth in retail margins *above fuel and purchased power costs that include demand charges* is available to a much larger extent to meet the cost-of-service increases attributable to return/depreciation requirements accompanying growth in distribution plant constructed to meet new load as well to simply recover increases in expense caused by ongoing inflation over time.

Returning to the various alternative rate proposals suggested by APS for the first time in rebuttal testimony, some recommendations would tend to offset earnings attrition. Specifically, of the "Additional Adjustments" reflected on Attachment SMW-2RB affixed to Mr. Wheeler's rebuttal testimony, the proposals labeled "Plant in Service," "Attrition Adjustment" and ".5% increase in ROR on Staff FVRB" are truly adjustments designed to address earnings attrition. Conversely, the proposals labeled "Depreciation" and "CWIP" would enhance cash flow and improve certain financial ratios relied upon by rating agencies, but would do relatively little to offset earnings attrition.

Q. Please further expand up the distinction you are drawing regarding the various subsets of alternative APS rate proposals, addressing first the APS recommendations that you believe address earnings attrition.

A. APS' first pure earnings attrition adjustment entitled "Plant in Service" is made to reflect additional post-test year plant additions predicted through the end of

2006 without equitably and consistently updating and reflecting growth in retail number of customers and attendant growth in revenues and margins above fuel cost. This asymmetrical proposal is purportedly recommended under the theory that growth in margins is not keeping pace with growth in plant in service and attendant return requirements.

I have not been able to observe within workpapers provided with the Company's rebuttal testimony exactly how the second alternative adjustment entitled simply "Attrition Adjustment" has been calculated. From the brief description provided in Mr. Brandt's rebuttal testimony, it would appear the Company has calculated this amount by simply determining an appropriate increase based upon 2007 and 2008 forecasted operating results. In other words, it would appear that the Company's position in proposing this alternative would be to completely ignore the massive efforts that the Company undertook in preparing an historic test year cost of service and also ignore all the other parties' discovery and analyses addressing the historic test year cost of service. Instead, with this adjustment, APS proposes within "the eleventh hour" of this proceeding to simply set rates upon a forecasted test year for which no meaningful discovery has been submitted and which – to my knowledge - no party has analyzed.

I also have not observed the actual calculations underlying the alternative entitled ".5% increase in ROR on Staff FVRB." However, it appears to simply be some form of a rate of return allowance derived from employment of Staff's Fair Value Rate Base. Apparently this proposal represents abandonment, or at least partial abandonment, of historic test year rate making principles as has been employed in Arizona for at least the past 20 years with which I am personally familiar.

Each of the adjustments described provide the Company with additional revenues, without any change in accounting that would modify the recovery of fixed assets (i.e., depreciation or amortization expense) or reduce the amount of expenditures that would otherwise be capitalized (i.e., CWIP in rate base reducing the amount of AFUDC otherwise capitalized). Because there would be no accompanying change in accounting with these pure attrition proposals, adoption of any of these recommendations would most assuredly reduce earnings attritions above that which would be achieved by establishing rates through strict employment of an historic test year cost of service.

Q. Please expand upon the other alternatives that you indicated would improve cash flow, but which would do little to address earnings attrition.

A. As already alluded to, each of the remaining two alternatives suggested result in accompanying changes in accounting. The impacts of the changes in accounting are to accelerate the recovery period for fixed plant assets from that currently being followed even though the total amount to be ultimately recovered over time would not change.

Currently APS capitalizes an Allowance for Funds Used During Construction ("AFUDC") whenever a plant addition has a construction period exceeding one month. AFUDC consists of interest and equity return associated with funding a project during construction. Capitalization of AFUDC ceases upon commercial operation of the project under the theory that once the project goes into service it will be useful in the provision of service, and thus contribute toward facilitating sales/margins that will provide for a "cash" return on the construction investment. With its "CWIP" alternative, APS is proposing to include an ongoing level of CWIP in rate base and concurrently cease the practice of capitalizing AFUDC during the construction phase. Under this proposal rates would be raised immediately, but with the cessation of capitalization of AFUDC, the ultimate in-service value of the plant will be lowered from that which would have occurred with continued capitalization of AFUDC. The increase in current retail rates would exactly offset the reduction in AFUDC income otherwise recorded – thus resulting in no increase in earnings.

Under the Company's "Depreciation" alternative the Company would increase recorded depreciation expense. The increase would not be based upon detailed and systematic depreciation rate studies. Further, per the Company's proposal, the increase in depreciation would not necessarily be FERC-plant-account specific. Rather, the Company would simply begin to record additional depreciation expense and record the attendant credit to a newly created depreciation reserve sub-account. It is not clear when or how the accelerated depreciation would eventually be considered in future rate proceedings, but presumably at some point ratepayers would be "credited" for what can essentially be considered a prepayment of depreciation expense. Because there would be an increase in the recording of depreciation expense that would be equivalent to the increase in revenues being collected, the Company would not experience any reduction in earnings attrition. However, depreciation is a "non-cash" expense. Accordingly, the recovery of depreciation expense on an accelerated basis would improve the Company's cash flow metrics.

Q. You have stated that Staff is not recommending the adoption of *any* of APS' alternative rate proposals. If the Commission were inclined to adopt any of APS' proposals over Staff's objections, do you have any recommendations as to which should be adopted?

A. First, I would reemphasize that it is Staff's recommendations that none of the APS alternative rate proposals should be adopted at this point in time. That having been stated, and at the risk of giving the impression that Staff is the least bit uncertain on this position, I would suggest that if the Commission were nonetheless inclined to adopt any of APS' proposals over Staff's objections, it should either adopt the proposal to include CWIP in rate base or to reflect accelerated depreciation. As already discussed, each of these two proposals affect the recovery period for fixed assets. Each of these two proposals result in accompanying accounting changes that would yield benefits – or reductions in rates – for future ratepayers. The other true "attrition" adjustments have no accompanying accounting changes, and thus, the revenues collected under these proposals would flow to APS' "bottom line" resulting in increased earnings for shareholders but no direct beneficial impact to future ratepayers. Accordingly, I would recommend that if the Commission were inclined to give APS more "cash," that it do so in the form of adopting the Company's accelerated depreciation expense or CWIP-in-rate-base proposals that would at least lead to future benefits to ratepayers.

Q. Are you recommending rejection of an attrition allowance beyond this case?

A. While I am admittedly skeptical of the need for an attrition allowance at this time, my recommendation is not intended to go beyond this case. If, however, APS desires the Staff or the Commission to consider an attrition allowance, or any other unique rate proposal that is driven by forward-looking financial metrics, I would recommend that APS be required to make such request *within its initial direct filing* so that Staff and other parties are forewarned and can correspondingly allocate resources appropriately. I do not believe the Company should be permitted to make such a significant request for a radically different rate proposal *for the first time* in the rebuttal phase of the case. Staff and other parties have less than two weeks to respond in surrebuttal to comments and arguments made by APS in rebuttal. There is no time to undertake discovery or meaningful analysis of new proposals within such timeframe. In my opinion, it would be unfair and inappropriate to consider such radical new proposals in the rebuttal/surrebuttal phase of a case. To borrow a characterization from Mr. Wheeler, I find such a proposal in the rebuttal phase of a case to be "disturbing."

Q. In your earlier answer you claimed that you were "admittedly skeptical" of the need for an attrition allowance at this point in time. Can you elaborate on that comment?

A. Yes. In the jurisdictions in which I frequently participate, I personally have not observed a utility company requesting, much less a commission granting, an attrition allowance for many years. Requests for attrition allowances were sometimes requested, and occasionally granted, in the late-1970s-through-early-1990s timeframe. In particular, in the early 1980s utilities were facing high single-digit if not double-digit inflation and borrowing costs. These conditions were being faced at the same time that many electric utilities were in the midst of significant generation construction programs and experiencing slower-than-originally-forecasted growth in sales. Today, interest rates and inflation rates are but a fraction of that being experienced in the early 1980s when attrition allowances were sometimes requested. Further, while APS is forecasting a need for significant construction expenditures for transmission and distribution facilities, it does not currently have plans to construct a new generating facility. Further, pursuant to the stipulation from the 2003 rate case, APS is prohibited from constructing new "self build" generating facilities with an in-service date prior to 2015 unless it seeks and is granted permission by this Commission. (Per Proposed Settlement in Docket No. E-01345A-03-0437, paragraph IX-74)

I also note that this "base rate" increase is driven exclusively by increasing fuel and purchased power costs. In fact, after revisions discussed in later sections of this testimony, Staff is recommending an *overall* base rate increase of $191.4 million. Underlying Staff's overall base rate increase is its recommendation to increase fuel and purchased power costs by $193.5 million. Thus, absent the increase in PSA-includable fuel and purchased power costs – no increase in base rates is required at this point in time. Or in other words, other than for PSA-includable costs, APS' cost of service has been, and continues to be, adequately recovered with existing non-fuel base rates.

I also emphasize that Staff is recommending significant changes to the currently-approved PSA. If Staff's PSA recommendations are adopted, the likelihood of cash flow constraints from temporary under recovery (delay in recovery) of fuel costs should be significantly mitigated. Further, disallowances stemming from the current PSA 90% limitation on the pass through of power supply costs would also be eliminated under Staff's proposal. Thus, if Staff's PSA modifications are adopted, there should be little, if any, earnings attritions stemming from under recovery of prudently incurred fuel/purchased power costs. Further, cash flow constraints caused by the delay in the recovery of prudently incurred fuel and purchased power expense should be mitigated if, as recommended under Staff's proposal, the annual PSA factor is based upon forecasted power supply costs.

In summary, at least based upon historic operating results, I believe any significant "attrition" that has been experienced has been resulting from the delay or disallowance of the recovery of fuel and purchased power expense. If Staff's PSA recommendations are adopted, attrition caused by delay or under recovery of prudently incurred fuel and purchased power expense should be de minimus – if it exists at all. Given current conditions of inflation, recent experience with APS' non-fuel/purchased power cost of service, as well as Staff's recommendations regarding prospective changes to the PSA, I do not believe that an attrition allowance is required at this point in time. That having been stated, I do not believe there should be any impediment to APS requesting an attrition allowance or other unique rate proposals *within its initial direct filing of its next rate case* – assuming one appears needed following the implementation of new base rates resulting from this case.

STAFF'S RECOMMENDATION REGARDING CONTINUATION OF THE INTERIM PSA ADJUSTOR

Q. Mr. Wheeler expressed confusion as to whether Staff was recommending that the interim PSA adjustor be terminated prior to the implementation of new base rates stemming from this case. He went on to specifically request the

Commission to authorize the synchronization of the expiration of the interim PSA with the implementation of new base rates resulting from this proceeding. Does Staff object to this proposal?

A. No. As stated within my direct testimony, it was assumed that new base rates would be implemented at about the time that the interim increase would expire. Staff has no objection to the continuation of the interim PSA until implementation of new base rates stemming from this proceeding.

STAFF'S REVISED RECOMMENDATIONS RESULTING FROM UPDATED, CORRECTED AND APS-CONCEDED ADJUSTMENTS

Q. Have you prepared revised Accounting Schedules that reflect needed corrections, updates and/or concessions included within APS rebuttal testimony and exhibits with which you agree?

A. Yes. I have revised Staff's original Joint Accounting Schedules to reflect updates included with APS' rebuttal testimony with which I agree. Further, APS has conceded a few issues presented by RUCO that Staff had not included within its original direct case. The updates, as well as the other APS concessions, have been included within Revised Joint Accounting Schedules filed as Staff Exhibit ___. I note that the Joint Accounting Schedules continue to post adjustments to APS' original as-adjusted retail jurisdictional cost of service filed with the Company's direct testimony in January 2006 even though APS has modified within rebuttal testimony some of its original adjustments and accepted all or portions of some of Staff and RUCO adjustments. Schedule E of the Revised Joint Accounting Schedules provides a reconciliation of issues between Staff's revised-rebuttal position and APS' original filed position. To assist the Commission and the parties in understanding which Staff adjustments remain "at issue," I have added a column on Schedule E that identifies adjustments that remain at issue, adjustments that have been conceded by APS in concept but for which the ultimate dollar value of the issue is dependent upon other Commission determinations[1], as well as adjustments that APS has agreed to in principle and for which there should be no dispute as to the value of the adjustment.

Q. Within your direct testimony you provided a table that summarized the recommendations being proposed by APS versus Staff. Have you updated that table for APS' and Staff's revised recommendations as presented within APS' rebuttal testimony and Staff's surrebuttal testimony?

A. Yes, Table A-Rebuttal below summarizes the recommendations of APS and Staff as I understand them to be at this point in time.

[1] For instance, the ultimate revenue requirement value of a rate base issue will be dependent upon the return found reasonable by the Commission.

Table A-Rebuttal Summary of APS' Request Versus Staff's Recommendations		
	APS' Request	**Staff's Recommenda-tion**
Annual Dollar Increase in Base Rates (millions):		
Fuel/power supply increase recommended	$331.0	$193.5
Non-fuel Increase Recommended	$111.5	($2.0)
Total Overall Base Rate Increase Recommended	**$442.5**	**$191.5**
Environmental Improvement Charge	$4.5	
Incremental EPS	4.3	4.3
Paragraph 19 d Bal. Account "second step"		27.5
Total Increase – Base & Trackers	**$451.3**	**$223.3**
% Impact to Average Retail Customer:		
Fuel/power supply increase recommended	15.6%	9.1%
Non-fuel Increase (Decrease) Recommended	5.2%	(0.1%)
Total Overall Base Rate Increase Recommended	**20.8%**	**9.0%**
Environmental Improvement Charge	0.02%	–
Incremental EPS	0.02%	.2%
Paragraph 19 d Bal. Account "second step" (to be filed with Staff rate design testimony)		1.3%
Total Increase – Base & Trackers	**21.2%**	**10.5%**

As discussed in greater detail in the surrebuttal testimony of Mr. John Antonuk, the Staff is recommending that the 2007 PSA factor be based upon 2007 power supply costs as prepared and reviewed during the fourth quarter of 2006. However, for purposes of calculating the base amount of PSA costs to be included within the development of current base rates, Staff has reflected revised and updated 2006 power supply costs. The fuel/power supply costs being proposed by APS for inclusion in base rate development within its rebuttal case have been prepared in mid-2006 based on a 2007 forecast. While Table A-Rebuttal above might suggest that Staff and APS disagree significantly on the level of ongoing power supply costs to include in rates, conceptually both parties are recommending reflection of forecasted 2007 power supply costs to be recovered in rates starting early within calendar year 2007.

Q. Please briefly describe the updates that have been reflected within the Revised Joint Accounting Schedules.

A. In direct testimony I proposed adjustments to update pension expense and post-retirement medical benefits based upon then-available actuarial estimates for those items for 2006. I recommended that these expense components be updated for actual 2006 final results before the end of this proceeding. APS has agreed to such update, and provided the amounts for such updates in the testimony and exhibits of Ms. Laura Rockenberger. Accordingly, the original Schedule Nos. C-6 and C-7 have been updated within the Revised Joint Accounting Schedules to reflect the latest actuarial amounts provided within APS rebuttal testimony.

Q. Please discuss the RUCO adjustments that APS has agreed to that were not incorporated within Staff's original direct filing.

A. First, I proposed an advertising adjustment on behalf of Staff that APS has agreed to. However, RUCO witnesses Ms. Marylee Diaz Cortez and Mr. William Rigsby proposed additional advertising adjustments in the amounts of $66,000 and $4,625, respectively, that APS has also agreed to. Accordingly, Staff's original advertising adjustment found on Schedule C-8 has been revised to include the additional concessions APS has made regarding RUCO's advertising adjustments.

Second, RUCO proposed the reflection of the post test year retirement of low pressure turbine equipment retired in conjunction with the Palo Verde 1 Steam Generator Replacement occurring in December 2005. This conceded retirement had the impact of reducing annualized depreciation expense by $262,000. On Schedule C-21 of the Revised Accounting Schedules I have reflected the noted depreciation expense adjustment that APS has conceded.

Third, RUCO proposed an adjustment to annualize interest on Customer Deposits based upon last-known interest rates being paid upon one-year treasuries. APS agreed in principle to this adjustment, but recommended that it be calculated based upon the actual 2006 rate in effect. Accordingly, I have reflected on revised Schedule C-22 the adjustment to annualize interest on Customer Deposits based upon the 2006 interest rate being paid by APS.

ACCELERATED RECOVERY OF UNDERFUNDED PENSION LIABILITY

Q. Please summarize the rebuttal comments and arguments of Mr. Donald Brandt regarding the issue of accelerated recovery of the underfunded pension liability.

A. Mr. Brandt offers the following rebuttal comments and arguments supporting the Company's continuing request for accelerated recovery of the underfunded pension liability:

- APS' pension plan did not "underperform" relative to the market
- APS' proposal will not lead to a "doubling up" of the recovery of pension costs – only the accelerated recovery of pension costs
- APS' proposal will not lead to intergenerational inequity between existing and future customers
- Corporate pension contributions have exceeded amounts charged to cost-of-service
- Accelerated cash contributions will reduce future years' pension expense that customers will enjoy via reduced cost-of-service based rates

Q. Referring to the first argument cited, do you disagree with Mr. Brandt's assertion that APS' pension trust did not "underperform" relative to the stock market?

A. No. When providing the background of events that have lead to the current "underfunded" pension trust position, I noted in my direct testimony that APS' trust balance actually declined between 2001 and 2003. However I went on to specifically state that such outcome "is not too surprising when one recalls that overall stock indexes also fell during this time frame." Thus, the basis for my opposition to the Company's accelerated recovery proposal is not that APS or its pension trustees have somehow dropped the ball when investing, and therefore APS should be "punished" by rejecting its accelerated cost recovery proposal. Rather, my direct testimony describes how projections of returns are often missed in the short run, but that *significant* "misses" in realized pension trust returns are considered within FAS 87-determined net periodic pension costs that include an element for the "net amortization of actuarial loss." I will not reiterate all discussion and arguments on the topic of the net amortization of actuarial losses included at pages 82 and 83 of my direct testimony, but will simply summarize herein by stating that underperformance of investment returns *relative to previous projections* have been, and continue to be, considered within the development of the "net amortization of actuarial loss" component of FAS 87-determined pension expense that both APS and Staff have already considered within their cost-of-service recommendations.

Q. Please expand upon Mr. Brandt's second argument that APS' pension proposal will not lead to a "doubling up" of recovery of pension costs.

A. First, as just noted, I discussed in my direct testimony how the "amortization of net actuarial losses" already considers a portion of shortfalls in returns from earlier projections. Therefore, I argued in direct testimony that the Company's request for accelerated recovery of the underfunded pension liability would constitute at least a partial double recovery of such costs which were already being considered within the FAS 87-determined "net amortization of actuarial loss."

Q. Did Mr. Brandt address your double recovery argument?

A. No. At page 57 of his surrebuttal testimony Mr. Brandt briefly alludes to my "double recovery" argument, noting that a component of FAS 87-determined pension expense includes the amortization of a portion of shortfalls from earlier projections – but then simply ignores the argument. Instead of offering any explanation as to why the Company's proposed accelerated recovery of the underfunded pension liability does not duplicate the impact of the "net amortization of actuarial losses" component of FAS 87-determined net periodic pension expense, he simply goes on to explain the mechanics of how, under the Company's proposal, monies collected in rates over five years targeted to fund the so-called underfunded pension liability position will be refunded to customers over the following ten-year period. The question of why monies collected within FAS 87-determined "net amortization of actuarial loss" does not duplicate – at least in part – the very same amount that APS is proposing to recover through its accelerated funding recommendation is simply ignored.

I believe there are many good arguments as to why the Company's proposal should be rejected. But in my opinion, the single strongest argument for rejection of this company proposal is that *such underfunded liability is already being considered within the FAS 87-determined pension expense* upon which rates are being set in this proceeding (under Staff's recommendations) and upon which rates have been established in prior APS rate cases for over 20 years. Mr. Brandt's total disregard for this argument does not cause it to lose its validity. *The Company's proposal will lead to at least a partial double recovery of such underfunded liability whenever there is a "net amortization of actuarial losses" component of FAS 87-determined net periodic pension cost.*

Q. Has the Company ever explained – in direct testimony, discovery, or within rebuttal testimony – the actual mechanics of how APS will refund to customers the monies that it proposes to collect on an accelerated basis?

A. No. At pages 57 and 58 of his rebuttal testimony Mr. Brandt briefly describes the *rate impact* of the Company's proposal as follows:

> As described in APS witness Rockenberger's direct testimony, the accelerated recovery over five years will reverse over the subsequent ten-year period. Pension cost recovery will not double up, but merely accelerate. Furthermore, customers in the near term would fund a liability that has already been incurred. We believe that by accelerating the recovery of underfunded pension expense over the next five years, customers would benefit over the subsequent ten years, as we amortize the balance recorded in the first five years. This lowering of revenue requirements in the future would have a stabilizing impact as the reversal partially mitigates higher costs related to infrastructure additions to serve customers' growing energy needs. (Brandt Rebuttal, pages 57 – 58)

Later in his rebuttal testimony Mr. Brandt assures this Commission that it is the Company's intention to fund the external pension trust with the incremental pension recovery that it would be collecting in rates.

Additionally, in Data Request No. UTI-7-266 (e) APS was asked to:

> [P]lease explain where the monies being collected from ratepayers on an accelerated basis in years 1 – 5 would be derived in order to facilitate a negative amortization (i.e., effectively a refund) and a return to ratepayers in years 6 – 15. Specifically state the extent to which the Company envisions the

> monies to be extracted from the external pension trust and how such extraction could legally occur.

The Company's answer was not illuminating, stating only:

> The return to ratepayers in years 6 – 15 would not come from the trust. The credit would come from the amortization of the regulatory liability.

Q. If the Company is permitted to recover in rates the presently-calculated underfunded pension liability over five years, and concurrently establishes a regulatory liability on its balance sheet that effectively represents an IOU to future ratepayers, where will the money to refund future ratepayers ultimately come from?

A. If the Company's construction program were to dramatically decline, there is a possibility that funds could be generated internally from operations (i.e., net income plus non-cash depreciation/deferred income tax expense). However, there has been nothing presented within Company testimony – direct or rebuttal – to suggest that this event is likely. To the contrary, the major theme in Mr. Steven Wheeler's as well as Mr. Brandt's rebuttal testimony is that infrastructure improvements will continue to cause the Company to borrow and spend more money on construction additions. Unless the current construction trend and the Company's prediction of future construction requirements reverse at the end of five years, the Company will have to borrow additional amounts, or issue additional equity, to come up with the monies to refund the amount sitting on its balance sheet as a regulatory liability.

Q. Can the Company just take the refund money out of the pension trust?

A. My understanding is that this is generally not possible. Even if the trust becomes significantly "overfunded" in the sense that the market value of pension assets exceeds the Projected Benefit Obligation, Internal Revenue Code ("IRC") and/or ERISA restrictions generally prohibit the withdrawal of money from the pension trust except to pay amounts owed to retirees. Accordingly, based upon present APS claims of a continuing significant construction program, I submit that monies that would be collected from ratepayers and contributed to the pension trust over the next five years would have to be borrowed or raised through equity sales in order to repay future ratepayers – at the very time that the Company will likely need to go to capital markets to meet its continuing construction program.

