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Transcript Exhibit(s)

Docket #(s): LE-00000C-94-01105

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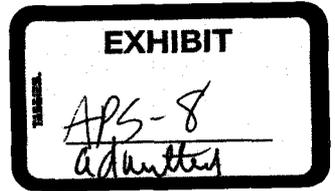
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Exhibit #: APS8, APS9, ECC1, AG1, AG2

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BEFORE THE  
ARIZONA CORPORATION COMMISSION

TESTIMONY OF JACK E. DAVIS

On Behalf of  
Arizona Public Service Company  
Docket No. U-0000-94-165

January 9, 1998

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**DIRECT TESTIMONY**

**OF**

**JACK E. DAVIS**

**(Docket No. U-0000-94-165)**

**I. INTRODUCTION**

**Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

A. My name is Jack E. Davis, and my business address is 400 North Fifth Street, Phoenix, Arizona 85004

**Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

A. I am the Executive Vice President of Commercial Operations for Arizona Public Service Company ("APS" or "Company"). My educational and professional qualifications and experience are set forth in Schedule JED-1, which is attached to my testimony.

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

A. I will address certain of the issues set forth in the Commission's Procedural Orders of December 1 and December 12, 1997. These include what I consider policy issues and what might be viewed as unique APS approaches to the stranded cost problem. Later in my testimony, I identify specific changes to the Commission's electric competition rules ("the Rules") that are consistent with my testimony and that of Dr. William H. Hieronymous, a nationally recognized expert in the area of electric industry restructuring and stranded costs.

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## II. SUMMARY

Q. **WOULD YOU SUMMARIZE THE COMPANY'S RESPONSE TO EACH OF THE ISSUES IDENTIFIED IN THE DECEMBER PROCEDURAL ORDERS?**

A. Yes. Set forth below are the issues listed in the December Procedural Orders along with a summary of the APS response as set forth in my testimony and that of Dr. Hieronymous:

Issue No. 1 - Should the Electric Competition Rules ("Rules") be modified regarding stranded costs, if so how?

Response - Yes. The definition of stranded costs should be clarified relative to nuclear fuel disposal costs, the scope of required mitigation, the inclusion of post-1996 costs, and the permissible classes of customers and services through which stranded cost recovery can be effectuated. Attached is a mark up of the Rules that will reflect these changes.

Issue No. 2 - When should "Affected Utilities" be required to make a "stranded cost" filing pursuant to A.A.C. R14-2-1607?

Response - Under the Company's proposal, no single stranded cost filing is required. It would, however, propose to submit its calculation of 1999 stranded costs no later than thirty (30) days after receiving a final order in this proceeding.

Issue No. 3 - What costs should be included as part of "stranded costs" and how should those costs be calculated?

Response - The definition of stranded costs set forth in the Rules is generally adequate. However, the treatment of nuclear fuel disposal and post-1996 costs needs clarification as noted above. Moreover, regulatory assets, although a component of stranded costs under the Rules, are treated separately pursuant to the Commission's direction in Decision No.

1 59601 and are not therefore included in the Company's calculation of stranded costs.

2 Stranded power supply costs should be calculated using the Company's variant of the "lost  
3 revenues" method.

4  
5 Issue No. 4 - Should there be a limitation on the time frame over which "stranded costs"  
6 are calculated?

7 Response -Most definitely. APS believes they should be calculated only during the period  
8 of market imbalance which it has forecasted will end by the end of 2006.

9  
10 Issue No. 5 - Should there be a limitation on the recovery time frame for "stranded costs?"

11 Response -In general, the recovery period should be as short as possible, and in APS'  
12 proposal would be the same time frame over which the costs are calculated.

13  
14 Issue No. 6 - How and who should pay for "stranded costs" and who, if anyone, should be  
15 excluded from paying for stranded costs?

16 Response -All APS customers (including partial requirements or back up customers)  
17 should pay a fair share of stranded costs. Only those who physically relocate from its  
18 service area or who completely disconnect themselves from the APS system should, as a  
19 practical matter, be exempted.

20  
21 Issue No. 7 - Should there be a true-up mechanism and, if so how would it operate?

22 Response -As a general proposition, true-up mechanisms should be kept to a minimum.  
23 Under the APS proposal, only the first year's (1999) estimates of market price would  
24 necessitate any true-up.

1        Issue No. 8 - Should there be price caps or a rate freeze imposed as part of the development  
2 of a stranded cost recovery program and if so, how should it be calculated?

3        Response -APS makes no such proposal at this time.

4  
5        Issue No. 9 - What factors should be considered for "mitigation" of stranded costs?

6        Response -The proper scope of mitigation is limited to cost reductions and generation  
7 revenue enhancements reasonably achievable during the same period of time allowed for  
8 stranded cost recovery. Moreover, the Commission must recognize past efforts by APS to  
9 reduce costs and prices as a result of the 1991, 1994 and 1996 rate agreements.

10  
11        Issue No.10- What are the FASB No. 71 implications resulting from the Company's  
12 recommended calculation and recovery of stranded cost recovery?