From my perspective, either the Company has not fully thought through the mechanics of its proposal – the funding, refunding and accounting – or it simply has not adequately explained how it can rationally, permissibly (from a tax qualification standpoint) and equitably be undertaken. IRC and ERISA requirements, which must be followed in order to keep a plan "qualified" and thus tax efficient, simply prohibit the "withdrawal" of monies from the external pension trust to facilitate customer refunds, even if past contributions had been accelerated above minimum requirements for a period of time. And because of these IRC/ERISA restrictions, I believe the Company's rate plan for pension costs will exacerbate future cash flow challenges, while doing nothing to improve the Company's current cash flow position.

Q. You have explained why the Company's proposal will likely create future cash flow challenges. Why do you also state that the Company's proposal will do nothing to enhance the Company's current cash flow position?

A. The Company is effectively committing to "fund" the external pension trust with any monies it collects in rates as a result of a Commission order authorizing its pension cost recovery proposal. If it meets this commitment, cash flow from operations would not be improved inasmuch as "underfunded pension" dollars collected in rates would go directly to the external trust fund. In other parts of his rebuttal testimony Mr. Brandt discusses how the Funds From Operation ("FFO") ratio is projected to be below the requirements established by Standard and Poors to maintain an investment grade bond rating. Both Mr. Brandt and Mr. Wheeler discuss rate alternatives that would raise rates, enhance the FFO ratio, and purportedly assist the Company in maintaining an investment grade bond rating. A couple of the alternatives suggested include increasing depreciation expense or including Construction Work in Progress in rate base. However, unlike these noted alternatives, the Company's proposal to recover the underfunded pension liability on an accelerated basis will do nothing to enhance cash flow, improve its FFO ratio, or assist it in maintaining its bond rating. This occurs as a result of the fact that 100% of the monies collected for five years (cash in-flow) will be contributed to the external trust (cash out-flow) – resulting in no additional Funds From Operation being made available to the Company. As previously noted, following the five year accelerated recovery period, it is reasonable to expect that APS' cash flow position will be worsened as it attempts to "refund" the accelerated collections to customers over the following ten years with money it cannot retrieve from the external pension trust – and therefore would probably have to borrow.

Q. How do you respond to Mr. Brandt's claims that its proposal will not lead to intergenerational inequity?

A. Mr. Brandt rationalizes that current customers would be funding a liability that already exists – that pertains to benefits already accrued. Or in other words, Mr. Brandt is effectively arguing that current customers are already responsible for the underfunded liability. In arriving at this conclusion Mr. Brandt argues that – contrary to what I stated in direct testimony – the Projected Benefit Obligation does ***not*** consider future years of service, and accordingly, the "underfunded" pension liability truly relates to employee services provided to existing, if not previous, APS customers. Specifically, Mr. Brandt states at page 58 of his rebuttal testimony:

> Mr. Dittmer states that the PBO considers **future years of service** as well as future pay raises. Mr. Dittmer's statements have incorrectly described the PBO. In fact, the PBO does **not** consider **future years of service** (as discussed in the Company's response to one of the Staff's data requests – UTI 16-376). The PBO only considers employment service provided **prior** to the current measurement date. The PBO reflects estimated future pay

> levels discounted to present-day dollars. Thus, APS does **not** request accelerated recovery of pension costs attributable to **future** employee service, but only the accelerated recovery of pension costs attributable to **prior** employee service. **(Emphasis as reflected in original testimony)**

Q. Who is correct on the matter of whether the Projected Benefit Obligation includes or excludes future years of service – you or Mr. Brandt?

A. This is a highly technical area. In my opinion, the language, guidance and definitions provided within FAS 87 are difficult even for accountants to understand. With that brief background, I sincerely submit that what we have both stated is technically correct, and that neither party has craftily undertaken "word smithing" to reach an intellectually dishonest conclusion. To the specific point, I believe that Mr. Brandt is technically correct when he states the Projected Benefit Obligation does not reflect a liability related to future employee service. But I was – and continue to be – technically correct when I state in my direct testimony that the Projected Benefit Obligation considers past pay and years of service as well as *future pay increases and years of service.* This apparent conflict can perhaps be best explained with a small example.

The actual retirement pay owed to employees (i.e., the ultimate liability) is determined for most defined benefit plans by considering years of service as well as actual pay earned during employment. In a nutshell, the longer an employee works, and the more he/she earns while employed, the more he/she will be owed upon retirement. Further, an employee typically earns more per year the longer he/she works – achieving cost of living as well as merit/rank pay increases with the passage of time. Thus, just as a hypothetical example, a 45 year old employee with 15 years of employment making $60,000 a year may be entitled to $10,000 a year in retirement pay upon eventually reaching retirement age – based upon current pay and actual years of employment at age 45. The $10,000 retirement pay would equate to approximately 17% of his final year of pay assuming he were to terminate his employment at age 45 ($10,000 divided by $60,000 equals 16.7%). However, if the employee works for an additional 15 years – or 30 years in total – he/she could, under the hypothetical example, be making $120,000 in his final year of employment. Because of the higher, final years of pay, as well as the additional employment years that result in a higher final payout liability, he/she would be entitled to $50,000 per year upon retirement. By working an additional 15 years, not only does the nominal dollar payout increase ($50,000 per year versus $10,000 per year after 15 years of service), but the retirement payout as a percentage of final pay also increases to 42% ($50,000 divided by $120,000 equals 41.7%).

My understanding is that the calculation of the Accumulated Benefit Obligation considers only the liability, in the example given, as it would exist at the end of the first 15 years of employment (i.e., the net present value of the $10,000 payout for life upon retirement already accrued or "earned" by the employee). However, the calculation of the Projected Benefit Obligation would also consider the likelihood that the employee would continue to work for additional years (i.e., future years of service) and continue to receive future pay increases. In other words, the calculation of the Projected Benefit Obligation would, at the end of 15 years, consider an allowance for the fact that more pension cost and related liability should be recognized currently for likely additional years of service and future pay increases – but not to the point of recognizing the *total* Projected Benefit Obligation that will exist when the employee actually completes the additional 15 years of service and receives all of the future pay increases.

In summary on the issue, I continue to claim – as I stated in direct testimony – that the Projected Benefit Obligations *considers* future years of service and future pay raises, but I do not dispute Mr. Brandt's assertion that the Projected Benefit Obligation only reflects the pension liability for employment service provided prior to the current measurement date.

The important point to be gleaned from this discussion is that there are different measurements of "underfunding." In the continuum of funding positions, the calculation of the Accumulated Benefit Obligation measures the lowest level of pension obligation, while the calculation of the Projected Benefit Obligation – which considers future years of service and future pay increases – measures the highest level of pension liability incurred to date. As noted on Table D included within my direct testimony, the Company's calculated funding position at any point in time tends to fluctuate fairly significantly. It is not unusual for the pension trust to be fairly significantly over or underfunded at a particular point in time.

Q. Returning to the earlier argument, do you still contend that the Company's proposal will lead to intergenerational inequity?

A. Yes. The inclusion of the "net amortization of actuarial loss" component of FAS 87-determined pension cost will tend to "make up" for past under or over funding of pension costs relative to prior projections. Thus, basing rates upon FAS 87-determined pension expense will eventually lead to the collection of monies to meet the underfunded pension liability. Since APS' proposal will duplicate the collection of the underfunded pension liability occurring with FAS 87-determined rates for the first five years of the APS plan, holding all other elements and assumptions constant, there will likely be an over collection of the "underfunded pension liability" following the first five years of APS' proposal. Under the Company's proposal, a portion of the "over collection" occurring during the first five years of the plan would then be refunded over the ensuing ten years – clearly leading to intergenerational inequity between current and future rate payers.

Q. Mr. Brandt also argues that over the past five years pension contributions have actually exceeded net periodic pension costs – and that claims to the contrary you made in direct testimony were ***incorrect***. How do you respond to such claims?

A. First, apparently the contributions I reflected on Table C of my direct testimony were off by one year, and therefore were incorrect. However, the point of the whole discussion in my direct testimony was that in recent years the Company had made contributions that were less than net periodic pension cost – and that the Company should be expected to make contributions that were at least equivalent to net periodic pension costs being reflected within rates before the Commission allows recovery of additional underfunded pension liability on an accelerated basis. As one can observe from values shown on Mr. Brandt's Attachment DEB-17RB, notwithstanding the corrections made, the Company's contributions to the external pension fund were less than net periodic pension cost for years 2003 and 2004. And thus, the point I was making in direct testimony remains valid. I think it is reasonable to expect the Company to make contributions to the external trust that are at least equivalent to net periodic pension costs being used to establish retail rates before seeking permission to recover the underfunded pension liability on an accelerated basis.

Q. How do you respond to Mr. Brandt's argument that recovery of accelerated cash contributions will reduce future years' pension expense that customers will enjoy via reduced cost-of-service based rates?

A. All other things held constant, the accelerated recovery of this liability will lead to reductions in future years' otherwise-calculated cost-of-service-based rates. However, the same could be said regarding the recovery of any utility asset included in rate development. Depreciation expense could be recovered quicker, resulting in lower rate base values and return requirements in the future. If the Commission were inclined to attempt to "stabilize" rates by changing the recovery period of an asset or paying off a liability (something I am not advocating but nonetheless point out), I would encourage it to consider means other than the accelerated recovery of the underfunded pension liability. For specific reasons stated, I believe that accelerated recovery of the so-called underfunded pension liability will create issues and problems – particularly during the ten year period wherein ratepayers will purportedly be "refunded" for accelerated payments made during the first five years of the Company's plan.

Q. Please summarize your surrebuttal testimony regarding the Company's proposal to recover the underfunded pension liability on an accelerated basis.

A. First, this underfunded position caused by the APS pension trust not meeting prior fund projections is already being considered within the "net amortization of actuarial loss" component of FAS 87-determined net periodic pension cost. Second, while it is not desirable that the Projected Benefit Obligation become significantly over or underfunded, it is not a particularly unusual situation. Third, the Company's proposal will lead to intergenerational inequities among rate payers. And fourth, I believe such proposal will lead to future cash flow problems for the Company, while doing nothing to improve the Company's current cash flow position. For these reasons summarized, as well as other reasons set forth in greater detail within my direct testimony, I would strongly urge the Commission to reject this Company proposal.

DEFERRED BARK BEETLE REMEDIATION COSTS

Q. Does an issue continue to exist between Company and Staff regarding deferred bark beetle remediation costs?

A. Yes. I discussed within my direct testimony the propriety of an adjustment to rate base as well as amortization expense related to deferred bark beetle costs. Some of the elements of those adjustments have been conceded by APS. However, one element of my adjustment dealt with the disallowance of bark beetle remediation costs deferred prior to the effective date of the last Commission order (i.e., the period January 2005 through March 2005). APS has not agreed to this element of the adjustment reflected within Staff's direct case.

Q. What is APS' rebuttal position regarding the deferral of costs prior to the effective date of the rate order?

A. APS witness Ms. Laura Rockenberger argues that the language from the Commission's order indicates that a full year of recovery was intended. Specifically, Ms. Rockenberger quotes and relies upon the Commission's language that states:

> APS is authorized to defer for later recover the reasonable and prudent direct costs of bark beetle remediation that exceed the test year levels of tree and brush control.

She goes on to conclude that the Company believed that the August 2004 Settlement intended that deferrals would include the entire calendar year in which the deferral became effective.

Q. How do you respond to Ms. Rockenberger's position?

A. Frankly, I do not understand how she can draw a conclusion that the agreed-upon language that sets the minimum basis for a deferral amount (i.e., the prior test year expense level) can somehow be interpreted to mean that deferral should begin earlier within a calendar year than the effective date of the order. Clearly, that was not Staff's understanding or intention when agreeing to allow the Company to defer amounts "that exceed the test year levels of tree and brush control." Further, in all my years of negotiating and reviewing the impact of accounting deferral orders, I do not ever recall an order being applied retroactively from the implementation date of the order *unless explicitly set forth within the order.* Ultimately I suppose this Commission can inform the parties of *its* intentions regarding the noted language, but I would simply summarize that Staff never interpreted the stipulation language to be applied prior to the effective date of the Commission's order – and that such interpretation is consistent with the way I have always seen accounting authority orders interpreted *absent specific language to the contrary.*

INVESTMENT TAX CREDITS AS A RATEBASE OFFSET

Q. Please briefly summarize the Company's rebuttal position regarding your proposed adjustment to reduce rate base for Investment Tax Credits ("ITC") being realized as a result of the Company amending prior year tax returns.

A. The Company claims that the majority of my proposed rate base adjustment for Investment Tax Credits will result in a violation of an Internal Revenue Code "normalization" requirement, and accordingly, it urges the rejection of the entire rate base adjustment.

Q. How do you respond to this Company rebuttal argument?

A. I would note a few items to put this adjustment into perspective. First, the total revenue requirement value of the issue is relatively small. Using Staff's proposed overall rate of return, the value of the rate base issue as presented within Staff's direct case is approximately $235,000. Staff's original adjustment was calculated by considering one-half of the ITC savings generated after allowing the Company full recovery of the cost to achieve the additional ITCs.

Second, assuming the Company's position that my rate base adjustment constitutes an IRC normalization violation is correct, the ramifications suggested by the Company will be very significant – resulting in the loss of tens of millions of dollars of previously-claimed ITCs that presumably would have to be refunded to the Internal Revenue Service.

Given that the value of the revenue requirement issue is relatively insignificant, I do not believe the Company should be exposed to a very significant disallowance by the Internal Revenue Service of previously claimed ITCs.

Q. Are you then withdrawing your ITC rate base adjustment?

A. Not entirely. Rather, I am proposing to modify it so that a normalization violation should not occur. Specifically, the Company claims that 62% of my ITC rate base adjustment will definitely result in a normalization violation. Therefore, I am first reducing my original adjustment to eliminate 62% of the ITCs related to property that has already been fully depreciated for tax purposes. Further, the Company claims that only the unamortized balance of the remaining 38% of ITCs – as calculated from the original in service date of the property generating the ITC – would be allowable as a rate base offset in order to be in compliance with normalization requirements. I do not know what that exact "unamortized" amount would be, but for purposes of calculating a revised adjustment I have assumed that one-half of the ITCs would be amortized as of the end of the test year. Originally I was proposing a 50/50 sharing between ratepayers and the Company of net savings resulting from all of the new ITCs claimed. However, for purposes of my revised adjustment, I am proposing that 100% of the unamortized ITC balance related to plant *not fully depreciated* be reflected as a rate base offset.

Q. Why are you now proposing that 100% of the unamortized and unrestricted-as-to-rate-base adjustment amount be considered within rate base determination?

A. For reasons stated in my direct testimony, I believe it most equitable to credit ratepayers with at least some of the savings realized by APS when amending its prior years tax returns. The majority of ITC savings appear to be IRC-protected from sharing with ratepayers at this point in time. Thus, it is only fair that the maximum amount of savings resulting from ITCs that do not have IRC restrictions be considered within the development of rates in this proceeding. Further, I would note that my revised proposal provides a very generous sharing of savings between APS and ratepayers. Specifically, with this calculation, APS would retain 100% of the ITC savings realized from the 62% of ITCs that should have already been fully amortized. Further, APS would retain one-half (i.e., the unamortized portion) of the remaining 38% of ITC savings realized. Thus, the total split of savings from ITCs would be 81% and 19% for APS shareholders and ratepayers, respectively. This treatment is very fair and generous to APS shareholders – and importantly, should not result in any normalization requirements.

Q. Have you researched whether, and do you accept the Company's claim that, your original adjustment will result in a normalization violation?

A. I asked the Company to provide the authorities that it was relying upon to reach the conclusion that my adjustment would result in an IRC normalization violation. The Company provided to me an Internal Revenue Service Private Letter Ruling that states facts that are similar to that which exists with regard to the ITC rate base adjustment I have proposed. It would appear from a read of the Private Letter Ruling that the ITC rate base adjustment as I originally proposed would be an IRC normalization violation. That having been stated, I would note that 1) I have not attempted to independently research whether there might be other rulings or decisions that are more favorable to the adjustment I am proposing and 2) the Private Letter Ruling specifically states that "[t]his ruling is directed only to the taxpayer who requested it" – as is standard in every private letter ruling I have ever reviewed.

It is possible that upon further research a determination could be made that my original adjustment would not result in a normalization violation. However, the Private Letter Ruling appears to be pretty much on point. Given this conclusion, and the relatively small value of the issue, I would urge the Commission to adopt my much smaller revised rate base adjustment and not attempt to "test" whether a further adjustment might result in a catastrophic disallowance to the Company. Further, given the *maximum* value of the issue, it would be very difficult to justify applying significant additional resources to researching whether there is any possibility that adoption of my entire original rate base adjustment would *not* lead to an IRC normalization violation.

CASH WORKING CAPITAL – LEAD LAG STUDY DEVELOPMENT

Q. Mr. Fred Balluff has filed rebuttal testimony on behalf of APS addressing the development of a lead lag study for use in the determination of the Company's cash working capital allowance. Do you have any comments or responses to arguments presented in Mr. Balluff's rebuttal testimony?

A. I filed fairly extensive direct testimony on this topic, so my comments and responses will be limited in number and brief in length so as to not become repetitive of lengthy arguments already made within my direct testimony.

First, in my direct testimony I discussed how payments for expenditures related to recently completed construction projects closed to plant in service included in rate base would not have been fully paid for in cash as of the end of the historic test year ending September 30, 2005. This argument was made in the context of addressing why a lag for non-cash depreciation expense should ***not*** be included in the development of a properly prepared lead lag study. Mr. Balluff refers to this testimony as "speculation" and notes that I did not offer any proof of such assertion.

In response I would note that construction expenditures closed to plant include Company labor capitalized, materials and supplies, as well as payments to outside contractors used on construction projects. The lags in the payment for all these types of components are measured as they exist for "expense" categories within a lead lag study. While no separate and specific lag day calculation was prepared for such expenditure as they exist regarding construction expenditures, I believe it would be absurd to assume that similar, if not identical, lags do not occur when paying for these exact same components incurred for construction projects. Accordingly, I do not believe the "proof" calculations suggested are necessary to simply conclude that a portion of test year end recorded plant in service would not have been fully "paid for" at test year end.

Second, in direct testimony I provided a fairly extensive listing of Arizona cases wherein this Commission has upheld the lead lag study approach that I again propose in this case. At page 9 of his rebuttal, Mr. Balluff lists three state jurisdictions that purportedly include "non-cash" expenses within the development of lead lag studies used in working capital development. I recognize that there is not complete unanimity among regulators on this issue. But so as to avoid any mistaken impression that Arizona is the only jurisdiction that routinely adopts the methodology that it has previously adopted – and which I am again proposing in the instant case – I note that the states of Kansas, Missouri and Oklahoma routinely adopt the exact same methodology that this Commission has previously accepted regarding exclusion of non-cash expenses and inclusion of interest expense in lead lag studies. Other states may also accept such methodology, but these are three jurisdictions that I happen to be personally familiar with without undertaking any research or surveys on the subject.

SUNDANCE OPERATION AND MAINTENANCE EXPENSE

Q. APS rebuttal witness Mr. Peter Ewen is critical of your adjustment that rejects a portion of the projected Sundance units' maintenance costs as proposed by APS. Please provide your understanding of his major criticisms of your adjustment.

A. Mr. Ewen's objections to the Sundance O&M adjustment proposed by me are:

- The recommendation and adjustment for Sundance overhaul O&M expense normalization is inconsistent with that proposed for other plants as well as previous Commission precedent

- Adoption of the adjustment will almost certainly lead to an under recovery of Sundance costs

Q. How do you respond to Mr. Ewen's criticisms?

A. Regarding the claim of "inconsistency," it should first be understood that the overhaul maintenance expenses at issue relate to a recently constructed and acquired generating facility for which there is very little historical operating information. In this case, and in all prior APS rate cases occurring over at least the past 20 years, maintenance expense for older, mature generating units has been normalized for cost-of-service inclusion by taking a multi-year historical average of actual costs incurred after first adjusting the costs incurred for inflation experienced during the period employed in developing the average. Because the Sundance units have only recently been placed in service, multiple years of data to use in developing an historical average – as has been employed for APS' older, mature units – is not available. In the absence of historical overhaul costs for the Sundance units, APS has prepared its adjustment by considering prospective or forecasted overhaul costs. However, the forecasted overhaul costs in question will not, by the Company's own admission, begin to be incurred until many years in the future. And for that reason, I recommend that they be excluded from cost-of-service development in the instant case.

A similar situation arose in the 2003 APS rate case for the PWEC units, and still exists regarding those units in the instant case. While there is a little more historical data for some of the PWEC units than what exists for the Sundance units, there is still insufficient data to undertake the multi-year historical average approach as is undertaken for APS' older units. In the 2003 rate case, APS proposed, and Staff consultants did not object to, the use of an average of a multi-year *projection* of PWEC overhaul costs for cost-of-service development. PWEC overhaul costs proposed by APS for cost-of-service development in the prior as well as current case were developed by considering projected future year maintenance costs. However, the methodology employed by APS in developing its PWEC overhaul expense adjustment in the previous case and current, is significantly different than what it has proposed for the Sundance units. Specifically, for the PWEC units APS proposes the use of a 12 year projected average of overhaul costs, with all costs reflected in 2004-purchasing-power dollars. A similar approach was undertaken by APS in the 2003 rate case, and not opposed by Staff consultants in that case.

To adjust for overhaul costs for the Sundance units, APS has employed an entirely different approach in this case. Specifically, the "non-routine" maintenance portion of APS' Sundance adjustment was calculated by considering the expected cost of certain major or "non-routine" maintenance activities, and dividing such projected costs into the expected number of hours of usage between such activities, to arrive at an average non-routine maintenance cost-per-hour of usage. The calculated average non-routine maintenance cost-per-hour-of-usage was then multiplied times the expected normalized annual hours usage for the Sundance units to arrive at a normalized annual cost level for such non-routine maintenance activities. As previously noted, the non-routine maintenance overhauls considered in the development of the Company's Sundance adjustment are not projected to occur for many years into the future[2]. Accordingly, the Sundance methodology proposed by APS is *inconsistent* with the approach APS is proposing for the PWEC units – an approach that considers an average of overhaul costs that *has already begun to occur and that is predicted to occur in immediately ensuing years*. If APS had undertaken an approach for normalizing maintenance costs for the Sundance units as it did for the PWEC units, the result would have been that it would have been proposing very little, if any, overhaul costs for the Sundance units. Thus in summary, if any party is inconsistent in approach regarding this issue, I submit it is APS.

While on the topic of PWEC O&M expenses, I note that since the 2003 rate case APS has only incurred a fraction of the level of overhaul costs that was included within the development of base rates in the previous APS rate case. Further, I note that other intervenors are proposing downward adjustments to APS' proposed level of PWEC O&M expense. While I am not attempting to adopt such intervenor adjustments, I would simply note that I spent considerable time reviewing historical PWEC costs incurred and attempting to ascertain the reasonableness of APS' forecast and request in the instant case. I was, and continue to be, somewhat uncomfortable with the high level of PWEC O&M

[2] See confidential portion of my direct testimony found at page 97 for APS' projected dates of first Sundance overhaul activities.

expense included within the Company's adjusted test year cost of service. Ultimately I did not propose a downward adjustment to PWEC O&M expense, but I would summarize by stating that I believe the level of PWEC O&M expense included within Company's case (and the Staff's case in the absence of any downward adjustment) should certainly be considered at the high end of any reasonable range of estimated PWEC O&M costs to be incurred during the period that rates in this case are likely to be in effect.