13        Response-None are immediately evident under the Company's proposal because APS has  
14 developed an approach to stranded cost recovery that essentially eliminates the many  
15 complex issues that could otherwise arise under other approaches.

16  
17        Issue No. 11-[What are the] assumptions made including any determination of market  
18 price?

19        Response-The Company's proposed method does not require assumptions about market  
20 price or generation costs because it would use actual data.

21  
22        **Q.        HAVE YOU PRIORITIZED THE ISSUES ADDRESSED IN YOUR TESTIMONY**  
23        **AS REQUESTED BY THE DECEMBER PROCEDURAL ORDERS?**

24        A.        Yes, at least as much as is possible. My summary below lists the issues in order of  
25 importance to the Company. To the extent the subsequent text of my testimony departs  
26

1 from that order of importance. such departure is solely for the sake of continuity and to  
2 reflect a logical grouping of related (but not necessarily equally important) issues.

3  
4 **Q. WOULD YOU SUMMARIZE YOUR CONCLUSIONS ON STRANDED COSTS?**

5 A. Yes. Stranded cost is not a single issue. but a complex and interrelated set of issues that  
6 must be resolved by the Commission prior to the initiation of retail competition in 1999.  
7 This will require evidentiary hearings subsequent to those presently scheduled but need not  
8 involve a full-blown general rate case unless the "Affected Utility" is simultaneously  
9 seeking to increase its current rates and charges. Second, both the measurement and  
10 recovery of stranded generation costs should be limited to a specified transition period  
11 ("Transition Period"). with rates for competitive generation being fully deregulated  
12 thereafter. The "lost revenues" method is the appropriate means of determining APS  
13 stranded generation costs during this Transition Period. Third, the Commission must  
14 properly limit the concept of stranded cost mitigation to reasonable cost reduction and  
15 generation revenue enhancement efforts. Fourth, the recovery of "regulatory assets" is not,  
16 at least for APS, a stranded cost issue for the simple reason that recovery of such assets has  
17 already been ordered by the Commission in Decision No. 59601. Fifth, stranded cost  
18 recovery should reflect traditional cost allocation and rate design considerations.

19  
20 **Q. PLEASE SUMMARIZE YOUR PROPOSALS TO AMEND THE COMMISSION'S  
21 CURRENT RULE ON STRANDED COSTS?**

22 A. The current mitigation provisions of the Rule are unreasonable and counterproductive and  
23 should be amended. Second, the definitions of both "stranded costs" and "system benefits"  
24 should be clarified to recognize certain nuclear fuel disposal costs as part of nuclear  
25 decommissioning costs. Third, the arbitrary "cut off" date for the incurrence of a "stranded  
26 cost" obligation should be eliminated or modified to recognize the fact that the Rules

1 themselves impose continuing service obligations on "Affected Utilities" that may  
2 legitimately involve the incurrence of "stranded costs" on an ongoing basis during the  
3 aforementioned Transition Period.  
4

### 5 III. STRANDED COST ISSUES

#### 6 Q. WHAT ARE STRANDED COSTS?

7 A. The Rules define stranded costs as:  
8

9 ...the net verifiable difference between:

- 10 a. The value of all the prudent jurisdictional assets and  
11 obligations necessary to furnish electricity ( such as  
12 generating plants, purchased power contracts,  
13 fuel contracts, and regulatory assets), acquired  
14 or entered into prior to the adoption of this  
15 Article; and
- 16 b. The market value of those assets and obligations directly  
17 attributable to the introduction of competition under this Article.

18 Assuming that the word "value" in A.A.C. R14-2-1601(8)(a) is synonymous with "cost"  
19 (as all parties to the Stranded Cost Working Group have apparently assumed), this  
20 definition is generally adequate with the following exceptions. First, it is not clear whether  
21 or not nuclear fuel disposal costs for fuel already consumed or to be consumed to serve  
22 standard offer customers would be included. As discussed later, these costs should be  
23 included in the system benefits charge. Second, costs necessarily incurred after 1996 to  
24 implement retail competition or to meet the continued service obligations under the Rules  
25 should be included as stranded costs. Finally, although the above definition would  
26 encompass "regulatory assets," APS has excluded them from its calculation of stranded  
costs.

1 Q. **WHAT WOULD BE INCLUDED IN POWER SUPPLY COSTS?**

2 A. The major elements of power supply costs would include purchase power contracts that  
3 have a minimum term of three years, fuel expense, operation and maintenance expense,  
4 taxes, depreciation, interest, administrative and general expense and equity return.

5  
6 Q. **WHY MUST THE COMMISSION RESOLVE THE STRANDED COST ISSUE NOW?**

7 A. "Affected Utilities," including APS, must have a stranded cost recovery mechanism  
8 approved and in place prior to the beginning of retail access or it will be inevitable that  
9 some customers will be able to evade their responsibility for such costs. Moreover,  
10 customers themselves should know what the stranded cost recovery mechanism will be  
11 **before** they leave their incumbent supplier rather than sometime after. Ideally, the  
12 stranded cost recovery mechanism should also be in place before new market entrants are  
13 certificated for the APS service area. This will help them better identify those customers  
14 most likely to benefit from their services.