Q. How do you respond to Mr. Ewen's claim that your proposed treatment will almost certainly result in an under recovery of Sundance maintenance costs?

A. At pages 98 and 99 of my direct testimony I provided a detailed explanation as to why I believe the Company's approach to developing the overhaul portion of its Sundance O&M expense adjustment will, in all likelihood, lead to an *overcharge* of such costs. I will not repeat such reasoning, but simply incorporate such argument by reference herein. Mr. Ewen ignores my detailed argument regarding how an overcharge of such costs under the Company's proposal will likely occur, but without any explanation whatsoever throws out a simple *quid quo pro* statement that failure to adopt the Company's proposal "will almost certainly" lead to an under recovery of Sundance costs.

Further, I note that in direct testimony I held out the possibility that Sundance maintenance costs being recovered in rates today could be deferred on the Company's balance sheet until such activities were undertaken – and related costs incurred – at some point in the future[3]. Apparently even this alternative remains undesirable to the Company inasmuch as Mr. Ewen did not even address this possibility in rebuttal testimony.

In summary, I believe it is the Company that is being *inconsistent* in its approach to developing Sundance overhaul expense for cost-of-service inclusion, and failure to accept Staff's adjustment will, in all likelihood, lead to an over collection of such costs over time.

Q. Does that **conclude** your direct testimony?

A. Yes, it does.

[3] The deferral proposal was included in direct testimony *in the event the Commission was inclined to accept the Company's level of Sundance overhaul cost* that is not projected to be incurred until many years in the future. As explained within my direct testimony, the deferral accounting alternative is not my primary recommendation, and in fact, I go on to explain that I believe such deferral accounting is unnecessary and unduly complicated for such a relatively minor level of cost incurrence.

IN THE MATTER OF THE APPLICATION OF ARIZONA PUBLIC SERVICE COMPANY FOR A HEARING TO DETERMINE THE FAIR VALUE OF THE UTILITY PROPERTY OF THE COMPANY FOR RATEMAKING PURPOSES, TO FIX A JUST AND REASONABLE RATE OF RETURN THEREON, TO APPROVE RATE SCHEDULES DESIGNED TO DEVELOP SUCH RETURN, AND TO AMEND DECISION NO. 67744	)	DOCKET NO. E-01345A-05-0816

REVISED JOINT ACCOUNTING SCHEDULES

OF THE

ARIZONA CORPORATION COMMISSION

UTILITIES DIVISION STAFF

FILED WITH STAFF SURREBUTTAL TESTIMONY ON SEPTEMBER 27, 2006

PUBLIC VERSION

PREPARED
BY
UTILITECH, INC.

Witness: J. Dittmer

Revised
Schedule A

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
COMPUTATION OF INCREASE IN GROSS REVENUE REQUIREMENT
FOR THE TEST YEAR ENDED SEPTEMBER 2005
(000's)

LINE NO.	DESCRIPTION	REFERENCE	APS PROPOSED ORIGINAL COST	APS PROPOSED FAIR VALUE	STAFF PROPOSED ORIGINAL COST	STAFF PROPOSED FAIR VALUE
	(A)	(B)	(C)	(D)	(E)	(F)
1	PROPOSED RATE BASE	Sch B	$ 4,466,697	$ 6,120,755	$ 4,402,377	$ 6,056,435
2	RATE OF RETURN	Sch D	8.73%	6.37%	8.05%	5.85%
3	OPERATING INCOME REQUIRED	Line 1 * 2	$ 389,943	$ 389,943	$ 354,391	$ 354,391
4	NET OPERATING INCOME AVAILABLE	Sch C	115,904	115,904	237,636	237,636
5	OPERATING INCOME EXCESS/DEFICIENCY	Line 3 - 4	$ 274,039	$ 274,039	$ 116,755	$ 116,755
6	REVENUE CONVERSION FACTOR	Sch A-1	1.6407	1.6407	1.6407	1.6407
7	OVERALL REVENUE REQUIREMENT	Line 5 * 6	$ 449,616	$ 449,616	$ 191,563	$ 191,563
8	ENVIRONMENTAL IMPROVEMENT CHARGE		4,315	4,315		
9	TOTAL INCREASE IN RATES	Line 7 + 8	$ 453,931	$ 453,931	$ 191,563	$ 191,563

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
REVENUE CONVERSION FACTOR
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION	REFERENCE	COMPANY PROPOSED
	(A)	(B)	(C)
1	Gross Jurisdictional Revenue		100.0000%
2	Less: Effective State Income Tax	APS Sch. 3	6.23%
3	Less: Effective Federal Income Tax	APS Sch. 3	32.82%
4	Operating Income % = 100% - Tax Percentage	Ln1-Ln2-Ln3	60.9500%
5	Income to Revenue Multiplier	Line 1/Line 4	1.640689 (a) (b)

Footnote:
(a) Source: APS Schedules A-1 & C-3.

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
SUMMARY OF ORIGINAL COST AND RCND RATE BASE ELEMENTS
FOR THE TEST YEAR ENDED SEPTEMBER 2005
(000's)

		ORIGINAL COST			RCND		
LINE NO.	DESCRIPTION	AS ADJUSTED BY APS	STAFF ADJUSTMENTS	AS ADJUSTED BY STAFF	AS ADJUSTED BY APS	STAFF ADJUSTMENTS	AS ADJUSTED BY STAFF
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
1	Gross Utility Plant in Service	$ 9,296,308	$ -	$ 9,296,308	$ 15,219,192		$ 15,219,192
2	Less: Accumulated Depreciation & Amort.	(3,546,560)	-	(3,546,560)	(6,161,346)		(6,161,346)
3	Net Utility Plant in Service	5,749,748	-	5,749,748	9,057,846	-	9,057,846
	Deductions:						
4	Deferred Taxes	(1,064,449)	(767)	(1,065,216)	(1,064,432)	(767)	(1,065,199)
5	Investment Tax Credits	-	-	-	-	-	-
6	Customer Advances for Construction	(59,807)	-	(59,807)	(59,807)	-	(59,807)
7	Customer Deposits	(54,860)	-	(54,860)	(54,860)	-	(54,860)
8	Pension Liability	(68,699)	-	(68,699)	(68,699)	-	(68,699)
9	Liability for Asset Retirement	(260,419)	-	(260,419)	(260,419)	-	(260,419)
10	Other Deferred Credits	(109,485)	-	(109,485)	(109,485)	-	(109,485)
11	Unamortized Gain-sale of Utility Plant	(46,360)	-	(46,360)	(46,360)	-	(46,360)
12	Regulatory Liabilities	(160,744)	(3,661)	(164,405)	(160,744)	(3,661)	(164,405)
13	Total Deductions	(1,824,823)	(4,428)	(1,829,251)	(1,824,806)	(4,428)	(1,829,234)
	Additions:						
14	Regulatory Assets	64,020	(2,873)	61,147	64,020	(2,873)	61,147
15	Miscellaneous Deferred Debits	39,464	-	39,464	39,464	-	39,464
16	Depreciation Fund - Decommissioning	285,855	-	285,855	285,855	-	285,855
17	Allowance for Working Capital	152,433	(57,018)	95,415	152,433	(57,018)	95,415
18	Total Additions	541,772	(59,891)	481,881	541,772	(59,891)	481,881
19	Total Rate Base	$ 4,466,697	$ (64,320)	$ 4,402,377	$ 7,774,812	$ (64,320)	$ 7,710,492

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
RATE BASE SUMMARY
FOR THE TEST YEAR ENDED SEPTEMBER 2005
(000's)

LINE NO.	DESCRIPTION (A)	B-1 (B)	B-2 (C)	B-3 (D)	B-4 (E)	B-5 (F)	B-6 (G)	B-7 (H)	B-8 (I)	Page Total (J)
1	Gross Utility Plant in Service									$ -
2	Less: Accumulated Depreciation & Amort.									-
3	Net Utility Plant in Service	-	-	-	-	-	-	-	-	-
	Deductions:									
4	Deferred Taxes			(767)						(767)
5	Investment Tax Credits									-
6	Customer Advances for Construction									-
7	Customer Deposits									-
8	Pension Liability									-
9	Liability for Asset Retirement									-
10	Other Deferred Credits									-
11	Unamortized Gain-sale of Utility Plant									-
12	Regulatory Liabilities	(3,661)								(3,661)
13	Total Deductions	(3,661)	-	(767)	-	-	-	-	-	(4,428)
	Additions:									
14	Regulatory Assets		(2,873)							(2,873)
15	Miscellaneous Deferred Debits									-
16	Depreciation Fund -- Decommissioning									-
17	Allowance for Working Capital				(57,018)					(57,018)
18	Total Additions	-	(2,873)	-	(57,018)	-	-	-	-	(59,891)
19	Total Rate Base	$ (3,661)	$ (2,873)	$ (767)	$ (57,018)	$ -	$ -	$ -	$ -	$ (64,320)

ADJUSTMENTS:

B-1 SFAS 112 DEFERRED CREDIT RATE BASE ADJUSTMENT
B-2 CORRECT BARK BEETLE DEFERRAL RATE BASE BALANCE
B-3 INVESTMENT TAX CREDIT ADJUSTMENT TO RATE BASE
B-4 CASH WORKING CAPITAL
B-5 **reserved**
B-6 **reserved**
B-7 **reserved**
B-8 **reserved**

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
SFAS 112 DEFERRED CREDIT RATE BASE ADJUSTMENT
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION	REFERENCE	AMOUNT
	(A)	(B)	(C)
1	Accumulated Provision for SFAS 112 Deferred Credits		
2	Acquiesced by APS in Discovery to be Properly Included		
3	as a Rate Base Offset	UTI-10-302	$ (3,886,000)
4	Composite Retail Jurisdictional Wages & Salaries Allocator		94.212%
5	ACC Jurisdictional Adjustment to Reflect SFAS 112 Deferred		
6	Credits as a Rate Base Offset	Line 3 * Line 4	$ (3,661,453)

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
CORRECT BARK BEETLE DEFERRAL RATE BASE BALANCE
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION	REFERENCE	AMOUNT
	(A)	(B)	(C)
1	Proforma Rate Base Adjustment Proposed by APS to Reflect		
2	Estimated Growth in Deferred Bark Beetle Costs Between		
3	the End of the Historic Test Year and December 31, 2006	LLR_WP7, p. 2	$ 6,114,585
4	Correction Required as Noted in Response to Discovery	UTI-14-351	704,820
5	Eliminate Bark Beetle Cost Deferred Prior to April 1, 2005 (the		
6	Rate Effective Period Resulting from 2003 Rate Case Order)	LLR_WP17, p. 3	(1,501,069)
7	Corrected Before-Tax Bark Beetle Rate Base Deferral Adjustment		
8	to End of Test Year Actual Recorded Balance	Sum Lines 3 thru 6	5,318,336
9	Composite Federal and State Income Tax Rate		39.05%
10	Related Accumulated Deferred Income Tax Expense Properly		
11	Reflected as a Rate Base Deduction	Line 8 * Line 9	2,076,810
12	Correct Total Before and After Tax Adjustment to Test Year		
13	End Recorded Deferred Bark Beetle Costs	Line 8 - Line 11	3,241,526
14	Total Company Rate Base Adjustment for Deferred Bark		
15	Beetle Remediation Costs	Line 13 - Line 3	$ (2,873,059)

Footnote: This adjustment is 100% ACC Retail Jurisdictional

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
INVESTMENT TAX CREDIT ADJUSTMENT TO RATE BASE
FOR THE TEST YEAR ENDED SEPTEMBER 2005

Revised
Schedule B-3

LINE NO.	DESCRIPTION	REFERENCE	AMOUNT
	(A)	(B)	(C)
1	Total Amount of Investment Tax Credits Expected to be Realized		
2	As a Result of Amending Prior Year Federal Income Tax Returns	UTI-10-299	$ 6,483,389
3	Revenue Conversion Factor	Sch. A-1	1.64069
4	Total Revenue Requirement Savings Resulting From Amending		
5	Prior Years Tax Returns to Claim Additional ITCs	Line 2 * 3	10,637,226
6	Total Costs Incurred to Research and Claim Additional ITCs		
7	Total Contingency Charge Recorded in 2003	UTI-10-301	(2,385,468)
8	Fee for Service Charge Recorded in February 2005	UTI-10-301	(1,553,333)
9	Net Total Company Revenue Requirement Savings Realized	Lines 5+ 7 + 8	6,698,425
10	Percentage Attributable to Plant Not Yet Fully	Froggatt	
11	Depreciated	Rebuttal	38.0%
12	Subtotal	Line 9 X*Line 11	2,545,401
13	Percentage Assumed to Be Depreciated @ 9/30/05		50.00%
14	Revenue Requirement Savings Allocated to Ratepayers	Line 12 * Line 13	1,272,701
15	Equivalent Total Company Rate Base Offset	Line14/Line 3	(775,711)
16	ACC Jurisdictional Demand Factor		98.847%
17	ACC Jurisdictional Adjustment to Rate Base for ITCs Allocated		
18	to Rate Payers	Line 12 * Line 13	$ (766,768)

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
CASH WORKING CAPITAL
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION		AMOUNT	REVENUE LAG (a)	EXPENSE LAG	NET LAG (DAYS)	CWC FACTOR	CWC REQUIREMENT
	(A)		(B)	(C)	(D)	(E)	(F)	(G)
1	FUEL FOR ELECTRIC GENERATION							
2	COAL		$ 200,856,342	36.85231	32.36664	4.48567	0.01229	$ 2,468,428
3	NATURAL GAS		237,557,927	36.85231	44.25857	-7.40625	-0.02029	(4,820,311)
4	FUEL OIL		1,077,082	36.85231	32.34060	4.51172	0.01236	13,314
5	NUCLEAR:							
6	AMORTIZATION		34,445,413	0.00000	0.00000	0.00000	0.00000	0
7	SPENT FUEL		7,336,099	36.85231	76.35359	-39.50128	-0.10822	(793,932)
8	SUBTOTAL		481,272,863					(3,132,502)
9	PURCHASED POWER	(b)	471,931,131	36.85231	38.15020	-1.29789	-0.00356	(1,678,121)
10	TRANSMISSION BY OTHERS		14,391,245	36.85231	33.69389	3.15842	0.00865	124,531
11	SUBTOTAL		486,322,376					(1,553,591)
12	OTHER OPERATIONS & MAINTENANCE							
13	PAYROLL		240,714,447	36.85231	15.00192	21.85039	0.05986	14,410,153
14	INCENTIVE		8,653,091	36.85231	214.50000	-177.64769	-0.48671	(4,211,511)
15	PENSION AND OPEB		38,986,000	36.85231	77.71371	-40.86140	-0.11195	(4,364,445)
16	EMPLOYEE BENEFITS		26,995,515	36.85231	20.35895	16.49337	0.04519	1,219,855
17	PAYROLL TAXES		18,118,131	36.85231	21.78589	15.06643	0.04128	747,878
18	MATERIALS & SUPPLIES		53,466,114	36.85231	24.22000	12.63231	0.03461	1,850,413
19	FRANCHISE PAYMENTS		11,986,402	36.85231	52.83966	-15.98735	-0.04380	(525,016)
20	VEHICLE LEASE PAYMENTS		3,169,771	36.85231	7.43789	29.41442	0.08059	255,444
21	RENTS		6,776,038	36.85231	-33.48601	70.33832	0.19271	1,305,795
22	PALO VERDE LEASE	(c)	45,900,681	36.85231	103.99426	-67.14195	-0.18395	(8,443,456)
23	PALO VERDE S/L GAIN AMORT		(4,575,722)	0.00000	0.00000	0.00000	0.00000	0
24	INSURANCE		4,639,562	0.00000	0.00000	0.00000	0.00000	0
25	OTHER		119,131,971	36.85231	35.39000	1.46231	0.00401	477,283
26	SUBTOTAL		573,962,001					2,722,393
27	DEPRECIATION & AMORTIZATION		321,525,565	0.00000	0.00000	0.00000	0.00000	0
28	AMORT OF ELECTRIC PLT ACQ ADJ		0	0.00000	0.00000	0.00000	0.00000	0
29	AMORT OF PROP LOSSES & REG STUDY COSTS		(2,564,492)	0.00000	0.00000	0.00000	0.00000	0
30	SUBTOTAL		318,961,073					0
31	INCOME TAXES							
32	CURRENT-FEDERAL		59,824,326	36.85231	58.95000	-22.09769	-0.06054	(3,621,861)
33	CURRENT- STATE	(d)	16,379,288	36.85231	62.05000	-25.19769	-0.06903	(1,130,740)
34	DEFERRED		77,758,889	0.00000	0.00000	0.00000	0.00000	0
35	SUBTOTAL		153,962,503					(4,752,601)
36	OTHER TAXES							
37	PROPERTY TAXES		123,403,653	36.85231	211.94223	-175.08992	-0.47970	(59,196,535)
38	SALES TAXES		158,240,555	16.69615	40.21000	-23.51385	-0.06442	(10,194,095)
39	FRANCHISE TAXES		18,920,381	16.69615	52.83966	-36.14351	-0.09902	(1,873,559)
40	SUBTOTAL		300,564,589					(71,264,189)
41	INTEREST EXPENSE	(e)	108,298,482	36.85231	90.43103	-53.57872	-0.14679	(15,897,244)
42	SUBTOTAL		108,298,482					(15,897,244)
43	TOTALS		$ 2,423,343,887					(93,877,734)
44	APS CWC ALLOWANCE							(29,372,869)
45	STAFF CWC ADJUSTMENT -- TOTAL COMPANY							(64,504,865)
46	% ARIZONA RETAIL -- Jurisdictional Factor							0.88394
47	STAFF CWC ADJUSTMENT -- RETAIL							$ (57,018,405)

Footnotes :

(a) See Workpaper B-4, p. 1, for calculation of re-weighted revenue lag.
(b) Test year purchased power reduced by expenses incurred to facilitate unregulaged marketing and trading (see Staff Adjustment C-4).
(c) See Workpaper B-4, p. 2, for calculation of PV lease expense lag.
(d) See Workpaper B-4, p. 3, for calculation of State income tax expense lag.
(e) See Workpaper B-4, p. 4, for calculation of interest expense lag & Staff Adjustment C-19 for pro forma interest expense.

Witness: J. Dittmer

Revised
Schedule C

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
SUMMARY OF OPERATING INCOME
FOR THE TEST YEAR ENDED SEPTEMBER 2005
(000's)

LINE NO.	DESCRIPTION	AS ADJUSTED BY APS	STAFF ADJUSTMENTS	AS ADJUSTED BY STAFF
	(A)	(B)	(C)	(D)
1	Electric Operating Revenues	$ 3,440,590	$ (849,582)	$ 2,591,008
	Operating Expenses:			
2	Purchased Power and Fuel	2,129,741	(966,175)	1,163,566
3	Operations and Maintenance	766,212	(72,186)	694,026
4	Depreciation and Amortization	306,988	(759)	306,229
5	Income Taxes	395	69,495	69,890
6	Other Taxes	121,350	(1,689)	119,661
7	Total	3,324,686	(971,314)	2,353,372
8	Operating Income	$ 115,904	$ 121,732	$ 237,636

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
SUMMARY OF RATEMAKING ADJUSTMENTS
FOR THE TEST YEAR ENDED SEPTEMBER 2005
(000's)

		ADJUSTMENT NUMBER / SCHEDULE REFERENCE									
LINE NO.	DESCRIPTION	C-1	C-2	C-3	C-4	C-5	C-6	C-7	C-8	C-9	SUBTOTAL
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Electric Operating Revenues	$ 4,907	$ 1	$ (18,924)	$ (835,566)						$ (849,582)
	Operating Expenses:										
2	Purchased Power and Fuel			(124,082)	(841,833)						(965,915)
3	Operations and Maintenance		19			(8,273)	(40,714)	(3,965)	(508)	(7,933)	(61,374)
4	Depreciation and Amortization										-
5	Income Taxes	1,916	(7)	41,064	2,447	3,231	15,899	1,548	198	3,098	69,395
6	Other Taxes										-
7	Total	1,916	12	(83,018)	(839,386)	(5,042)	(24,815)	(2,417)	(310)	(4,835)	(957,895)
8	Operating Income	$ 2,991	$ (11)	$ 64,094	$ 3,820	$ 5,042	$ 24,815	$ 2,417	$ 310	$ 4,835	$ 108,313

Composite Federal and State Income Tax Rate 39.05%

ADJUSTMENTS:

C-1 REVERSE ESTIMATED CONSERVATION IMPACT FROM DSM
C-2 CORRECTION OF MISCELLANEOUS OTHER REVENUES
C-3 NORMALIZE FUEL, PURCH POWER EXPENSE & OFF-SYSTEM SALES
C-4 ELIMINATE M&T REVENUES & PURCHASE POWER EXPENSE
C-5 ELIMINATE MARKETING AND TRADING O&M EXPENSES
C-6 PENSION EXPENSE ADJUSTMENT
C-7 POST RETIREMENT MEDICAL BENEFITS ADJUSTMENT
C-8 ELIMINATE ADDITIONAL MARKETING EXPENSES
C-9 ELIMINATE NON-RECURRING SHARED SERVICES COSTS

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
SUMMARY OF RATEMAKING ADJUSTMENTS
FOR THE TEST YEAR ENDED SEPTEMBER 2005
(000's)

LINE NO.	DESCRIPTION	PRIOR PAGE SUBTOTAL	ADJUSTMENT NUMBER / SCHEDULE REFERENCE C-10	C-11	C-12	C-13	C-14	C-15	C-16	C-17	SUBTOTAL
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1	Electric Operating Revenues	$ (849,582)									$ (849,582)
	Other Operating Expenses:										
2	Purchased Power and Fuel	(965,915)							(260)		(966,175)
3	Operations and Maintenance	(61,374)	(95)	(2,718)	(2,618)	(4,488)		(1,764)			(73,057)
4	Depreciation and Amortization	-					(500)				(500)
5	Income Taxes	69,395	37	1,062	1,022	1,752	195	689	101	659	74,913
6	Other Taxes	-								(1,689)	(1,689)
7	Total	(957,895)	(58)	(1,657)	(1,595)	(2,735)	(305)	(1,075)	(158)	(1,029)	(966,508)
8	Operating Income	$ 108,313	$ 58	$ 1,657	$ 1,595	$ 2,735	$ 305	$ 1,075	$ 158	$ 1,029	$ 116,926

Composite Federal and State Income Tax Rate 39.05%

ADJUSTMENTS:
C-10 ELIMINATE SILVERHAWK RELATED LEGAL EXPENSES
C-11 ELIMINATE SUNDANCE NON-ROUTINE MAINTENANCE EXPENSE
C-12 ELIMINATE NON-RECURRING TAX RESEARCH COSTS
C-13 ELIMINATE STOCK BASED INCENTIVE COMPENSATION
C-14 ELIMINATE BARK BEETLE AMORT - DEFERRED PRE-RATE ORDER
C-15 ELIMINATE LOBBYING COSTS CHARGED ABOVE-THE-LINE
C-16 NUCLEAR FUEL/ISFSI AMORTIZATION EXPENSE ADJUSTMENT
C-17 ELIMINATE ESTIMATED INCREASE IN 2007 PWEC PROPERTY TAXES

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
SUMMARY OF RATEMAKING ADJUSTMENTS
FOR THE TEST YEAR ENDED SEPTEMBER 2005
(000's)

			ADJUSTMENT NUMBER / SCHEDULE REFERENCE								
LINE NO.	DESCRIPTION	PRIOR PAGE SUBTOTAL	C-18	C-19	C-20	C-21	C-22	C-23	C-24	C-25	TOTAL
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(F)
1	Electric Operating Revenues	$ (849,582)									$ (849,582)
	Operating Expenses:										
2	Purchased Power and Fuel	(966,175)									(966,175)
3	Operations and Maintenance	(73,057)					871				(72,186)
4	Depreciation and Amortization	(500)				(259)					(759)
5	Income Taxes	74,913	(959)	618	(4,838)	101	(340)				69,495
6	Other Taxes	(1,689)									(1,689)
7	Total	(966,508)	(959)	618	(4,838)	(158)	531	-	-	-	(971,314)
8	Operating Income	$ 116,926	$ 959	$ (618)	$ 4,838	$ 158	$ (531)	$ -	$ -	$ -	$ 121,732

Composite Federal and State Income Tax Rate 39.05%

C-18 PRODUCTION TAX CREDIT ADJUSTMENT
C-19 INTEREST SYNCHRONIZATION DEDUCTION ADJUSTMENT
C-20 CORRECT COS INCOME TAX EXPENSE ADJUSTMENT
C-21 PV 1 STEAM GENERATOR DEPRECIATION EXPENSE
C-22 INTEREST ON CUSTOMER DEPOSITS
C-23
C-24
C-25

Witness: J. Anderson

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
REVERSE ESTIMATED CONSERVATION IMPACT FROM DSM
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION	REFERENCE	AMOUNT
	(A)	(B)	(C)
1	Adjustment to Reverse APS' Proposal to Reduce Test Year		
2	Margins Predicted to Occur as a Result of Implementing	APS Sch. C-2,	
3	Various Demand Side Management Programs	Page 1, Col F	$ 4,907,000

Footnote: Adjustment is 100% Retail Jurisdictional

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
CORRECTION OF MISCELLANEOUS OTHER REVENUES
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION	REFERENCE	REVENUE AMOUNT	EXPENSE AMOUNT
	(A)	(B)	(C)	(D)
1	APS Adjustment for Schedule 1 Rate Changes	Workpaper DJR_WP8	$ 127,000	$ (19,000)
2	APS Revised Adj. for Schedule 1 Rate Changes	UTI 13-344, 13-345	128,339	-
3	Adjustment Correcting APS Schedule 1 Rate Adjustment	Line 2 - Line 1	$ 1,339	$ 19,000
4	Jurisdictional Allocation Factor		100%	99.12%
5	Staff Retail Adjustment for Schedule 1 Rate Changes	Line 3 * Line 4	$ 1,339	$ 18,833

Witness: J. Antonuk &
J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
NORMALIZE FUEL, PURCH POWER EXPENSE & OFF-SYSTEM SALES
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION	REFERENCE	AMOUNT
	(A)	(B)	(C)
1	Normalized Fuel and Purchased Power Expense Proposed by:		
2	Staff/Liberty Consulting Group (cents/kWh)		2.8942
3	APS (cents/kWh)	PME_WP6, P. 2	3.2859
4	Net Cents/kWh Reduction Proposed by Staff to be		
5	Rolled Into Base Rates	Line 2 - Line 3	(0.3917)
6	Adjusted Test Year Retail Sales	PME_WP6, P. 3	$ 26,759,478
7	Subtotal: Reduction in Fuel and Purchased Power Expense		
8	Attributable to Serving Retail Load	Line 5 * Line 6	(104,816,875)
9	**Note: This portion of fuel adjustment is 100% retail**		
10	**Proforma Off-Systems Sales Margin Adjustment:**		
11	Proforma Off-System Sales Revenues Per:		
12	Staff/Liberty Consulting Group		133,863,799
13	APS	PME_WP6, P. 5	153,098,000
14	Total Co. Adjustment Decreasing Off-System Sales Revenues	Line 12 - Line 13	(19,234,201)
15	Proforma Fuel and Purchased Power Expense Incurred to		
16	Facilitate Off-system Sales Per:		
17	Staff/Liberty Consulting Group		107,553,298
18	APS	PME_WP6, P. 5	127,134,000
19	Subtotal: Total Co. Additional Fuel and Purchased Power		
20	Expense to Facilitate Off-system Sales	Line 17 - Line 18	(19,580,702)
21	Net Total Company Decrease in Off-System Sales Margins	Line 14 - Line 20	346,501
22	Retail Jurisdictional Energy Allocator		98.389%
23	ACC Jurisdictional Adjustment Reducing Off-system		
24	Sales Revenues	Line 14 * Line 22	(18,924,319)
25	ACC Jurisdictional Adjustment Reducing Fuel/Purchased		
26	Power Expense Related to Reduced Off-system Sales	Line 20 * Line 22	(19,265,238)
27	ACC Jurisdictional Adjustment Increasing Net Margins		
28	Resulting from Reduced Off-system Sales Forecasted	Line 24 - Line 26	$ 340,919

Witness: J. Dittmer
& Liberty

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
ELIMINATE M&T REVENUES & PURCHASE POWER EXPENSE
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION	REFERENCE	AMOUNT (000s)
	(A)	(B)	(C)
1	Unregulated Marketing and Trading Revenue Included Within the	GAAPversus FERC_	
2	Total Company Cost of Service Study	Reporting(2).xls	$ 849,248
3	Purchased Power Expense Incurred in Facilitating Unregulated	GAAPversus FERC_	
4	Marketing and Trading Revenues	Reporting(2).xls	(855,618)
5	Total Company Net Margin (Loss) on M&T Operations		
6	Exclusive of Payroll and Other Non-fuel O&M Expenses	Line 2 + Line 3	(6,370)
7	Energy Allocator		98.389%
8	ACC Retail Jurisdictional		
9	Revenues	Line 2 * Line 7	835,566
10	Purchased Power Expense	Line 4 * Line 7	(841,833)
11	Net Margin (Loss)	Line 9 + Line 10	$ (6,267)

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
ELIMINATE MARKETING AND TRADING O&M EXPENSES
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION	REFERENCE	AMOUNT (000S)
	(A)	(B)	(C)
1	Eliminate Unregulated Marketing and Trading		
2	Non-Purchased Power Operations and		
3	Maintenance Expenses Included Within APS'		
4	Total Company Cost of Service:		
5	Payroll	Response to	$ 6,618
6	Outside Services	UTI-10-315	1,078
7	Corporate Allocations		33
8	Miscellaneous		811
9	Corporate Allocable and Governance		241
10	Total Company Unregulated Marketing and Trading Non-		
11	Purchased Power Operations and Maintenance		
12	Expenses to be Eliminated From APS' Proposed		
13	Total Company Cost of Service	Sum Lines 5 - 9	(8,781)
14	Composite ACC Jurisdictional Allocator		94.212%
15	ACC Jurisdictional Unregulated Marketing and Trading Non-		
16	Purchased Power Operations and Maintenance		
17	Expenses to be Eliminated From APS' Proposed		
18	ACC Jurisdictional Cost of Service	Line 13 * Line 14	$ (8,273)

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
PENSION EXPENSE ADJUSTMENT
FOR THE TEST YEAR ENDED SEPTEMBER 2005

Revised
Schedule C-6
Page 1 of 1

LINE NO.	DESCRIPTION	REFERENCE	AMOUNT (000s)
	(A)	(B)	(C)
1	Reversal of APS' Proposed Total Company	APS Exhibits	
2	Adjustment to Amortize the Unfunded Projected	Sch. C-2, page 7	
3	Benefit Obligation Over a Five Year Period	Adj't No. 21	$ (43,695)
4	Company's Adjustment to Test Year Operations	Rockenberber	
5	to Reflect Actual 2006 Pension Expense	Rebuttal	
6		Attachment LLR-4	
7		-5RB	2,249
8	Pension Expense Adjustment Included Within APS'	LLR_WP21,	
9	Payroll Annualization Adjustment	page 34	(1,769)
10	Subtotal:	Sum Lines 7 - 9	480
11	Net Total Company Adjustment to APS' Proposed		
12	Level of Pension Expense	Line 3 + Line 10	(43,215)
13	Composite ACC Jurisdictional Wages		
14	and Salaries Allocator		94.212%
15	ACC Jurisdictional Adjustment to APS' Proposed		
16	ACC Jurisdictional Pension Expense	Line 12 * Line 14	$ (40,714)

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
POST RETIREMENT MEDICAL BENEFITS ADJUSTMENT
FOR THE TEST YEAR ENDED SEPTEMBER 2005

Revised
Schedule C-7

LINE NO.	DESCRIPTION	REFERENCE	AMOUNT (000s)
	(A)	(B)	(C)
1	Company's Adjustment to Test Year Operations	Rockenberber	
2	to Reflect Actual 2006 PRMB Expense	Rebuttal	
3		Attachment LLR-4	
4		-6RB	$ (3,191)
5	Less: APS PRMB Expense Annualization		
6	Adjustment Included as Part of the	LLR_WP21,	
7	Payroll Expense Annualization	page 34	(1,018)
8	Net Total Company PRMB Adjustment to Annualize		
9	Expenses for 2006 Actuarial Estimates	Sum Lines 3 - 7	(4,209)
10	Composite ACC Jurisdictional Wages		
11	and Salaries Allocator		94.212%
12	ACC Jurisdictional Adjustment to APS' Proposed		
13	ACC Jurisdictional Pension Expense	Line 9 * Line 11	$ (3,965)

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
ELIMINATE ADDITIONAL MARKETING EXPENSES
FOR THE TEST YEAR ENDED SEPTEMBER 2005

Revised
Schedule C-8
Page 1 of 1

LINE NO.	DESCRIPTION	REFERENCE	AMOUNTS
	(A)	(B)	(C)
1	Additional Marketing and Sponsorship Costs Identified and		
2	Conceded by APS to be Excluded From Retail Cost of		
3	Service Development		
4	Eliminate Dodge Theater Sponsorship	UTI-5-240	$ (100,000)
5	Eliminate Allocated PWCC Radio and	UTI-1-17	
6	Television Advertising	(Revised)	(337,351)
7	Additional Marketing Expenses Eliminated by RUCO that	Rockeberger	
8	APS Agreed to in Rebuttal Testimony	Rebuttal	(70,625)
9		Testimony, p. 24	
10	Total Additional Marketing and Sponsorship Costs to be		
11	Eliminated from Retail Cost of Service Development	Line 4 + Line 6	$ (507,976)

Footnote: This adjustment is assigned 100% to ACC Jurisdictional Cost of Service

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
ELIMINATE NON-RECURRING SHARED SERVICES COSTS
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION	REFERENCE	AMOUNT
	(A)	(B)	(C)
1	Reverse Correcting Journal Entries Recorded During the		
2	Historic Test Year that Had the Impact of Overstating "On Going"		
3	Shared Services Expenses:		
4	Reverse Correcting Journal Entry Recorded in		
5	November 2004 Posted to Transfer Shared Services		
6	Costs Originally Recorded as Depreciation Expense		
7	as "A&G" Expense	UTI-10-314	$ (5,323,351)
8	Reverse a Correcting Journal Entry Recorded in		
9	December 2004 to Reallocate Rents Improperly		
10	Allocated Throughout 2004	UTI-10-314	(3,096,000)
11	Total Company Adjustment to Reverse Correcting Journal Entries		
12	Recorded During the Historic Test Year that Had the Impact of		
13	Overstating "On Going" Shared Services Expenses	Line 7 + 8	(8,419,351)
14	Composite ACC Jurisdictional Wages		
15	and Salaries Allocator		94.212%
16	ACC Jurisdictional Adjustment to Reverse Correcting Journal		
17	Entries Recorded During the Historic Test Year that Had the		
18	Impact of Overstating "On Going" Shared Services Expenses	Line 13 * 15	$ (7,932,850)

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
ELIMINATE SILVERHAWK RELATED LEGAL EXPENSES
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION	REFERENCE	AMOUNT
	(A)	(B)	(C)
1 2	Legal Expenses Incurred in the Sale of the Unregulated Silverhawk Power Plant	UTI-14-349	$ 240,238
3 4	Silverhawk Legal Costs Already Eliminated by APS from the Test Year Cost of Service		
5 6	Total Shared Services Legal Costs Allocated to PWEC During the Historic Test Years	LLR_WP13, pages 6 & 7	1,394,011
7 8	Percentage of PWEC Legal Costs Assigned by APS to PWEC Activities	LLR_WP13, pages 6 & 7	10%
9 10	Total Company Silverhawk-related Legal Expenses Already Eliminated from the COS by APS	Line 6 * Line 8	139,401
11 12	Net Total Company Adjustment to Eliminate Additional Silverhawk-Related Legal Costs from the Test Year Cost of Service	Line 10 - Line 2	(100,837)
13 14	Composite ACC Jurisdictional Wages and Salaries Allocator		94.212%
15 16	ACC Jurisdictional Adjustment to Eliminate Additional Silverhawk-Related Legal Costs from the Test Year Cost of Service	Line 12 * Line 14	$ (95,010)

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
ELIMINATE SUNDANCE NON-ROUTINE MAINTENANCE EXPENSE
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION	REFERENCE	AMOUNTS
	(A)	(B)	(C)
1	Eliminate APS' Proposed Accrual for "Non-Routine"		
2	Maintenance or "Major" Overhaul Costs at the Sundance		
3	Power Station Not Expected to Occur For Many Years	LLR_WP14	$ (2,750,100)
4	ACC Jurisdictional Production Demand Allocator		98.847%
5	Eliminate ACC Jurisdictional Accrual for "Non-Routine"		
6	Maintenance or "Major" Overhaul Costs at the Sundance		
7	Power Station Not Expected to Occur For Many Years	Line 3 * Line 4	$ (2,718,396)

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
ELIMINATE NON-RECURRING TAX RESEARCH COSTS
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION	REFERENCE	AMOUNTS
	(A)	(B)	(C)
1	Total Company Adjustment to Eliminate a Credit Given to		
2	Joint Owners of Palo Verde During the Historic Test Year		
3	Related to a Tax Contingency Fee Recorded in 2003 That		
4	in Turn Resulted in Incremental TY Charges to Account 9302	UTI-10-296	$ (1,224,795)
5	Total Company Adjustment to Eliminate Non-recurring		
6	Tax Research Costs Incurred on a Fee for Service Basis		
7	During the Historic Test Year	UTI-10-301	(1,553,333)
8	Total Company Adjustment to Eliminate Non-Recurring		
9	Tax Research Costs/Credits Recorded During the		
10	Historic Test Year	Line 4 + Line 7	(2,778,128)
11	Composite ACC Jurisdictional Wages		
12	and Salaries Allocator		94.212%
13	ACC Jurisdictional Adjustment to Eliminate Non-Recurring		
14	Tax Research Costs/Credits Recorded During the		
15	Historic Test Year	Line 10 * Line 12	$ (2,617,594)

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
ELIMINATE STOCK BASED INCENTIVE COMPENSATION
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION	REFERENCE	AMOUNT
	(A)	(B)	(C)
1	Total Company Adjustment to Eliminate Above-		
2	the-Line Expense Charges for Stock Based		
3	Incentive Compensation	UTI-1-83	$ (4,762,874)
4	Composite ACC Jurisdictional Wages		
5	and Salaries Allocator		94.212%
6	ACC Jurisdictional Adjustment to Eliminate Above-		
7	the-Line Expense Charges for Stock Based		
8	Incentive Compensation	Line 3 * Line 5	$ (4,487,657)

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
ELIMINATE BARK BEETLE AMORT - DEFERRED PRE-RATE ORDER
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION	REFERENCE	AMOUNT
	(A)	(B)	(C)
1	Eliminate Bark Beetle Remediation Costs Deferred in		
2	January through March 2005 Prior to the Effective Date		
3	of Decision No. 67744 (April 1, 2005)	LLR_WP7	$ (1,501,069)
4	Amortization Period -- Years		3
5	Adjustment to Eliminate Bark Beetle Amortization Expense		
6	Related to Costs Inappropriately Deferred Prior to		
7	Effective Date of ACC's Prior Case Rate Order	Line 3 / Line 4	$ (500,356)

Footnote: This adjustment is 100% ACC Retail Jurisdictional

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
ELIMINATE LOBBYING COSTS CHARGED ABOVE-THE-LINE
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION	REFERENCE	AMOUNT
	(A)	(B)	(C)
1	Federal Affairs Charged to "Governance" Activities		
2	During the Historic Test Year - Ultimately Allocated		
3	to Various PWCC Subsidiaries	UTI-6-244	$ 1,352,479
4	Percent of Governance Activities Allocated		
5	During the Historic Test Year to PWEC	UTI-6-244	28.930%
6	Federal Affairs Lobbying Costs Allocated as		
7	Corporate Governance Activities to PWEC	Line 3 * Line 17	391,272
8	Total Federal Affairs Shared Services Costs		
9	Charged to APS Above-the-Line Operating		
10	Expense in the Historic Test Year	UTI-10-305	834,125
11	Subtotal: Federal Affairs Lobbying Costs Charged		
12	Above-the-Line to APS and PWEC During the		
13	Historic Test Year	Line 7 + Line 10	1,225,397
14	Public Affairs Costs Charged Above-the-Line to		
15	APS During the Historic Test Year	UTI-10-306	595,455
15			
16	Total Public Affairs Costs Charged to		
17	APS During the Historic Test Year	UTI-10-306	1,617,107
18			
	Percent of Public Affairs Costs Charged		
19	Above the Line During the Historic Test Year	Line 15/Line 17	36.82%
20			
20	Public Affairs Costs Direct Assigned to PWEC		
21	During the Historic Test Year	UTI-6-244	139,377
22	Estimate of Public Affairs Costs Charged to PWEC		
23	Above-the-Line During the Historic Test Year	Line 19 * Line 21	51,322
23			
24	Total Company Above-the-Line Lobbying Costs to		
25	Be Eliminated from Cost of Service Development	Line 13 +15 + 23	(1,872,174)
25			
26	Composite ACC Jurisdictional Wages		
27	and Salaries Allocator		94.212%
27			
28	ACC Jurisdictional Above-the-Line Lobbying Costs to		
29	Be Eliminated from Cost of Service Development	Line 25 * Line 27	$ (1,763,994)

Witness: J. Dittmer

Schedule C-16
Page 1 of 1

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
NUCLEAR FUEL/ISFSI AMORTIZATION EXPENSE ADJUSTMENT
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION	REFERENCE	AMOUNT
	(A)	(B)	(C)
1	Yearly Amortization of Post Shutdown ISFSI Costs Based on	LLR_WP16	
2	Funding Expiration Date	Page 7	$ 108,000
3	Negative Amortization of Reduction in Post Shutdown		
4	ISFSI Costs Accrued Between September 30, 2005 and	LLR_WP16	
5	January 1, 2006	Page 8	(48,000)
6	Reduction in Ongoing ISFSI Costs to be Collected in Base	LLR_WP16	
7	Rates Based Upon Updated TLG Study	Page 7	(324,000)
8	Net Total Company Adjustment Reducing Nuclear Fuel		
9	Expense and Amortization of ISFSI Expense	Sum Lines 2 - 7	(264,000)
10	Retail Jurisdictional Energy Allocation Factor		98.389%
11	ACC Jurisdictional Adjustment Reducing Nuclear Fuel		
12	Expense and Amortization of ISFSI Expense	Line 9 * Line 10	$ (259,747)

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
ELIMINATE ESTIMATED INCREASE IN 2007 PWEC PROPERTY TAXES
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION	REFERENCE	AMOUNT
	(A)	(B)	(C)
1	Eliminate APS Proposed Inclusion of Increased PWEC	LLR_WP20	
2	Property Tax Expense Attributable to Legislative Phase-in	Pages 2 & 10	$ (1,708,338)
3	ACC Jurisdictional Production Demand Allocator		98.847%
4	Eliminate ACC Jurisdictional Portion of APS' Proposed		
5	Inclusion of Increased PWEC Property Tax Expense		
6	Attributable to Legislative Phase-in	Line 2 * Line 3	$ (1,688,644)

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
PRODUCTION TAX CREDIT ADJUSTMENT
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION	REFERENCE	DEMAND RELATED AMOUNT (000s)	ENERGY RELATED AMOUNT (000s)	TOTAL COMPANY AMOUNT (000s)
	(A)	(B)	(C)	(D)	(E)
1	Total Company Production Rate Base	CNF_WP13, p.2	$ 2,172,190	$ 95,432	$ 2,267,622
2	Staff Proposed Weighted Cost of Common Equity	Sch. D	5.59%	5.59%	5.59%
3	After-Tax Net Income	Line 1 * Line 2	121,425	5,335	126,760
4	Revenue Conversion Factor	Sch. A-1	1.64069	1.64069	1.64069
5	Pre-Tax Net Income	Line 3 * Line 4	199,221	8,753	207,974
6	Book/Tax Differences	CNF_WP13, p.2	32,377	1,422	33,799
7	Taxable Income	Line 5 + Line 6	231,598	10,175	241,773
8	Deduction Percentage - Effective in 2006		3.00%	3.00%	3.00%
9	Additional Production Deduction	Line 7 * Line 8	6,948	305	7,253
10	Composite Income Tax Rate	Sch. A-1	39.05%	39.05%	39.05%
11	Total Company Annualized Income Tax Savings	Line 9 * Line 10	2,713	119	2,832
12	Total Company Annualized Savings per APS	CNF_WP13, p.2	1,784	78	1,862
13 14	Total Company Adjustment to APS' Original Production Tax Credit Calculation	Line 12 - Line 11	(929)	(41)	(970)
15	Jurisdictional Allocator		98.847%	98.389%	-98.828%
16 17	ACC Jurisdictional Annualized Income Tax Savings Adjustment	Line 14 * Line 15	$ (918)	$ (40)	$ (959)

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
INTEREST SYNCHRONIZATION DEDUCTION ADJUSTMENT
FOR THE TEST YEAR ENDED SEPTEMBER 2005

Revised
Schedule C-19

LINE NO.	DESCRIPTION	REFERENCE	AMOUNT (000s)
	(A)	(B)	(C)
1	ACC Jurisdictional Rate Base Proposed by Staff	Sch. B	$ 4,402,377
2	Weighted Cost of Debt Proposed by Staff	Sch. D	2.460%
3	Annualized Interest Deduction Based Upon ACC Staff		
4	Proposed Retail Jurisdictional Rate Base and the		
5	ACC Staff' Proposed Weighted Cost of Debt	Line 1 * Line 2	108,298
6	Annualized Interest Deduction per APS		
7	APS Proposed As Adjusted ACC Jurisdictional	APS Sch. B-1	
8	Rate Based	Page 1, Col. F	4,466,697
9	APS Proposed Weighted Cost of Debt	APS Sch. D-1	2.460%
10	APS Proposed ACC Retail Jurisdictional Interest		
11	Expense Deduction	Line 8 * Line 9	109,881
12	Retail Jurisdictional Reduction in Annual		
13	Interest Deduction	Line 11 - Line 5	1,582
14	Composite Federal and State Income Tax Rate	Sch. A-1	39.05%
15	Adjustment Increasing Retail Jurisdictional Income		
16	Tax Expense to Reflect the Synchronization of the		
17	Interest Deduction with Staff's Proposed Rate Base		
18	and Cost of Capital Recommendations	Line 13 * Line 14	$ 618

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
CORRECT COS INCOME TAX EXPENSE ADJUSTMENT
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION	TOTAL COMPANY AS ADJUSTED AS FILED BY APS (PER ORIGINAL UTI-3-169 & UTI-10-297) TAX EXP. $s	2006 AS ADJUSTED PERMANENT DIFFERENCES PER UPDATED UTI-10-297 TAX EXP. $s	ADDITIONAL ON GOING 2006 PER UPDATED UTI-10-297 TAX EXP. $s	ADJUSTMENT EXCLUDING PRODUCTION TAX CREDIT TAX EXP. $s
	(A)	(B)	(C)	(D)	(E)
1	Other Permanent Differences:				
2	OPEB Subsidy	$ 1,349,000			$ (1,349,000)
3	DCP & SERBP CSV	1,250,000			(1,250,000)
4	2005 vs. 2006 statutory rate	1,181,000			(1,181,000)
5	Tax exempt Interest Income	449,000			(449,000)
6	Depreciation on AFUDC	276,000		394,614	118,614
7	Officer's Compensation	83,000	70,924	27,696	(55,304)
8	Misc. tax credit true-up	28,000			(28,000)
9	Interest on tax reserve - net of tax	-			-
10	Meals & Entertainment	(102,000)	1,644,804	642,296	744,296
11	Penalties	(36,000)			36,000
12	Other	1,536,000			(1,536,000)
13	Subtotal: Other Permanent Differences	6,014,000			(4,949,394)
14	Medicare Subsidy	(3,872,000)		(3,338,429)	533,571
15	AZ State Credits	(570,000)		(482,950)	87,050
16	Amortization of FAS 109 Reg Liability			(460,435)	(460,435)
17	Depreciation on Medicare Subsidy			(49,195)	(49,195)
18	Net Add (Deduction) to Otherwise Calculated				
19	COS Income Tax Expense Based Upon "As				
20	Adjusted Book Income" Including a Deduction				
21	for Synchronized Interest Expense	$ 1,572,000		$ (3,266,403)	$ (4,838,403)

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
PV 1 STEAM GENERATOR DEPRECIATION EXPENSE
FOR THE TEST YEAR ENDED SEPTEMBER 2005

(a)

LINE NO.	DESCRIPTION	REFERENCE	AMOUNT (000s)
	(A)	(B)	(C)
1	Adjustment to Test Year Production Depreciation	Rockenberger	
2	Expense to Reflect Post Test Year Retirement of	Rebuttal	
3	Low Pressure Turbine Equipment Retired in	Attachment	
4	Conjunction with Palo Verde Steam Generator	LLR-4-1RB	
5	Replacement Occuring in 12/05		$ (262)
6	Retail Jurisdictional Demand Allocator		98.847%
7	Retail Adjustment to Test Year Production Depreciation		
8	Expense to Reflect Post Test Year Retirement of		
9	Low Pressure Turbine Equipment Retired in		
10	Conjunction with Palo Verde Steam Generator		
11	Replacement Occuring in 12/05	Line 5 X 6	(259)

(a) This is an adjustment originally proposed by RUCO that was not included within Staff's Original direct filing but which has been accepted by APS in rebuttal testimony

Witness: J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
INTEREST ON CUSTOMER DEPOSITS
FOR THE TEST YEAR ENDED SEPTEMBER 2005

Schedule C-22
Page 1 of 1
(a)

LINE NO.	DESCRIPTION	REFERENCE	AMOUNT (000s)
	(A)	(B)	(C)
1	Before-Tax Adjustment to Retail Jurisdictional	Froggatt	
2	Operating Income to Reflect Annualized Interest	Rebuttal	
3	on Customer Deposits Utilizing the 1/2/06	Attachment	
4	Treasury Interest Rate Applied to Customer Deposit	CNF-6RB	
5	Balance at 9/30/05		$ 871

Note: This adjustment is 100% ACC retail jurisdictional

(a) This is an adjustment originally proposed by RUCO that was not included within Staff's Original direct filing but which has been accepted by APS in rebuttal testimony

Witness: Parcell

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
CAPITAL STRUCTURE & COSTS
FOR THE TEST YEAR ENDED SEPTEMBER 2005

LINE NO.	DESCRIPTION (A)	AMOUNT (000'S) (B)	CAPITAL RATIO (C)	COST RATES (D)	WEIGHTED COST (E)
	APS - PROPOSED (a)				
1	Long-Term Debt	$ 2,574,825	45.50%	5.41%	2.46000%
2	Preferred Stock	-	0.00%	0.00%	0.00000%
3	Common Equity	3,083,591	54.50%	11.50%	6.27000%
4	Short-Term Debt	-	0.00%	0.00%	0.00000%
5	Total	$ 5,658,416	100%		8.73%
	ACC STAFF- PROPOSED (b)				
6	Long-Term Debt	$ 2,574,825	45.50%	5.41%	2.46000%
7	Preferred Stock	-	0.00%	0.00%	0.00000%
8	Common Equity	3,083,591	54.50%	10.25%	5.59000%
9	Short-Term Debt	-	0.00%	0.00%	0.00000%
10	Total	$ 5,658,416	100%		8.05%

Footnotes:
(a) Source: APS Schedule D-1, p. 1. Test year ended 9/30/05.
(b) Source: Staff witness Parcell, Exhibt__(DCP-1)

Witness:
J. Dittmer

ARIZONA PUBLIC SERVICE
DOCKET NO. E-01345A-05-0816
RECONCILIATION OF POSITIONS
FOR THE TEST YEAR ENDED SEPTEMBER 2005
(000's)

Revised
Schedule E
Page 1 of 1

Sch/ Adj. Ref.	Description (A)	Company Position	Amount (B)	Difference In Pretax Return (C)	Revenue Requirement Value (D)
Sch. A	**APS PROPOSED REVENUE REQUIREMENT**				$ 453,931
Sch. B	**RETURN DIFFERENCE (on APS Proposed Rate Base)**	(c)	$ 4,466,697	-1.120%	(50,027)
	SUBTOTAL - REVENUE REQUIREMENT				$ 403,904
	RATE BASE ADJUSTMENTS			**Pre-Tax Return**	
B-1	SFAS 112 DEFERRED CREDIT RATE BASE ADJUSTMENT	(b)	$ (3,661)	11.63%	$ (426)
B-2	CORRECT BARK BEETLE DEFERRAL RATE BASE BALANCE	(c)	(2,873)	11.63%	(334)
B-3	INVESTMENT TAX CREDIT ADJUSTMENT TO RATE BASE	(c)	(767)	11.63%	(89)
B-4	CASH WORKING CAPITAL	(c)	(57,018)	11.63%	(6,632)
B-5	**reserved**		-	11.63%	-
B-6	**reserved**		-	11.63%	-
B-7	**reserved**		-	11.63%	-
B-8	**reserved**		-	11.63%	-
	TOTAL VALUE OF STAFF RATE BASE ADJUSTMENTS		(64,320)		$ (7,481)
	STAFF RATE BASE RECOMMENDATION		$ 4,402,377		
SCH. A	**Company Proposed Net Operating Income**		$ 115,904	**Revenue Conversion Multiplier**	
	NET OPERATING INCOME ADJUSTMENTS				
C-1	REVERSE ESTIMATED CONSERVATION IMPACT FROM DSM	(c)	$ 2,991	1.6407	$ (4,907)
C-2	CORRECTION OF MISCELLANEOUS OTHER REVENUES	(a)	(11)	1.6407	17
C-3	NORMALIZE FUEL, PURCH POWER EXPENSE & OFF-SYSTEM SALE	(c)	64,094	1.6407	(105,158)
C-4	ELIMINATE M&T REVENUES & PURCHASE POWER EXPENSE	(a)	3,820	1.6407	(6,267)
C-5	ELIMINATE MARKETING AND TRADING O&M EXPENSES	(a)	5,042	1.6407	(8,273)
C-6	PENSION EXPENSE ADJUSTMENT	(c)	24,815	1.6407	(40,714)
C-7	POST RETIREMENT MEDICAL BENEFITS ADJUSTMENT	(c)	2,417	1.6407	(3,965)
C-8	ELIMINATE ADDITIONAL MARKETING EXPENSES	(a)	310	1.6407	(508)
C-9	ELIMINATE NON-RECURRING SHARED SERVICES COSTS	(a)	4,835	1.6407	(7,933)
C-10	ELIMINATE SILVERHAWK RELATED LEGAL EXPENSES	(a)	58	1.6407	(95)
C-11	ELIMINATE SUNDANCE NON-ROUTINE MAINTENANCE EXPENSE	(c)	1,657	1.6407	(2,718)
C-12	ELIMINATE NON-RECURRING TAX RESEARCH COSTS	(a)	1,595	1.6407	(2,618)
C-13	ELIMINATE STOCK BASED INCENTIVE COMPENSATION	(c)	2,735	1.6407	(4,488)
C-14	ELIMINATE BARK BEETLE AMORT - DEFERRED PRE-RATE ORDER	(c)	305	1.6407	(500)
C-15	ELIMINATE LOBBYING COSTS CHARGED ABOVE-THE-LINE	(c)	1,075	1.6407	(1,764)
C-16	NUCLEAR FUEL/ISFSI AMORTIZATION EXPENSE ADJUSTMENT	(a)	158	1.6407	(260)
C-17	ELIMINATE ESTIMATED INCREASE IN 2007 PWEC PROPERTY TAXE	(a)	1,029	1.6407	(1,689)
C-18	PRODUCTION TAX CREDIT ADJUSTMENT	(b)	959	1.6407	(1,573)
C-19	INTEREST SYNCHRONIZATION DEDUCTION ADJUSTMENT	(b)	(618)		-
C-20	CORRECT COS INCOME TAX EXPENSE ADJUSTMENT	(a)	4,838	1.6407	(7,938)
C-21	PV 1 STEAM GENERATOR DEPRECIATION EXPENSE	(a)	158	1.6407	(259)
C-22	INTEREST ON CUSTOMER DEPOSITS	(a)	(531)	1.6407	871
	TOTAL VALUE OF STAFF NET OPERATING INCOME ADJUSTMENTS		121,359		$ (200,365)
SCH. A	STAFF NET OPERATING INCOME RECOMMENDATION		$ 237,263		
	RECONCILED REVENUE REQUIREMENT				$ 196,058
	OTHER RECONCILING ITEMS				
	APS PROPOSED ENVIRONMENTAL CHARGE				(4,315)
	UNRECONCILED DIFFERENCE				(180)
SCH. A	**REVENUE REQUIREMENT RECOMMENDATION**				$ 191,563

(a) Staff understands that APS agrees to adjustment in principle as well as to the value of the issue
(b) Staff understands that APS agrees to adjustment in principle but value of issue may be dependent upon other Commission determinations (i.e., rate of return authorized)
(c) Staff understands that APS does not agree with some element of, if not entire, adjustment

BEFORE THE

ARIZONA CORPORATION COMMISSION

APPLICATION OF ARIZONA PUBLIC SERVICE CO. FOR AN INCREASE IN ELECTRIC RATES	))))	DOCKET NO. E-01345A-05-0816

SURREBUTTAL TESTIMONY

OF

DAVID C. PARCELL

ON BEHALF OF THE

COMMISSION STAFF

SEPTEMBER 27, 2006

BEFORE THE ARIZONA CORPORATION COMMISSION

DOCKET NO. E-01345A-05-0816

SURREBUTTAL TESTIMONY AND EXHIBIT

OF

DAVID C. PARCELL

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My Name is David C. Parcell. My address is Technical Associates, Inc., 1051 East Cary Street, Suite 601, Richmond, VA 23219.

Q. ARE YOU THE SAME DAVID C. PARCELL WHO FILED DIRECT TESTIMONY IN THIS PROCEEDING?

A. Yes, I am.

Q. WHAT IS THE PURPOSE OF YOUR CURRENT TESTIMONY?

A. My current testimony takes the form of surrebuttal testimony in response to the rebuttal testimony filed on September 15, 2006 by William E. Avera on behalf of Arizona Public Service Co. ("APS").

Q. HOW IS YOUR SURREBUTTAL TESTIMONY ORGANIZED?

A. My surrebuttal testimony is organized in a fashion to respond directly to Dr. Avera's rebuttal testimony. Accordingly, my surrebuttal testimony addresses the following topics:

- Reasonableness of Return
- DCF Analysis
- Risk Premium Approach
- Comparable Earnings Approach
- Flotation Costs
- Other Factors

REASONABLENESS OF RETURNS

Q. PLEASE SUMMARIZE DR. AVERA'S REBUTTAL TESTIMONY ON THE TOPIC OF "REASONABLENESS OF RETURNS."

A. In this section of his rebuttal testimony, Dr. Avera maintains that my recommendation, as well as the recommendation of RUCO witness Steven G. Hill, do not "meet the threshold test of reasonableness required by established regulatory and economic standards governing a fair rate of return on equity." Dr. Avera's apparent standard in this regard is that the fair return for a utility be "comparable to contemporaneous returns available from alternative investments of equivalent risk" so as to "maintain their financial flexibility and ability to attract capital."

Q. HOW DOES DR. AVERA ASSESS THE CONTEMPORANEOUS RETURNS STANDARD HE CITES?

A. Dr. Avera appears to place a lot of emphasis on the returns authorized for other utilities. On page 8, he cites average authorized returns on equity of 10.69 percent and 10.57 percent in 2006. It is noteworthy that such returns do not nearly justify the 11.5 percent return on equity he appears to be recommending for APS in this proceeding. I say appears since it seems that Dr. Avera is now recommending, for the first time, an attrition allowance of 1.7 percent for APS that was not part of his direct testimony. I do not regard an "attrition adjustment" to be a cost of capital issue. I do, however, disagree with the inclusion of such a significant, new issue at this stage of the proceeding under any guise. It is my understanding that ACC Staff Witness Dittmer is sponsoring testimony that addresses the proposed attrition adjustment, and I would recommend denying any adjustment to the cost of capital that is based on "attrition" rather than cost of capital analysis.

Dr. Avera's Attachment WEA-1RB shows what he represents are authorized returns on equity for my proxy group and Mr. Hill's proxy group. I note that his source is AUS Utility Reports, which often does not cite the date of the authorized returns meaning that some of these authorized returns could be several years old. It is noteworthy that Dr.

Avera's Attachment WEA-1RB does not list an "Allowed ROE" for Pinnacle West, notwithstanding the fact that his source document (AUS Utility Reports) lists a 10.25 percent return on equity for this company.

I also note that I am personally familiar with one of these authorized returns he cites. Hawaiian Electric had a rate proceeding in 2005 in which there was a stipulated return on equity of 10.7 percent (not the 10.82 percent cited by Dr. Avera). It is also noteworthy that the capital structure to which this return on equity was applied was about 46 percent, or well below that requested by APS (54.5 percent) in this proceeding. This demonstrates that a mere listing of authorized returns on equity can be misleading and, in the case of Hawaiian Electric, is misleading in the context of APS.

Q. DO YOU HAVE ANY PERSONAL EXPERIENCE WITH AUTHORIZED RETURNS OF EQUITY FOR PUBLIC UTILITIES IN CASES THAT HAVE BEEN DECIDED IN 2006?

A. Yes, I do. I have been personally involved in the following three proceedings which were both heard and decided in 2006:

Company	State	Docket	ROE
Delmarva P&L	Delaware	05-304	10.0%
Virginia Natural Gas	Virginia	2005-00062	10.0%
Sierra Pacific Power	Nevada	05-100005	10.6%

It is noteworthy that none of these authorized return even remotely approached the 11.5 percent (or greater) recommended by Dr. Avera in this proceeding.

Q. DO YOU HAVE ANY CONCLUDING REMARKS ABOUT DR AVERA'S REFERENCE TO AUTHORIZED RETURNS ON EQUITY?

A. Yes, I do. Dr. Avera attempts to use authorized returns on public utilities to criticize my recommended return on equity. In reality, authorized returns are much closer to my recommended return on equity (10.25 percent) than to his recommended return on equity (11.50 percent plus 1.7 percent attrition).

Q. DR. AVERA STATES, ON PAGE 9, THAT VALUE LINE PROJECTS ELECTRIC UTILITIES TO EARN 11.5 PERCENT FROM 2007 TO 2011. DOES THIS INDICATE THAT 11.5 PERCENT IS THE COST OF EQUITY FOR ELECTRIC UTILITIES?

A. No, it does not. I noted in my direct testimony that electric utilities, as represented by my proxy group and Dr. Avera's proxy group, have had market-to-book ratios that significantly exceed 100 percent. This is significant since investors are aware that electric utilities are regulated based on the book value of their assets and the book value of their equity. The only rational reason for pricing a utility's stock significantly above book value is an expectation that the utility will earn a return above its cost of capital. This relationship is not recognized in Dr. Avera's rebuttal testimony. I also note that the projected returns on equity for Dr. Avera's proxy group for the 2009-2011 period is 9.9 percent, as estimated by Value Line and shown on my Schedule 11.

Q. DR. AVERA CITES, ON PAGE 10, THE REGULATORY ENVIRONMENT OF ARIZONA AS A FACTOR THAT HE PERCEIVES SHOULD IMPACT THE AUTHORIZED RETURN ON EQUITY IN THIS PROCEEDING. DO YOU HAVE ANY COMMENTS ON THIS ASSERTION?

A. Yes, I do. I have also cited this State's regulatory environment in my direct testimony. I also noted that the Staff in this proceeding is recommending an enhanced methodology for recovery of fuel and purchased power costs in this proceeding. Dr. Avera does not acknowledge this in his rebuttal testimony.

In any event, there in no need to authorize a return on equity for APS that exceeds its fair cost of equity. Yet, this is essentially what Dr. Avera is implicitly recommending.

Q. DO YOU HAVE ANY OTHER GENERAL COMMENTS ABOUT DR. AVERA'S PERCEPTION OF THE ALTERNATIVE RETURNS IN THE ECONOMY?

A. Yes, I do. It is apparent that the returns expected by investors are lower now than has been the case throughout the past three decades. This is, of course, not surprising since interest rates and inflation are both low by historic standards. The table below cites the returns for several major stock indices for periods ending June 30, 2006:

Index	Year-to-date	1 Year	5 Years	10 Years
S&P 500	2.71%	8.63%	2.49%	8.32%
Wilshire 4500	5.51%	13.87%	9.03%	9.32%
Russell 2000	8.21%	14.58%	8.50%	9.05%

(Source: Vanguard)

It is evident that returns to investors in the largely unregulated sector of the U. S. economy are much less than the 11.5 percent recommendation of Dr. Avera and, in fact, are generally lower than my recommended 10.25 percent return on equity for APS.

DCF ANALYSIS

Q. ON PAGE 12 OF HIS REBUTTAL TESTIMONY, DR. AVERA TAKES ISSUE WITH YOUR PROXY GROUP OF ELECTRIC UTILITIES. DO YOU HAVE ANY RESPONSE TO HIS ASSERTION?

A. Yes, I do. I note, first of all, my proxy group is designed to select a group of companies as closely related to APS and PWC as possible. My Schedule 7 indicates that my proxy group is more closely related to APS and PWC than is Dr. Avera's proxy group.

I also note that my cost of equity analyses are also applied to Dr. Avera's proxy group, indicating that I have used both groups in my analyses and conclusions. I observe that Dr. Avera does not acknowledge this in his rebuttal testimony. This is further noteworthy since my DCF results are higher for my proxy group than for Dr. Avera's proxy group, meaning that I likely would have obtained a lower DCF conclusion had I not used my own proxy group. Dr. Avera also does not acknowledge this in his rebuttal testimony.

Q. DR. AVERA MAINTAINS, ON PAGE 14, LINE 11, THAT YOU HAVE PLACED "RELIANCE ON HISTORICAL GROWTH RATES." IS HE CORRECT?

A. No, he is not. As is apparent from my direct testimony, my DCF conclusion is a range of 9 percent to 10 percent (Page 24, Lines 9-12). It is also apparent from my Schedule 8, Page 4, that my recommended DCF range is essentially determined by reference to prospective growth rates, as the historic growth rates produce DCF costs below the 9 percent lower end.

Q. DR. AVERA FURTHER MAINTAINS, ON PAGES 14 TO 15, THAT YOU HAVE A "DOWNWARD BIAS OF HISTORICAL GROWTH MEASURES." IS HE CORRECT?

A. No, he is not correct. As I indicated in the prior response, the historic growth rates did not factor into my 9 percent to 10 percent DCF conclusion.

Q. DR. AVERA CRITICIZES YOUR RETENTION GROWTH RATE (PAGES 15-17). IS THIS CRITICISM JUSTIFIED?

A. No, it is not. My retention growth uses the measurement of this statistic as reported by Value Line Investment Survey. The ratio that I employed in my analyses thus matches the one likely used by investors who read and use Value Line for investment decisions.

Q. ON PAGES 17-18, DR. AVERA ALSO CRITICIZES YOU FOR NOT INCLUDING THE IMPACT OF NEW STOCK ISSUANCES IN YOUR RETENTION GROWTH RATES. IS THIS A VALID CRITICISM?

A. No, it is not. There is very little impact on retention growth associated with new stock issuances. As evidence of this, I have calculated the "s x v" component Dr. Avera refers to, using the Federal Energy Regulatory Commission methodology. The following growth rates apply to the companies in my proxy group:

Cleco	0.94%
DTE Energy	-0.46%
Energy East	0.05%
HEI	0.12%
PWC	0.00%
PNM Res	0.36%
Puget Energy	0.20%
Average	0.17%

This demonstrates that only 0.17 percent would be added to the retention growth rates if the impact of stock issuances is added. If this were added to my prospective retention growth in my Schedule 8, Page 4, the DCF results would still be below 9 percent, the lower bound of my recommendation.

Q. DR. AVERA ALSO APPEARS TO BE PROPOSING USE OF A MULTI-STAGE DCF ON PAGES 20-21. DO YOU HAVE ANY COMMENTS ON THIS?

A. Yes, I do. If Dr. Avera believed that a multi-stage DCF model was proper, he should have included this in his own DCF analyses. The fact that he did not indicates that he has not favored such a DCF model.

Q. DO YOU HAVE ANY OTHER COMMENTS ABOUT DR. AVERA'S REBUTTAL TO YOUR DCF ANALYSES?

A. Yes, I do. I find it interesting that Dr. Avera criticizes my DCF results, which are 9 percent to 10 percent, while his own DCF results are 9 percent. It is apparent that my conclusions exceed his DCF conclusions.

<u>RISK PREMIUM (CAPM) APPROACH</u>

Q. ON PAGE 22, DR AVERA CRITICIZES YOUR EQUITY RISK PREMIUM COMPONENT OF THE CAPM BY SAYING YOUR ANALYSES DO NOT INCORPORATE INVESTOR EXPECTATIONS. IS THIS A FAIR CRITICISM?

A. No, it is not. I note that Dr. Avera cites his Attachment WEA-6 from his direct testimony as a source of forward-looking returns. A review of this document indicates that Dr. Avera's "forward looking" market returns are represented by a DCF analysis of dividend paying firms in the S&P 500. I also used the S&P 500 as the source of expected returns in my risk premium. My three sources of expected returns for the S&P 500 are:

14.02% -- 1978-2004 achieved returns on equity
12.3% -- 1926-2005 arithmetic holding period returns
10.4% -- 1926-2005 geometric holding period returns

These three sets of returns exceed the more recent returns of the S&P 500, which were cited earlier:

2.71% -- year-to-date
8.63% -- one year
2.49% -- 5 years
8.32% -- 10 years

Dr. Avera apparently believes that investors expect to achieve a return of 13.5 percent, notwithstanding the fact that such returns have not and are not being earned by the S&P 500.

Q. DR. AVERA MAINTAINS, ON PAGES 23-25, THAT YOU SHOULD NOT HAVE CONSIDERED GEOMETRIC RETURNS IN YOUR RISK PREMIUM ANALYSES. WHAT ARE YOUR COMMENTS ON THIS?

A. What is important is not what Dr. Avera and I believe, but what investors rely upon in making investment decisions. It is apparent that investors have access to both types of returns when they make investment decisions.

In fact, it is noteworthy that mutual fund investors regularly receive reports on their own funds, as well as prospective funds they are considering investing in, that show only geometric returns. Based on this, I find it difficult to accept Dr. Avera's position that only arithmetic returns are appropriate.

Q. DOES DR. AVERA USE VALUE LINE INFORMATION IN HIS COST OF CAPITAL ANALYSES?

A. Yes, he does.

Q. DO VALUE LINE REPORTS SHOW HISTORIC GROWTH RATES FOR UTILITIES?

A. Yes, they do.

Q. DO THESE VALUE LINE REPORTS SHOW HISTORIC RETURNS ON AN ARITHMETIC BASIS?

A. No, they do not.

Q. DO THE VALUE LINE REPORTS SHOW HISTORIC RETURNS ON A GEOMETRIC, OR COMPOUND GROWTH RATE BASIS?

A. Yes, they do. As a result, any investor reviewing Value Line, as Dr. Avera does, would be using geometric growth rates.

Q. IS IT YOUR POSITION THAT ONLY GEOMETRIC GROWTH RATES BE USED?

A. No. I believe that both arithmetic and geometric growth rates should be used. This is the case since investors have access to both and presumably use both.

Q. BUT DOES NOT DR. AVERA CITE HIS PERCEPTION THAT "FINANCIAL LITERATURE" REQUIRES THAT ARITHMETIC RETURNS BE USED EXCLUSIVELY?

A. He does state this in his testimony. However, the cost of capital determination is not an academic exercise made in some laboratory or university classroom. The true cost of equity is made in the "laboratory" of the financial markets, based on the ongoing inter-play of countless investors, each with their own agendas and beliefs. This is verified by the fact that each time a share of stock is purchased by one investor, it is simultaneously being sold by another investor, indicating that their respective views at that time differ.

Again, investors have access to both arithmetic and geometric growth rates. In all likelihood, there is more geometric growth readily available to investors (e.g., mutual fund reports and Value Line) than arithmetic growth.

Q. DR. AVERA ALSO MAINTAINS, ON PAGES 25-27, THAT ONLY THE INCOME COMPONENT OF BOND RETURNS SHOULD BE USED TO DETERMINE THE RISK PREMIUM. DO YOU AGREE WITH THIS?

A. No, I do not. Dr. Avera is proposing to compute an equity risk premium which uses one measure of returns (i.e., total returns-dividends plus capital gains) for stocks and a different measure of return (i.e., income returns, which ignores capital gains) for bonds. He is thus inconsistent in his selection of returns in a manner that overstates the risk premium and thus CAPM result.

COMPARABLE EARNINGS APPROACH

Q. ON PAGES 27-28, DR AVERA CLAIMS YOUR COMPARABLE EARNINGS APPROACH IS NOT "INTERNALLY CONSISTENT." IS HE CORRECT?

A. No, he is not. First, when Dr. Avera cites that the S&P 500 has earned about 13.5 percent in recent years, this does not mean that investors expect these returns to be earned in the future and it also does not mean that this figure represents the cost of capital to the S&P 500. As I indicated in my testimony (Page 30), the S&P 500 has had market-to-book ratios of over 300 percent (i.e., price is over three times book), which strongly suggests that returns of 13.5 percent exceed the cost of capital.

Second, electric utilities are less risky than the S&P 500 and do not require the same level of returns. My direct testimony (Page 30) also shows that the projected returns on equity for both my proxy group and Dr. Avera's proxy group are 10.4 percent or less. Yet these companies had 2005 market-to-book ratios of over 150 percent, indicating that investors accept these expected returns as being more than adequate.

FLOTATION COSTS

Q. DR. AVERA CRITICIZES YOUR POSITION ON FLOTATION COSTS (PAGES 29-30) BY STATING THAT IT IS INCONSISTENT WITH YOUR OWN RESEARCH ON THIS SUBJECT. DO YOU HAVE ANY COMMENTS ON THIS?

A. Yes, I do. Dr. Avera is being very selective in his description of my "research." In his testimony, he is citing a paper I prepared in 1993 on the ways to measure flotation costs, as well as the use of flotation cost adjustments by commissions. What Dr. Avera did not cite was my "research" finding that the majority of commissions have not made flotation cost adjustments.

Q. IS A FLOTATION COST ADJUSTMENT NECESSARY FOR APS?

A. No, it is not. APS already has a relatively high common equity ratio. In addition, Dr. Avera has made no demonstration that APS has recently incurred any flotation costs. Further, should PWC issue common stock, it would be at a price above book value, meaning that existing shareholders would enjoy an accretion to the value of their existing book value. Finally, I note that Value Line estimates no increase in the shares outstanding of PWC between now and 2009-2011.

<u>OTHER ISSUES</u>

Q. DR. AVERA MAKES SEVERAL REFERENCES TO A PRIOR TESTIMONY OF ACC STAFF WITNESS DENNIS ROGERS AND IMPLIES THAT YOUR TESTIMONY AND MR. ROGERS' TESTIMONIES ARE IN CONFLICT. DO YOU HAVE ANY RESPONSE TO THIS?

A. Yes, I do. The testimony that Dr. Avera cites was filed by Mr. Rogers on January 16, 2005 in Docket No. W-01303A-05-0405. I note, first of all, that I was retained by the ACC Staff in the current proceeding to provide my own analyses and conclusions, not to duplicate the analyses or results of any other witness, including Staff witnesses. Having said this, my review of Mr. Rogers testimony reveals to me that our conclusions are very similar. In his testimony, Mr. Rogers recommended, for Paradise Valley Water Company, a subsidiary of American Water, a return on equity range of 9.6 percent (DCF results) to 10.0 percent (CAPM results) plus a 0.6 percent "upward financial risk adjustment" which was designed to recognize the financial risk associated with the 36.7 percent common equity ratio of the utility. In the case of Paradise Valley Water, the subject utility had more leverage and thus financial risk than the proxy group. In the case of APS, on the other hand, the opposite situation occurs, since APS has a higher equity ratio and thus less financial risk than the proxy group.

What Dr. Avera has obviously done is cite certain portions of Mr. Rogers' testimony and attempt to create a perceived conflict between my testimony and that of Mr. Rogers. Dr. Avera does not acknowledge that my 10.25 percent recommendation for APS and Mr. Rogers' 10.4 percent recommendation (9.8 percent prior to financial risk adjustment) are quite compatible. Clearly, Dr. Avera has taken Mr. Rogers' testimony out of context and, in the process, has ignored the most important aspect of mine and Mr. Rogers' testimonies – our "bottom line" recommendations.

Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?

A. Yes it does.

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

JEFF HATCH-MILLER, Chairman
WILLIAM A. MUNDELL
MIKE GLEASON
KRISTIN K. MAYES
BARRY WONG

IN THE MATTER OF THE APPLICATION OF ARIZONA PUBLIC SERVICE COMPANY FOR A HEARING TO DETERMINE THE FAIR VALUE OF THE UTILITY PROPERTY OF THE COMPANY FOR RATEMAKING PURPOSES, TO FIX A JUST AND REASONABLE RATE OF RETURN THEREON, TO APPROVE RATE SCHEDULES DESIGNED TO DEVELOP SUCH RETURN, AND TO AMEND DECISION NO. 57744.	DOCKET NO. E-01345A-05-0816

SUR-REBUTTAL TESTIMONY OF JOHN ANTONUK
President, The Liberty Consulting Group

Q. What is the purpose of your sur-rebuttal testimony?

A. I wish to respond to certain points made by APS rebuttal witnesses Wheeler, Ewen, Robinson, and Rumolo about 2006 and 2007 fuel and energy costs and about the design of the PSA.

Q. What is your response to the APS rebuttal testimony that addresses the findings, conclusions, and recommendations of the fuel audit?

A. That testimony reflects general agreement with what the audit found, with the principal exception being that APS witnesses state that a number of recommended changes concern programs or activities that they believe APS is already undertaking. Accordingly, there is not a significant difference of opinion about what APS and we believe ought to be done to optimize fuel and energy procurement and management.

I observed no significant matter of disagreement that would affect either the base rates to be established in this proceeding or the design or implementation of the PSA. Generally, the best way to address audit findings is for the Company to prepare an implementation plan for each recommendation with which it agrees and a detailed explanation of its reasons when it concludes that particular recommendations should not or need not be implemented. Following such documentation, the Staff can then identify the best method for monitoring progress against the plan and resolving any differences of opinion about recommendations in dispute. Particularly given the Company's rebuttal testimony, we recommend that the Commission, as a result of this proceeding, should require the Company to prepare an implementation plan as outlined above.

Q. Please summarize your sur-rebuttal testimony addressing fuel and energy costs and the PSA.

A. This testimony addresses the reasons why the proposed base rate and PSA treatment of fuel and energy costs recommended in my direct testimony remains appropriate and why the Commission should not adopt the variations on that approach that the rebuttal testimony of APS witnesses Wheeler, Ewen, and Robinson recommends. I also address why the revised estimate of costs for 2007 (from the APS witness's rebuttal testimony) is not appropriate for two reasons: (a) volatility in fuel and energy markets and (b) the potential for error in what comprises an insufficiently tested estimate.

I clarify that the 2007 fuel and energy cost estimate that APS proposes to use is theirs -- not Liberty's or Staff's. I also clarify that the change between the 2007 estimate cited in my direct testimony and the one cited in the rebuttal testimony of these APS witnesses resulted not from an omission by Liberty or Staff but from an omission by APS. This second, significant error, addressed in my direct testimony, exemplifies the need for Commission scrutiny before it relies on a future-year estimate to set rates. That second error was the inclusion of non-utility revenues and expenses in the normalized APS fuel and energy 2006 data that Mr. Ewen used in his direct testimony to support APS's rate request.

I explain that the use of forecasted 2007 fuel and energy costs should be limited to the establishment of a forward-looking PSA rate element, and that such a forecast should be based on data that uses actual and forecasted cost and revenue information current through at least the end of the third quarter of 2006. I state further that this data must be subject to Commission scrutiny prior to its use to set any rate element. I show through actual 2006 natural gas price information how volatility makes prediction of 2007 prices very uncertain, thus rendering estimates made as of mid-2006 unreliable. Consequently, the APS rebuttal testimony observations about whose approach will better match actual 2007 revenues and costs are speculative. I also show that APS witnesses are not correct in asserting that the Commission can consider the Company's 2007 fuel and energy expenses as reasonably fixed or certain or conclude that actual 2007 expenses will significantly exceed those of the normalized 2006 data on which we based our proposed base rate level.

I set forth the central procedural elements of the PSA approach that we recommend. Those elements include a September 30, 2006 forecast of 2007 fuel and energy expenses and an opportunity to scrutinize that estimate before next year. We believe that such an estimate can be provided by APS, and scrutinized in the current proceeding. I also set forth an alternate method, should the Commission be unable to complete those procedures before early 2007 (or whatever date the Commission establishes for the next resetting of those PSA elements that reflect current period, as opposed to deferred, costs). I recommend in that event that the Commission use our proposed normalization of 2006 costs (as opposed either to APS's normalized 2006 costs or its just-introduced proposal to use estimated 2007 costs) to set rates for 2007. I address why this alternate proposal, when combined with our means of reconciling actual 2007 costs through the PSA, will produce a reasonable level of certainty that APS will recover its prudent and reasonable fuel and energy costs in a sufficiently timely manner. The implementation plan included in Witness Rumolo's testimony is not appropriate for adoption because it incorporates a number of problems identified in this testimony. Staff is continuing its review of the plan of administration proposed by APS, and will file comments and any alternate proposals regarding that plan of administration within approximately two weeks.

Q. Is it correct to describe your testimony as setting forth an opinion about the level of expected 2007 fuel and energy costs?

A. No, it is not. My testimony reported an APS-prepared projection of 2007 costs based on expectations as of June 30, 2006. My testimony did not endorse that estimate for any direct use in this proceeding. My testimony anticipated a late-2006 estimate (clarified in discovery to be one including actual data and assumptions current at the end of the first nine months of 2006) for use in developing an estimate of 2007 costs. The volatility in fuel and energy markets makes reliance on a mid-2006 estimate as troubling as reliance on the normalized 2006 data that witness Ewen addressed in his direct testimony.

In addition, we did not, as our testimony made clear, perform the detailed analysis of APS's estimate of 2007 costs that we performed for normalized 2006 costs. Therefore, we would not endorse the accuracy of the APS 2007 estimate discussed in my direct testimony. We offered it only for illustrative purposes, and would not recommend it as a basis for setting either a base or PSA rate element.

Q. How would your proposal address 2007 costs?

A. We would propose the use of a 2007 estimate that considers conditions as of the end of the third quarter of 2006. We also believe that such an estimate must be subject to review and scrutiny before it is used to set a PSA rate going forward. We recommend that this review take place in the current proceeding. If there is not time for such a review, then we would propose to use the 2006 normalized fuel and energy cost data described in our testimony, and to reconcile actual collections against actual expenses during 2007 for eventual refund or collection.

Q. Discuss the ability of the Commission to receive and consider a late-2006 estimate of APS's 2007 fuel and energy costs.

A. My direct testimony envisioned "... the use of a late-2006 estimate that applies then-current market price assumptions and accounts for mid-2007 changes that are reasonably certain to occur." (p. 42) Based on our experience, I believe that a proper evaluation of estimated 2007 fuel costs could be completed by the end of this year, if APS files updated estimates promptly after the end of the 2006 third-quarter. We believe that there is time and opportunity to consider that estimate in these proceedings, provided that there is an opportunity for the parties to examine, question, and if necessary provide testimony responding to it.

Q. Will your proposal produce increasing deferrals?

A. That answer is unknown, which makes the APS prediction that it will do so speculative. It may in fact produce over-collections before the reconciliation aspects of the PSA occur. What will eventually happen depends in significant part on the direction of fuel and energy markets for 2007. The volatility in those markets is what led us to propose what we consider to be a reasonably certain basis both for managing the level of under- or over-recovered balances, and for assuring the financial community that there is a reasonable level of certainty regarding eventual recovery or refund.

Q. How would the approach suggested in Mr. Wheeler's Rebuttal Testimony relate to improving accuracy in "getting the base fuel rate right to begin with"?

A. Given the volatility in the marketplace, using a mid-2006 estimate of 2007 costs is not as sound as using the end-of-third-quarter estimate that we recommended. I therefore do not agree that the APS approach would necessarily improve the degree of correspondence between base rates to be set in this proceeding and actual 2007 experience. Nor do I agree that there is a basis at present in the record for concluding that our approach will leave APS with the deferral amount that the Company rebuttal witnesses posit.

Q. What did your testimony propose with respect to the retention of the 10 percent sharing mechanism that exists now in the PSA?

A. We anticipated its elimination, on the assumption that the Commission would use an earnings examination to determine whether the recovery of 100 percent of fuel and energy costs on a current basis would cause returns to vary too significantly from those finally used to set base rates in this proceeding. We do not oppose the use of an over-earnings mitigation method; we merely considered an earnings review to be a more direct tool.

Q. Do you agree with Mr. Wheeler that 2007 costs are already essentially "fixed" and well above the 2006 normalized costs your direct testimony cited?

A. No, I do not. In response to a data request in this proceeding (Data Request No. LCG-2-1), the Company provided us with its estimate of its Rate Year (2006) fuel and purchased-power costs using the future prices they expected on February 28, 2006. That estimate was $86.5 million, or 9 percent, lower than the estimate presented as part of the Company's filed rate-increase request, which used November 30, 2005 data and expectations. Total system costs, including fuel and purchased-power costs for off-system sales as well as for native load, were lower by $127.2 million, or 11.7 percent. That significant drop in just a few months shows that market changes can operate to change significantly the Company's expected 2007 costs.

There have been further significant market changes since last February. On top of those, the last few days have witnessed what can be described as a "collapse" in the prices of natural gas. The fluid energy markets of 2006 well demonstrate that there may be substantial changes in 2007 costs from those that the Company proposes to use. Given what has happened to prices during 2006, and the collapse of the last few days, 2007 costs may be below or above the Company's estimate using June 30, 2006 data. The difference may be substantial. An estimate based on September 30, 2006 conditions and expectations is a preferable approach because, while still uncertain, it will be closer in time to the start date of revised PSA rates.

Q. What is your view of the fuel and energy-cost influencing factors cited on page 6 of Mr. Ewen's Rebuttal Testimony?

A. They represent the kinds of factors that make fuel and energy costs variable. That variability is what makes them most appropriately addressable through a PSA or similar mechanism. Year 2007 costs estimated on the basis of June 2006 conditions are not what I would call "known and measurable."

Mr. Ewen's observation about ignoring them is inapt. We simply propose to treat them differently, and, moreover, in a manner that is soundly based and more responsive to concerns about their volatility than would be the case under the APS approach. That APS approach is to use a significantly premature estimate of 2007 costs, whose outputs moreover are largely unexamined and untested, as the basis for setting rates for the future. We differ in that we consider only two approaches appropriate. First would be to use a 2007 estimate that is both near-in-time to the start of 2007 and subjected to scrutiny not yet applied to Mr. Ewen's estimate. Second would be to use an historical base (that proposed for base rates in our testimony) that has undergone appropriate scrutiny. Under that second approach, the PSA would reconcile the virtually inevitable differences between estimated and actual 2007 costs.

Q. Explain in more detail why you consider it important to scrutinize estimates of 2007 fuel and energy costs before using them to set rates.

A. The first reason is that future fuel and energy prices can change very significantly over a short period of time. The second reason is that estimates are complex to perform, and subject to both judgment and potential error. The potential for error is evident from Mr. Ewen's testimony, which incorporates a major change from the 2007 estimate provided to us. That change was made because APS apparently omitted an important cost component from the estimate that it prepared at our request for use in our Direct Testimony. The Company's original presentation of its Test Year fuel and purchased-power costs contained another large error. That presentation mistakenly included $849 million of revenue and $856 million of cost pertaining to the Company's unregulated power-trading operations. Possible error is an important reason why we do not consider any of the estimates of 2007 costs on the record now sufficiently tested for use to set either base rates or the PSA.

I also note that APS did not use a 2007 estimate as the basis for its rate-case filing. Had it done so, the parties would have had a greater opportunity to focus on its structure, components, and underlying details. Neither did APS provide in its rebuttal testimony an estimate more current than the one it had prepared for us based on June 30, 2006 conditions and expectations. Had it done so, the record would already include an estimate at least close to the vintage we have recommended. There has been no material opportunity for discovery regarding testimony presented in rebuttal. That lack makes Mr. Ewen's rebuttal testimony revisions to the APS estimate using June 30, 2006 data, while interesting, not sufficiently substantiated to form a basis for rate-setting. We do not recommend the use of such an estimate to establish rates, either through base or PSA components. Our testimony makes clear that we did not recommend such use, but that we did recommend the use of a properly scrutinized and more current estimate.

Again, we do not propose to ignore 2007 cost estimates. Instead, we simply request that they be accompanied by adequate substantiation. If supported before their application, we do not object to their use to set PSA rate elements, whether they serve to increase or decrease the collections, which, in any event, will be subject to timely reconciliation. If not, then we recommend against their use, in favor of reliance on a PSA balancing mechanism. In either case, the ability of APS to demonstrate to the financial community that it will recover all prudently incurred fuel and energy costs on a sufficiently timely basis will not come into substantial doubt.

Q. How did your testimony treat the crediting of the $3.7 million in transmission optimization margins?

A. We understood that APS had already credited the margins through the PSA and we did not ask for any change in historical PSA treatment. We were not asking for any additional benefits to customers from past transactions. Instead, from a base-rate perspective, we included them to make sure that 2006 costs reflected all 2006 transactions. This approach is consistent with our treatment of all 2006 versus 2007 costs.

If similar transactions do not occur in 2007, then the PSA mechanism will operate to make APS whole. Similarly, if APS finds a way in 2007 to do for the benefit of utility operations what it was inappropriately doing for non-utility operations, then the Company will still be made whole. Our approach is even-handed, and it induces APS to seek to maximize opportunities for utility customers, much as it had been doing for shareowners in the recent past. Either way, it is not correct to conclude that APS will be deprived of any recovery of fuel and energy expenses.

Q. What is your response to Mr. Ewen's Rebuttal Testimony on page 13 addressing your inadvertent exclusion of capacity payments from 2007 fuel and energy cost estimates?

A. As a preliminary matter, I found his statement far too cryptic a way to address an omission that was not ours, but APS's. More significantly, it underscores the peril in using a largely untested estimate for setting an important rate element. We offered the APS estimate, as our testimony made clear, only to help gauge the overall magnitude of the effect of our PSA proposal as far as it was observable at a point in time that was then current. We did not offer it, nor should the Commission take it, as our view of 2007 costs or as a sound basis for setting APS base or PSA rates.

Q. What should the Commission do if there is not, as Mr. Ewen testifies, time to incorporate your proposed approach in time for a new PSA rate to be effective at the beginning of 2007?

A. We believe that there is time to set a new PSA adjustor, provided that the Company files complete estimates soon (its next testimony filing in this proceeding presents such an opportunity), so that the parties can begin their examination. However, under no circumstances do we recommend that the Commission use an untested (as Mr. Ewen's is) estimate of 2007 expenses. If an examination of a 2007 estimate based on conditions and estimates as of the end of the third quarter of 2006 is not feasible, then the Commission should adopt our proposed means for normalizing 2006 data as the basis for setting rates, and make reconciliations to actual 2007 experience after the fact.

If the variance from that amount, which can be reported monthly, grows substantially, a mid-year reconciliation in 2007 can address any urgent financial consequences, should any arise.

Q. Discuss the degree to which your reason for proposing the use of estimated 2007 costs was to "mitigate" a "tremendous run-up" in 2007 deferrals resulting from your "conscious understatement of base fuel costs."

A. We did not understate base fuel costs, consciously or otherwise. The Ewen direct testimony to which we responded did not propose to use forecasted 2007 costs. Mr. Robinson's Rebuttal Testimony nevertheless criticizes our efforts for not proposing to use a 2007 estimate. The Ewen testimony normalized 2006 costs. We simply did the same, with our only changes being those necessary to do so on a basis that we considered to be more sound.

More significantly, the implication that some form of embarrassment about our views of normalized 2006 costs led us to use estimated costs trivializes what we sought to do. Our recommendation for PSA changes had nothing to do with the size of any actual or expected deferral. Its goal was to set forth a sound approach for tracking fuel and energy costs and customer collections in a manner that fairly considers and balances Company and customer needs and interests.

Q. Did you in fact recommend the items numbered as 2, 3, and 6 from the list beginning on page 9 of Mr. Robinson's rebuttal testimony?

A. No. His item 2 suggests that we recommended a 2007 PSA adjustor based on the forecast cited in our direct testimony. We clearly did not then and we do not now recommend any rate based on that forecast. Mr. Ewen's rebuttal testimony appears to reflect our position correctly, even though Mr. Robinson's does not. Moreover, Mr. Robinson continues to be cryptic, like Mr. Ewen, in failing to make clear that the numbers "corrected" by Mr. Ewen in the 2007 estimate address an omission from a forecast that APS prepared and supplied to us.

As to item 3, we made no recommendation respecting the treatment of the prior unrecovered balance. We merely observed that we found no reason to conclude that any amounts were imprudently incurred in 2005. We stated specifically that we had not undertaken the analysis and testing necessary to determine the same for 2006 expenditures. Therefore, it would not be correct to conclude that we have endorsed the recovery of any 2006 expenditures without their being subject to accuracy and prudence review. Moreover, we believe that the period of recovery for prudently incurred 2005 expenditures should be as determined after Commission review. We have not recommended that the recovery period should be within any specifically identified future period. The review of 2006 costs and the amortization of any deferred balances are among the matters we have recommended be treated in the late-2006 Commission PSA examination that we propose.

Item 6 states that we endorse a 90/10 sharing of certain future year costs. Our testimony did not include this recommendation. We recommended a very limited sharing of the benefits of optimizing hedge positions as two relationships change as actual experience replaces estimates: (a) natural gas versus purchased power prices and (b) changes in fuel and energy requirements.

Q. Mr. Robinson's rebuttal says that Staff's proposal would "obviously" understate 2007 fuel costs. Please respond.

A. First, the very basis for using a PSA or similar mechanism is that fuel costs are volatile and unpredictable. The fact that it is not at all obvious what future fuel and energy costs will be is a core reason for using a PSA. We proceed from the premise that there is no helpful level of certainty that 2007 fuel costs will be what APS forecasted them to be as of June 30, 2006. Look for example at what APS thought 2007 costs were going to be in February 2006. That estimation differs by more than $100 million from what the APS estimate as of June 30, 2006 showed them to be.

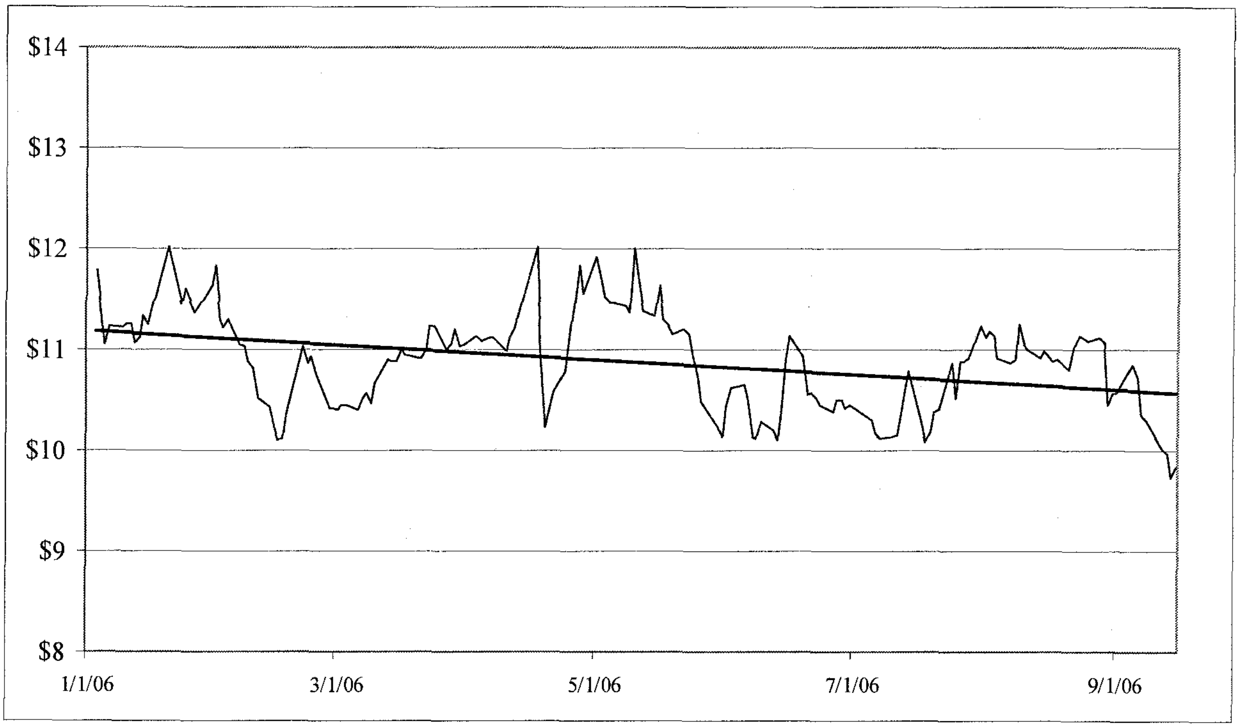
What we find to be "obvious" is that there remains all too much time for 2007 fuel and energy costs to change between a mid-year vantage point and the view that will be available when 2007 starts. Moreover, even after 2007 begins there will remain another 12 months for actual experience to turn what Mr. Robinson now calls obvious into what has a very good chance of widely missing the mark.

Our approach would be the same whether the change Mr. Robinson is suggesting starts the Company out "ahead of" or "behind" the potential deferral amount on which its rebuttal testimony focuses, because we take a long term view of the application of a PSA. We urge the Commission not to be swayed by Mr. Robinson's exaggeration and misstatement of our proposal's intent and methods to give APS a boost that may have no bearing on what it actually spends in 2007.

Q. What do energy market conditions illustrate with respect to the uncertainty you are discussing?

A. Take, for example, natural gas prices, which strongly drive APS energy costs at the margin. The following chart shows the danger in picking one's vantage point for an estimate of future prices and costs. The chart shows the strip prices for 2007 (*i.e.*, the average of the monthly forward prices for each of 2007's 12 months) at the close of each trading day through mid-September 2006. The trend line shows an overall decline through the year.

If we had used late January 2006 prices to estimate 2007 prices for natural gas (a primary source of volatility in APS fuel and energy costs), we could have priced gas at \$12.01/MMBTU (the January 20, 2006 closing price). If we used, as APS suggests, June 30, 2006, we have a closing price of \$10.45. If we use a more current date (September 15, 2006) we have a closing price for the 2007 strip of \$9.84. The January 20 price exceeds the June 30 price by 22 percent. The June 30 price exceeds the September 15 price by over 6 percent, even though the time gap between them is only 2½ months.



Between Friday, September 15 (the last date that the preceding chart covers) and September 19, 2006, natural gas prices fell even more precipitously, reaching $8.03 per MMBtu. This drop was over 18 percent across two-trading days. The next two trading days produced another 5 percent drop to a price of $7.64 on September 21.

We do not contend that these will necessarily be the actual 2007 prices as that year unfolds; we do, however, contend that these changes show that what APS now says about 2007 isn't necessarily so, and that the most recent estimates practicably available should be used.

Q. Does that complete your Sur-Rebuttal Testimony?

A. Yes, it does.

SURREBUTTAL

TESTIMONY

OF

MATTHEW J. ROWELL

BARBARA KEENE

ERINN A. ANDREASEN

JERRY D. ANDERSON

DOCKET NOS. E-01345A-05-0816
E-01345A-05-0826
E-01345A-05-0827

IN THE MATTER OF THE AMENDED APPLICATION OF ARIZONA PUBLIC SERVICE COMPANY FOR A HEARING TO DETERMINE THE FAIR VALUE OF THE UTILITY PROPERTY OF THE COMPANY FOR RATEMAKING PURPOSES, TO FIX A JUST AND REASONABLE RATE OF RETURN THEREON, TO APPROVE RATE SCHEDULES DESIGNED TO DEVELOP SUCH RETURN, AND TO AMEND DECISION NO. 67744.

SEPTEMBER 27, 2006

Rowell

BEFORE THE ARIZONA CORPORATION COMMISSION

JEFF HATCH-MILLER
Chairman
WILLIAM A. MUNDELL
Commissioner
MIKE GLEASON
Commissioner
KRISTIN K. MAYES
Commissioner
BARRY WONG
Commissioner

IN THE MATTER OF THE AMENDED APPLICATION OF ARIZONA PUBLIC SERVICE COMPANY FOR A HEARING TO DETERMINE THE FAIR VALUE OF THE UTILITY PROPERTY OF THE COMPANY FOR RATEMAKING PURPOSES, TO FIX A JUST AND REASONABLE RATE OF RETURN THEREON, TO APPROVE RATE SCHEDULES DESIGNED TO DEVELOP SUCH RETURN, AND TO AMEND DECISION NO. 67744.)	DOCKET NOS. E-01345A-05-0816 E-01345A-05-0826 E-01345A-05-0827

SURREBUTTAL

TESTIMONY

OF

MATTHEW J. ROWELL

CHIEF ECONOMIST

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

SEPTEMBER 27, 2006

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EXECUTIVE SUMMARY
ARIZONA PUBLIC SERVICE COMPANY
DOCKET NOS. E-01345A-05-0816 ET AL

This Surrebuttal Testimony will address Arizona Public Service Company's rebuttal testimonies pertaining to the proposed Environmental Improvement Charge ("EIC") as submitted by Messrs. Edward Z. Fox and Gregory A. DeLizio. Staff continues to oppose adoption of the EIC.

I. INTRODUCTION

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

A. My name is Matthew J. Rowell. I am the Chief Economist at the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Are you the same Matthew Rowell who submitted prepared Direct Testimony in this Docket?

A. Yes.

Q. What is the purpose of your Surrebuttal Testimony?

A. This Surrebuttal Testimony will address Arizona Public Service Company's ("APS" or "Company") rebuttal testimonies pertaining to the proposed Environmental Improvement Charge ("EIC") as submitted by Messrs. Edward Z. Fox and Gregory A. DeLizio.

II. REPLY TO REBUTTAL TESTIMONY OF EDWARD Z. FOX

Q. At page 3 lines 1 thru 4 of his Rebuttal Testimony Mr. Fox summarizes his perception of Staff's concerns. Please comment.

A. Here Mr. Fox lists three of the many concerns with the EIC discussed in my Direct Testimony: It is unique, its impact on the environment is unclear, and it seeks to recover estimated future costs of projects not yet mandated. Mr. Fox characterizes these issues as Staff's "major concerns." While these issues were discussed in my Direct Testimony they were not singled out as being Staff's "major concerns." Staff is opposing the EIC because of all the concerns listed in my Direct Testimony and restated below:

- The EIC would collect revenues from ratepayers based predominantly upon estimated rather than incurred costs.

- The EIC appears to be unique. Staff is not aware of any jurisdiction that employs a mechanism with the same characteristics as the EIC.
- The EIC would include costs that will not be incurred for several years beyond the Test Year.
- The EIC would include funding for projects before they are mandated to be installed on APS' system.
- Regulatory mandates typically build in construction lead times to provide industry sufficient time to comply with mandated regulatory requirements.
- The EIC is derived based upon multiple year revenue requirements that increase the complexity of auditing the charge in the context of future general rate cases and annual EIC reset proceedings.
- The effect of the EIC on APS' interest expense is unclear.
- The annual reset of the EIC could be implemented without Commission approval under APS' proposal.
- The EIC does not address the fundamental financial challenges that APS has identified.
- The environmental impact of implementing the EIC is unclear.

Q. In the question at page 4 lines 10 thru 13 Mr. Fox states that "...Staff identifies Wisconsin as being innovative..." Please comment.

A. Mr. Fox's comments here indicate that a clarification of my Direct Testimony may be necessary. In my Direct Testimony, I merely pointed out that *the authors of the NARUC study*[1] held Wisconsin out as a particularly innovative state. Staff was not advocating for a similar approach in Arizona. Staff's discussion of the NARUC study was simply meant

[1] *A Survey of State Incentives Encouraging Improved Environmental Performance of Base-Load Electric Generation Facilities; Policy and Regulatory Initiatives;* The National Association of Regulatory Utility Commissioners (June 2004).

to highlight the fact that APS' proposed EIC is unique. Staff is not aware of any other state with a mechanism quite like the EIC. At page 11 line 6 of his testimony Mr. Fox concedes the point that the EIC is unique.

Q. At page 5 lines 7 thru 23, Mr. Fox lists several states (Florida, Indiana, West Virginia, and Kentucky) that have environmental cost recovery programs. Please comment.

A. Staff believes that the EIC proposed by APS is more radical than each of the state programs Mr. Fox discusses here. As Staff understands these programs, none of them allow for recovery based on the *estimated* costs of future projects.

Q. At page 10 lines 13 thru 20 Mr. Fox indicates that the standard for review based on prudence contained in "the traditional ratemaking process" is problematic. Please comment.

A. Here it appears that APS is concerned about a negative prudence determination regarding environmental improvements. Staff will just note here that this prudence concern could be addressed without a surcharge mechanism like the EIC. The Commission has established processes to address similar prudence concerns arising from the construction of natural gas infrastructure investments.[2] This process allows for pre approval of such investments given certain circumstances. While Staff is not advocating such a program at this time, we believe it is worth noting that such a program is substantially less radical than the proposed EIC and would address the concerns with prudence determinations that Mr. Fox discusses on page 10 of his rebuttal testimony.

[2] See the Commission's December 18, 2003 Policy Statement Regarding New natural Gas Pipeline and Storage Costs.

III. REPLY TO REBUTTAL TESTIMONY OF GREGORY A. DELIZIO

Q. At page 3 lines 21 and 22 of his Rebuttal Testimony Mr. DeLizio implies that Staff would require the company to quantify the environmental benefits of emission control equipment before a project can be funded. Please comment.

A. In my Direct Testimony I did comment on the uncertainty of the environmental benefit of the EIC. However, my Direct Testimony did not state that the environmental benefit of emission control equipment needs to be quantified before a project can be funded. That is simply not Staff's position.

Q. At page 3 line 23 thru page 4 line 7, Mr. DeLizio discusses the financial impact of Staff's recommendation not to adopt the proposed EIC. Please respond.

A. First, Mr. DeLizio states that Staff contends that "the denial of timely recovery of these types of costs would not impose a significant financial burden on the company…" Again, this is a misinterpretation of Staff's position. Staff is not opposed to the timely recovery of prudently incurred costs and Staff does not believe that the denial of timely recovery has no financial impact on the company. The real point of disagreement between Staff and APS has to do with what is considered to be "timely." Staff believes that the traditional ratemaking process does provide for timely recovery of costs. The company believes otherwise. However, Staff does not believe that the company has made the case that the radical departure from the traditional ratemaking process envisioned by the EIC is necessary in order to ensure timely recovery.

Next, Mr. DeLizio contends that Staff's analysis of the EIC has missed "the key point in this entire proceeding, which is discussed in the rebuttal testimony of Mr. Wheeler. Capital is at a premium for APS and without the EIC, environmental projects are just another capital need in a very long line of competing needs." Staff understands this point:

money spent on environmental improvements has the same financial impact on APS as money spent on any other capital improvement. However, APS chose to single out the cost of environmental improvements for a surcharge. Mr. Wheeler identifies customer growth as the driver of the company's financial concerns.[3] However, the company has not proposed a surcharge to cover the capital costs associated with customer growth.

Implementation of the EIC could cause customers to blame their increased rates on the cost of environmental improvements. However, the company contends that customer growth is the driver of the company's financial concerns and thus its need for increased rates. This disparity between the Company's claimed cause of its financial concerns and its proposal to deal with those concerns is striking.

IV. SUMMARY

Q. Please summarize Staff's position on the EIC.

A. For the reasons cited in my Direct Testimony, Staff does not support adoption of the EIC at this time.

Q. Does Staff have any other comments at this time?

A. Yes. Staff recognizes and appreciates APS' commitment to environmental issues (as exemplified by the EPA's selection of APS to receive the 2006 Climate protection Award.) Staff's testimony concerning the EIC should not be construed in any way to reflect negatively on APS' record with regard to environmental issues. Staff has viewed the EIC as a ratemaking issue, not an environmental policy issue.

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[3] Also, Mr. Fox identifies customer growth as a challenge to its environmental commitments. See page 18 lines 16-17 of Mr. Fox's Rebuttal Testimony.

Q. Does this conclude your testimony?

A. Yes.

Keene

BEFORE THE ARIZONA CORPORATION COMMISSION

JEFF HATCH-MILLER
Chairman
WILLIAM A. MUNDELL
Commissioner
MIKE GLEASON
Commissioner
KRISTIN K. MAYES
Commissioner
BARRY WONG
Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA PUBLIC SERVICE COMPANY FOR A HEARING TO DETERMINE THE FAIR VALUE OF THE UTILITY PROPERTY OF THE COMPANY FOR RATEMAKING PURPOSES, TO FIX A JUST AND REASONABLE RATE OF RETURN THEREON, TO APPROVE RATE SCHEDULES DESIGNED TO DEVELOP SUCH RETURN, AND TO AMEND DECISION NO. 67744.	DOCKET NOS. E-01345A-05-0816 E-01345A-05-0826 E-01345A-05-0827

SURREBUTTAL

TESTIMONY

OF

BARBARA KEENE

PUBLIC UTILITIES ANALYST MANAGER

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

SEPTEMBER 27, 2006

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This surrebuttal testimony addresses new rate schedules proposed by APS in its rebuttal testimony. Although Staff has not found any problems with the proposed rate schedules at this time, Staff is continuing its review and reserves the right to address any concerns at a later date.

INTRODUCTION

Q. Please state your name and business address.

A. My name is Barbara Keene. My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Have you previously filed testimony in this docket?

A. Yes. I filed direct testimony addressing renewable energy for Arizona Public Service ("APS"); in particular, funding for renewable resources, net metering, and green pricing tariffs. That testimony also responded to Commissioner Mayes' July 17, 2006, letter regarding the Renewable Energy Standard and Tariff. I also filed rate design testimony addressing a change in the Environmental Portfolio Standard adjustor rate for Arizona Public Service to recover costs for the EPS Credit Purchase Program, and the establishment of a Power Supply Adjustor surcharge to recover costs associated with nuclear plant outages that have not been found to be imprudent.

Q. What is the subject matter of this surrebuttal testimony?

A. This surrebuttal testimony will address new rate schedules proposed by APS in its rebuttal testimony.

RESPONSE TO NEW RATE SCHEDULES PROPOSED BY APS

Q. Did Staff review the rebuttal testimony of APS witness Mr. Gregory A. DeLizio?

A. Yes.

Q. What did Mr. DeLizio propose in his rebuttal testimony?

A. Among changes to existing and previously proposed rate schedules, Mr. DeLizio proposed three new rate schedules.

Q. Had APS proposed the three new rate schedules previously?

A. No. Staff saw the new rate schedules for the first time in Mr. DeLizio's rebuttal testimony.

Q. What are the three new rate schedules?

A. The proposed rate schedules are Solar-3, E-56, and E-57.

Q. Briefly describe the three rate schedules.

A. Solar-3 would be a Solar Power Pilot Program as an option for residential customers to have their energy needs served from solar power resources constructed by APS.

E-56 would be Partial Requirements Service for general service customers with distributed generation equipment of 100 kW or greater.

E-57 would be Solar Partial Requirements Service for general service customers having solar/photovoltaic generation equipment of greater than 100 kW but less than 1000 kW.

Q. Has Staff analyzed the three rate schedules?

A. Staff began its review of the rate schedules.

Q. Has Staff found any problems with the proposed rate schedules?

A. Not at this time. However, Staff is continuing its review and reserves the right to address any concerns at a later date.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

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BEFORE THE ARIZONA CORPORATION COMMISSION

JEFF HATCH-MILLER
Chairman
WILLIAM A. MUNDELL
Commissioner
MIKE GLEASON
Commissioner
KRISTIN K. MAYES
Commissioner
BARRY WONG
Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA PUBLIC SERVICE COMPANY FOR A HEARING TO DETERMINE THE FAIR VALUE OF THE UTILITY PROPERTY OF THE COMPANY FOR RATEMAKING PURPOSES, TO FIX A JUST AND REASONABLE RATE OF RETURN THEREON, TO APPROVE RATE SCHEDULES DESIGNED TO DEVELOP SUCH RETURN, AND TO AMEND DECISION NO. 67744.	)	DOCKET NO. E-01345A-05-0816 E-01345A-05-0826 E-01345A-05-0827

SURREBUTTAL

TESTIMONY

OF

ERINN A. ANDREASEN

PUBLIC UTILITIES ANALYST V

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

SEPTEMBER 27, 2006

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Ms. Andreasen's testimony recommends the rate design to be adopted by the Commission for ET-2 incorporate off-peak winter rates that are less than off-peak summer rates. Ms. Andreasen's testimony also addresses Staff's recommended changes to Schedule 1 and Schedule 3.

INTRODUCTION

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

A. My name is Erinn Andreasen. I am a Public Utilities Analyst employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Have you previously filed testimony in this docket?

A. Yes. I filed direct testimony on the topics of revenue allocations and rate design, APS' proposed customer transition plan, APS' proposed changes to Schedule 1 and Schedule 3, general issues related to the establishment of hook-up fees, and demand-response and load-management programs.

Q. What is the scope of your rebuttal testimony in this proceeding?

A. My rebuttal testimony will address rate schedule ET-2, Schedule 1, and Schedule 3.

RATE SCHEDULE ET-2

Q. Does Staff have any comments regarding the revenue neutrality of the proposed rate design for ET-2 that was provided in its direct testimony?

A. Yes. ET-2 is a recently approved time-of-use rate that has an on-peak period from 12:00 p.m. to 7:00 p.m.[1] Based on further evaluation, Staff has determined that if Staff's proposed rates for ET-2 are adopted by the Commission an adjustment should be made for revenue neutrality when compared to ET-1.

[1] Approved in Commission Decision No. 68645.

Q. Does Staff have any other recommendations regarding the rate structure for ET-2?

A. Yes. Under the current rate structure, the off-peak kilowatt-hour ("kWh") charge for the winter season is higher than the off-peak kWh charge for the summer season. Typically, a utility's generating costs are lower in the winter than they are in the summer which is not reflected in the design of the current rate structure. Therefore, Staff recommends that the rate design to be adopted by the Commission for ET-2 incorporate off-peak winter rates that are less than off-peak summer rates.

SCHEDULE 1

Q. Has Staff reviewed APS' revised Schedule 1?

A. Yes. APS provided a redlined and clean copy of Schedule 1 in the Rebuttal testimony of Mr. Greg Delizio.

Q. What does Staff recommend in regard to Schedule 1?

A. Although Mr. Delizio does not explain the changes that were made to the latest version of Schedule 1,[2] in his rebuttal testimony, Staff believes that APS made modifications to sections 4.3.2.3.4, 5.4, and 6.4 of Schedule 1. Staff recommends that the wording for sections 4.3.2.3.4, 5.4, and 6.4 on Schedule 1 included on APS document number 10679 be adopted. Copies of the wording in the applicable section are attached as Exhibit A. Staff also reasserts its recommendation included in direct testimony that APS include a definition for Multi-Unit Residential High-Rise Developments on Schedule 1.

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[2] APS document number 10679 which can be found in the direct testimony of Staff witness Ms. Erinn Andreasen.

SCHEDULE 3

Q. Has Staff reviewed APS' revised Schedule 3?

A. Yes. APS provided a redlined and clean copy of Schedule 3 in the Rebuttal testimony of Mr. David Rumolo.

Q. What does Staff recommend in regard to schedule 3?

A. Staff recommends that the following clarifying changes to Schedule 3 be adopted.

a. Clarify that under section 1.1.1 of Schedule 3, "group" would be defined as "4 or less homes" instead of "less than 4 homes."

b. Clarify that under section 1.3.1 of Schedule 3, the allowance would be credited against the "total construction costs."

c. Clarify that under section 1.3.2 of Schedule 3, advances would be subject to refund as specified in "section 4.1" instead of "section 4.2."

SUMMARY OF STAFF RECOMMENDATIONS

Q. Please provide a summary of your recommendations.

A.

1. Staff recommends that the rate design to be adopted by the Commission for ET-2 incorporate off-peak winter rates that are less than off-peak summer rates.

2. Staff recommends that the wording for sections 4.3.2.3.4, 5.4, and 6.4 on Schedule 1 included on APS document number 10679 be adopted. Staff also reasserts its recommendation included in direct testimony that APS include a definition for Multi-Unit Residential High-Rise Developments on Schedule 1.

3. Staff recommends that the following clarifying changes to Schedule 3 be adopted.

a. Clarify that under section 1.1.1 of Schedule 3, "group" would be defined as "4 or less homes" instead of "less than 4 homes."

b. Clarify that under section 1.3.1 of Schedule 3, the allowance would be credited against the "total construction costs."

c. Clarify that under section 1.3.2 of Schedule 3, advances would be subject to refund as specified in "section 4.1" instead of "section 4.2."

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.

Exhibit A

4.3.2.3 Except as specified below, corrected charges for underbillings shall be limited to three (3) month for residential accounts and six (6) months for non-residential accounts.

4.3.2.3.1 Where the account is billed on a special contract or non-metered rate, corrected charges for underbillings shall be billed in accordance with the contract or rate schedule requirements and is not limited to three or six months as applicable.

4.3.2.3.2 Where service has been established but no bills have been rendered, corrected charges for underbillings shall go back to the date service was established.

4.3.2.3.3 Where there is evidence of meter tampering or energy diversions, corrected charges for underbillings shall go back to the date meter tampering or energy diversions began, as determined by Company.

~~4.3.3 Where Company is responsible for rendering the customer's bill, Company may provide a one-time incentive of up to $10.00 per customer to customers who elect to pay their bills using Company's electronically transmitted payment options.~~

4.3.2.3.4 Where lack of access to the meter (caused by the customer) has resulted in estimated bills, corrected charges for underbillings shall go back to the billing month of the last actual Company obtained meter read date.

~~4.3.4 Where Company is responsible for rendering the customer's bill, Company may provide a one-time incentive of $5.00 per customer for a customer electing to forego the presentation of a paper bill.~~

4.3.2.4 Company may forgo billing and collection of corrected charges for an underbilling if Company believes the cost of billing and collecting the underbilling would not justify pursuing the underbill.

4.4 Dishonored Payments - If Company is notified by the customer's financial institution that they will not honor a payment tendered by the customer for payment of any bill, Company may require the customer to make payment in cash, by money order, certified or cashier's check, or other means which guarantee the customer's payment to Company.

4.4.1 The customer ~~shall~~will be charged a fee of $15.00 for each instance where the customer tenders payment of a bill with a payment that is not honored by the customer's financial institution.

4.4.2 The tender of a dishonored payment shall in no way (i) relieve the customer of the obligation to render payment to Company under the original terms of the bill, or (ii) defer Company's right to terminate service for nonpayment of bills.

4.4.3 Where the customer has tendered two (2) or more dishonored payments in the past twelve (12) consecutive months, Company may require the customer to make payment in cash, money order or cashier's check for the next twelve (12) consecutive months.

5.2.4 The customer shall be responsible for payment for any equipment damage and/or estimated unmetered usage resulting from unauthorized breaking of seals, interfering with, tampering with, or by-passing the meter.

5.2.5 The customer shall be responsible for notifying Company of any failure in Company's equipment.

5.3 Service Interruptions: Limitations on Liability of Company

5.3.1 Company shall not be liable to the customer for any damages occasioned by Load Serving ESP's equipment or failure to perform, fluctuations, interruptions or curtailment of electric service, except where due to Company's willful misconduct or gross negligence. Company may, without incurring any liability therefore, suspend the customer's electric service for periods reasonably required to permit Company to accomplish repairs to or changes in any of Company's facilities. The customer needs to protect their own sensitive equipment from harm caused by variations or interruptions in power supply.

5.3.2 In the event of a national emergency or local disaster resulting in disruption of normal service, Company may, in the public interest and on behalf of Electric Service Providers or Company, interrupt service to other customers to provide necessary service to civil defense or other emergency service agencies on a temporary basis until normal service to these agencies can be restored.

5.4 Company Access to Customer Sites - Company's authorized agents shall have satisfactory unassisted access to the customer's sites at all reasonable hours to install, inspect, read, repair or remove its meters or to install, operate or maintain other Company property, or to inspect and determine the connected electrical load. If, after six (6) months (not necessarily consecutive) of good faith efforts by Company to deal with the customer, Company in its opinion does not have satisfactory unassisted access to the meter, then Company shall have sufficient cause for termination of service or denial of any ~~existing~~ rate options where, in Company's opinion, access is required. The remedy for unassisted access will be at Company discretion and may include the installation by Company of a specialized meter. If such specialized meter is installed, the customer will be billed the difference between the otherwise applicable meter for their rate and the specialized meter plus~~and~~ the cost incurred to install the specialized meter as a one-time charge and any reoccurring incremental costs. If service is terminated as a result of failure to provide unassisted access, Company verification of unassisted access may be required before service is restored. Written termination notice is required prior to disconnecting service under this schedule.

5.5 Easements

5.5.1 All suitable easements or rights-of-way required by Company for any portion of ~~the~~an extension to serve a customer, which is either on sites owned, leased or otherwise controlled by the customer or developer, or other property required for the extension, shall be furnished in Company's name by the customer without cost to or condemnation by Company and in reasonable time to meet proposed service requirements. All easements or rights-of-way granted to, or obtained on behalf of Company shall contain such terms and conditions as are acceptable to Company.

5.5.2 When Company discovers that the customer or the customer's agent is performing work, has constructed facilities, or has allowed vegetation to grow adjacent to or within an

~~permitted to make and energize the connection between Company's service wires and the customer's service entrance conductors. Such employees carry credentials~~

6.3.3 For special applications where service is provided at voltages higher than the standard voltages specified in the Electric Service Requirements Manual, Company and customer shall mutually agree upon the designated point of delivery.

6.3.4 For the mutual protection of the customer and Company, only authorized employees or agents of Company or the Load Serving ESP are permitted to make and energize the connection between Company's service wires and the customer's service entrance conductors. Such employees carry Company issued identification which they will show on request.

6.4 Measuring Customer Service - All the energy sold to the customer will be measured by commercially acceptable measuring devices by Company (or the Meter Reading Service Provider (MRSP) pursuant to the terms and conditions of Company's Schedule ~~10.~~10). Where energy and, if applicable, demand is estimated by Company, estimation will be in accordance with Company's bill estimation procedures approved by ~~Schedule 8, Bill Estimation, as filed with~~ the Arizona Corporation Commission. Where it is impractical to meter loads, such as street lighting, security lighting, or special installations, consumption will be determined by Company.

6.4.1 For Standard Offer customers, or where Company is the MRSP, the readings of the meter will be conclusive as to the amount of electric power supplied to the customer unless there is evidence of meter tampering or energy diversion, or unless a test reveals the meter is in error by more than plus or minus three percent (3%).

6.4.2 If there is evidence of meter tampering or energy diversion, the customer will be billed for the estimated energy ~~consumption~~and, if applicable, demand, for the period in which the energy eversion took place.~~that would have registered had all energy and demand usage been properly metered.~~ Additionally, where there is evidence of meter tampering, energy diversion, or by-passing the meter, the customer ~~may~~will also be charged the cost of the investigation as determined by Company.

6.4.3 If after testing, a meter is found to be more than three percent (3%) in error, either fast or slow, proper correction shall be made of previous readings and adjusted bills shall be rendered or adjusted billing information will be provided to the MRSP.

6.4.3.1 ~~6.4.4 Customer will be billed~~Customer will be billed, in accordance with Section 4.3.2, for the estimated energy and demand that would have registered had the meter been operating properly.

6.4.4 Where Company is the MRSP, Company ~~shall~~will, at the request of the customer or the ESP, reread the customer's meter within ten (10) working days after such request by the customer. The cost of such rereads is $16.50 and may be charged to the customer or the ESP, provided that the original reading was not in error.

6.4.5 Where the ESP is the MSP or MRSP, and the ESP and/or its' agent fails to provide the meter data to Company pursuant to Company's Schedule 10 Section 8.16, Meter Reading

Anderson

BEFORE THE ARIZONA CORPORATION COMMISSION

JEFF HATCH-MILLER
Chairman
WILLIAM A. MUNDELL
Commissioner
MIKE GLEASON
Commissioner
KRISTIN K. MAYES
Commissioner
BARRY WONG
Commissioner

IN THE MATTER OF THE APPLICATION OF ARIZONA PUBLIC SERVICE COMPANY FOR A HEARING TO DETERMINE THE FAIR VALUE OF THE UTILITY PROPERTY OF THE COMPANY FOR RATEMAKING PURPOSES, TO FIX A JUST AND REASONABLE RATE OF RETURN THEREON, TO APPROVE RATE SCHEDULES DESIGNED TO DEVELOP SUCH RETURN, AND TO AMEND DECISION NO. 67744.	DOCKET NOS. E-01345A-05-0816 E-01345A-05-0826 E-01345A-05-0827

SURREBUTTAL

TESTIMONY

OF

JERRY D. ANDERSON

PUBLIC UTILITIES ANALYST

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

September 27, 2006

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ARIZONA PUBLIC SERVICE COMPANY
DOCKET NOS. E-01345A-05-0816 ET AL

Staff adds clarification that any under-spending for DSM below the $30 million in base rates during the period 2005 through 2007 will result in the amount of the under-spending being applied as a credit to the DSM adjustor account. Staff also comments on SWEEP's proposal to implement an Energy Efficiency Standard ("EES") in which Staff agrees with APS that the EES is aggressive and possibly premature, but believes it is useful for planning for future energy efficiency. Staff also sets a time limitation on the use of measured energy savings values from sources other than the Measurement, Evaluation, and Research ("MER") contractor in the calculation of the DSM Performance Incentive and sets a date when actual measured savings must be used in those calculations. Staff also contends that energy savings resulting from DSM measures are not known and measurable and adds that argument to its position that APS' proposed revenue adjustment for DSM-related reduced revenues should be disallowed.

INTRODUCTION

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

A. My name is Jerry D. Anderson. I am a Public Utilities Analyst employed by the Arizona Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business address is 1200 West Washington Street, Phoenix, Arizona 85007.

Q. Have you previously filed testimony in this docket?

A. Yes. I filed direct testimony in this rate case regarding the System Benefits Charge ("SBC") and the details of the Arizona Public Service Company ("APS" or the "Company") Demand-Side Management ("DSM") programs and how they are funded.

Q. **Have you reviewed relevant portions of APS' and other parties' rebuttal testimony in this case?**

A. Yes, I have.

PURPOSE OF SURREBUTTAL TESTIMONY

Q. What is the purpose of your surrebuttal testimony in this case?

A. This surrebuttal testimony will clarify Staff's position on some issues related to APS DSM programs and introduce an additional argument that reduced revenues resulting from DSM measures during the period 2005 through 2007 are not known and measurable.

SUMMARY OF SURREBUTTAL TESTIMONY

Q. Please summarize your surrebuttal testimony.

A. Staff adds clarification that any under-spending for DSM below the $30 million in base rates during the period 2005 through 2007 will result in the amount of the under-spending being applied as a credit to the DSM adjustor account. Staff also comments on SWEEP's proposal to implement an Energy Efficiency Standard ("EES") in which Staff agrees with APS that the EES is aggressive and possibly premature, but believes it is useful for planning for future energy efficiency. Staff also sets a time limitation on the use of measured energy savings metrics from sources other than the Measurement, Evaluation, and Research ("MER") contractor in the calculation of the DSM Performance Incentive and sets a date when actual measured savings must be used in these calculations. Staff also contends that energy savings resulting from DSM measures are not known and measurable and adds that argument to its position that APS' proposed revenue adjustment for DSM-related reduced revenues should be disallowed.

Q. Do you have any modifications to make to your direct testimony?

A. No, I do not.

DEMAND-SIDE MANAGEMENT

Q. Is Staff in agreement with APS witness Teresa A. Orlick's rebuttal testimony with regard to how under-spending of DSM dollars in the period 2005 through 2007 is handled?

A. Staff believes Ms. Orlick's explanation requires some clarification. Ms. Orlick's rebuttal testimony indicates that APS does not believe that the $48 million required by Decision No. 67744 to be spent on DSM programs during the period 2005 through 2007 will be achieved. She also indicated that any under-spending of the $48 million will be carried over and spent in subsequent years in addition to the $16 million required for each of those years. Decision No. 67744 provides that if during 2005 through 2007, APS does not spend at least $30 million of the base rate allowance for approved and eligible DSM-related items, the unspent amount is to be credited to the account balance of the Demand-Side Management Adjustment Clause ("DSMAC") account. If APS desires to spend in excess of the required $16 million in any subsequent year, it may do so and recover all spending for approved DSM-related items incurred over $10 million each year through the DSMAC. The $16 million DSM spending requirement is an annual minimum spending requirement.

Q. Is Staff in agreement with APS staff witness Teresa A. Orlick's rebuttal testimony in which she expresses concerns about SWEEP's Energy Efficiency Standard ("EES")?

A. Staff agrees that the EES proposed for APS by SWEEP witness Jeff Schlegal is very aggressive and perhaps somewhat premature. APS is still in the early implementation phases of a broad range of new DSM programs proposed in the APS Demand-Side Management Portfolio Plan ("Portfolio Plan") and approved in 2005 and 2006. Mr. Schlegal's proposal, however, has merit in that planning for future energy efficiency expansion is important. Staff would disagree with Ms. Orlick's testimony that a DSM spending goal is always more appropriate than a DSM savings goal as proposed by SWEEP. Although APS currently has a DSM spending goal, there could be merits in using a savings goal in the future, as it is the energy efficiency savings that are the desired end result. Ms. Orlick is correct that APS DSM incentive levels are generally limited by the Commission to 50 to 75 percent of incremental cost. Staff believes that it is important for the customer to "buy in" to energy savings by investing some of the customer's own money for efficiency measures. Staff currently is not convinced that incentives of 100 percent of incremental cost are required to achieve higher levels of energy savings.

Q. Did APS agree with Staff's proposals in regard to a DSM Performance Incentive?

A. Yes, generally Staff and APS are in agreement regarding the Performance Incentive. Ms. Orlick's testimony suggests that the program-filed savings metrics be utilized in the calculation of the performance incentive until such time as MER contractor results are available. Staff understands that MER results may not yet be available. However, Staff recommends that APS should use the most recent and regionally similar energy savings data available instead of the program-filed savings numbers from 2005. In addition, APS should incorporate results from the Baseline Study into its calculations. Nevertheless, Staff believes that a time limit should be placed upon the use of energy use measurements from other regions. Staff recommends that APS use measured savings obtained from APS customers by the MER contractor beginning no later than July 1, 2007, such that the year-end DSM Semi-annual Report for the period July 1, 2007, through December 31, 2007, and the Performance Incentive calculations contained therein, are based on these measured savings supplied by the MER. Staff's objective is for APS to use savings metrics that most accurately reflect patterns in APS' service territory. Because of Arizona's unique desert climate, metrics obtained from other states may not accurately reflect savings in Arizona.

DSM-RELATED REDUCED REVENUE PRO FORMA ADJUSTMENT

Q. Do you agree with the rebuttal testimony of APS staff witness Peter M. Ewen (page 6) that lists DSM energy savings related to the Company's DSM spending obligations as a factor already known for 2007?

A. No. I do not. Staff believes that the DSM spending for the remainder of the Portfolio Plan period, 2005 through 2007, is very much in question. The energy savings resulting from that spending is even more difficult to quantify with certainty.

Q. Is it Staff's position, then, that revenue reductions attributable to DSM measures for the remainder of 2006 and 2007 are not known and measurable?

A. Yes, that is Staff's position.

Q. What levels of DSM spending has APS recorded to date relative to their $16 million per year ($48 million for 2005 through 2007) obligation for the period 2005 through 2007?

A. According to DSM Semi-Annual Reports APS filed with the Commission, the following levels of DSM spending have been recorded:

January – June 2005	$ 953,501
July – December 2005	$2,257,280
January – June 2006	$2,686,449

Q. How does the actual level of DSM spending compare to the spending obligations required by Decision No. 67744?

A. Because Decision No. 67744 was issued on April 5, 2005, the spending obligation for 2005 was reduced to $10 million. However, the 2005 through 2007 spending obligation remains at $48 million. The $6 million reduction in 2005 was intended to facilitate a ramp-up of the programs, thus the latter years need to exceed the $16 million annual obligation to make up for the $6 million reduction in 2005. The distribution of the spending over $16 million for 2006 and 2007 is flexible, so for illustrative purposes I will assume the $6 million from 2005 will be made up in 2007.

Year	Obligation	Spending	Variance
2005	$10,000,000	$3,210,781	-68%
2006	$16,000,000	$2,686,449 (6-months only)	
2007	$22,000,000	(unknown at this time)	
TOTAL	$48,000,000		

At this time, we have actual spending results from the DSM Semi-Annual Reports for the first year and one-half of the 2005 through 2007 period. During this 1.5-year span, representing half of the 3-year 2005 through 2007 period, \$5.9 million of the \$48 million obligation has been spent.

Q. Is it likely that the \$48 million spending requirement for the period 2005 through 2007 will be achieved?

A. Staff believes the \$48 million DSM Portfolio Plan spending goal for 2005 through 2007 may not be achieved; however, it is unknown at this time. Staff acknowledges that one of the reasons that spending is lagging is that, with the exception of the Consumer Products Program, the programs were not approved by the Commission until 2006. Staff is also aware that this three-year period is a ramping-up period for the Portfolio Plan DSM programs, and that much of the early efforts will not result in actual savings until a later time. Staff fully expects that DSM spending during July through December 2006 and during 2007 will be significantly higher than that experienced to date. The extent of spending during this period is unknown at this time; however, it appears very unlikely that APS' \$48 million, three-year Portfolio Plan spending goal will be achieved.

Q. Does APS expect that the \$48 million DSM Portfolio Plan spending goal for 2005 through 2007 will be achieved?

A. No. Ms. Orlick's rebuttal testimony on page 2 states that "Due to the delayed approval of the programs and the steep ramp-up from a level of \$1 million of DSM spending per year prior to Decision 67744 to the current level of \$16 million per year, APS does not believe that \$48 million will be spent by year end 2007."

Q. Would you conclude that the level of DSM spending for 2005 through 2007 is not known at this time?

A. Yes, I would.

Q. Are there additional factors besides DSM spending that affect DSM savings and ultimately revenue reductions resulting from successful DSM programs?

A. Yes there are. Actual DSM kW and kWh savings are currently being estimated from engineering calculations and savings factors from national databases which are primarily measured in states other than Arizona. APS has only within the past three months hired its own MER contractor to measure savings actually achieved in the APS service territory as a result of successful APS' DSM measures. The use of actual measured savings in APS' service territory will provide more accurate demand and energy savings; however, APS has indicated such actual measured savings will not be available until some time in the future. The conversion of demand and energy savings into revenue reductions is a calculation that is also an estimation, adding even more uncertainty to the actual revenue reduction attributable to DSM programs.

Q. Would you conclude that APS's proposed pro forma revenue adjustment should be disallowed on the basis that the revenue reduction resulting from DSM is not known and measurable?

A. Yes, I would.

Q. Are there other reasons why Staff is recommending disallowance of APS' proposed pro forma adjustment to compensate for revenue shortfalls resulting from DSM savings?

A. Yes. I outlined in my direct testimony and in responses to discovery that Staff has proposed a Performance Incentive for APS to reward it for successful DSM programs instead of an adjustment for DSM-caused revenue reductions. Allowing the Company both a pro forma DSM lost revenue adjustment and a Performance Incentive would be duplicative. If DSM-induced lost revenue were possible to measure definitively, the pro forma would compensate APS for every dollar of DSM revenue that was saved through DSM measures. If a DSM Performance Incentive were also allowed, APS would then be compensated over the amount of the DSM revenue reductions. Staff feels that APS should share in the DSM savings with its customers who adopt DSM measures through a Performance Incentive, but it should not be compensated twice for the same effort.

Q. Is Staff confusing an adjustment to base rates in a general rate case for a known and measurable condition with a year-by-year net lost revenue approach as proposed in APS witness Peter M. Ewen's rebuttal testimony on page 10?

A. No. Staff explained in its response to APS-Staff-4-4 that APS's proposed adjustment for reduced revenues owing to successful DSM programs is a one-time pro forma adjustment to the test year. Staff believes such an adjustment should not be allowed for the reasons stated herein and that a Performance Incentive similar to that proposed by APS in its Portfolio Plan should be adopted instead.

Q. Is staff witness Peter M. Ewen's testimony regarding the funding of APS's DSM programs through base rates and a DSM adjustment mechanism accurate?

A. No. It appears there is a typographical or transposition error in his rebuttal testimony at page 11. The Company was ordered by the Commission in Decision No. 67744 to spend $10 million recovered in base rates and at least $6 million recovered through the DSM adjustment mechanism.

Q. Does this conclude your surrebuttal testimony?

A. Yes, it does.