15  
16 Q. **WILL THIS REQUIRE THE COMMISSION TO CONDUCT A FULL-BLOWN GENERAL RATE CASE FOR EACH OF THE "AFFECTED UTILITIES"?**

17 A. No. There would be no need for such extensive rate case proceedings unless an "Affected  
18 Utility" is actually seeking to increase its current rates and charges as part of the stranded  
19 cost recovery process. Indeed, the Commission's own rules on rate filings (A.A.C. R14-2-  
20 103) are limited by their own terms to rate increases. This is not to say that the  
21 Commission should not require the utility to justify its filing, but merely that such  
22 justification need not rise to the level of a general rate case proceeding.  
23

24  
25 Q. **IN ADDITION TO ESTABLISHING A STRANDED COST MECHANISM, MUST THE COMMISSION DETERMINE A TOTAL STRANDED COST AMOUNT FOR EACH "AFFECTED UTILITY?"**  
26

1 A. Not necessarily. This will depend on how the particular utility proposes to quantify and  
2 recover its stranded costs. For example, under the APS proposal outlined later in my  
3 testimony, there would be no need to estimate in advance such a total amount of stranded  
4 costs and therefor no need for APS to make an omnibus stranded cost "filing" as  
5 contemplated under the Rules. Rather, the Company would submit a series of annual  
6 filings to reflect the level of stranded cost recovery sought for the succeeding year. APS  
7 would anticipate making the first of these filings (for 1999) no later than thirty (30) days of  
8 the entry of a final order in this proceeding.

9  
10 **Q. HOW WOULD APS PROPOSE TO MEASURE ITS STRANDED COSTS?**

11 A. In general, the Company supports the lost revenues method (i.e., the difference between  
12 expected revenues under cost-of-service regulation and revenues under market-based  
13 pricing), but with several important limitations on the use of that method.

14  
15 **Q. WHAT ARE THE LIMITATIONS TO WHICH YOU JUST REFERRED?**

16 A. First of all, utilities should only be compensated for stranded costs during a defined period  
17 during which they are transitioning to fully competitive and unregulated generation  
18 pricing. This so called "Transition Period" should equal that period of time in which the  
19 power supply market is out of equilibrium, i.e., when market price is depressed below long  
20 term marginal generation cost. Once that period is over, supply resources should be  
21 permitted to succeed or fail based on their own economics without receiving either  
22 customer support or providing customer subsidies.

23  
24 Second, the APS method avoids the inevitable debate over long term projections of market  
25 prices, power supply costs, and sales (and then discounting them into current dollar  
26 amounts) that are often associated with the lost revenues method.

1 Q. **WHEN WOULD THIS TRANSITION PERIOD END?**

2 A. As is discussed later, the Company believes that the regional imbalance will be rectified by  
3 2007, and thus the Transition Period would extend only through 2006.

4  
5 Q. **WHAT WOULD BE THE ACTUAL MECHANICS OF THE APS PROPOSAL?**

6 A. Stranded costs would be measured annually during the Transition Period by comparing the  
7 Company's actual power supply costs and actual market prices for the preceding year.  
8 Because the first year (1999) would necessarily have to rely on estimates of market price,  
9 there could be a one-time true up after that first year. I have provided a chart explaining  
10 the four (4) steps to our proposal as Schedule JED-2.

11  
12 Q. **HOW WOULD ACTUAL MARKET PRICES BE DETERMINED FOR A PARTICULAR YEAR?**

13 A. Arizona could take advantage of the California Power Exchange (PX), or a similar market  
14 price indicator, to determine actual market prices in Arizona. This may be accomplished  
15 by taking the hourly PX prices and adjusting them for the administrative charges to support  
16 the PX and the transmission charges and line losses to the Palo Verde substation. This will  
17 result in an actual market price for power delivered in Arizona. The hourly market price  
18 would then be matched to APS power supply to determine stranded investment. Again, a  
19 more detailed explanation is set forth in Schedule JED-2.

20  
21 Q. **IS THIS THE SAME METHOD OF MEASURING STRANDED COST AS PROPOSED IN THE COMMISSION'S STRANDED COST WORKING GROUP REPORT?**

22 A. Absolutely not. The working group report would stretch the measurement period out some  
23 twenty (20) or thirty (30) years and the recovery period to at least ten (10). It would use  
24 long range estimates of both generation costs and market prices, which would then be  
25  
26

1 reduced to a single present value amount, and which would thereafter require frequent  
2 true up proceedings.

3

4 **Q. WHY IS LIMITING THE STRANDED COST MEASUREMENT PERIOD**  
5 **IMPORTANT?**

6

7 A. In addition to those practical advantages discussed later in my testimony, our goal ought to  
8 be to transition generation prices to a fully competitive market as quickly as possible rather  
9 than essentially continue with traditional cost of service regulation of the present stock of  
10 generating assets for decades into the future.

11

12 Limiting stranded cost measurement and recovery to a relatively brief Transition Period  
13 also matches the solution with the problem. *The largest cause of stranded cost is the*  
14 *current market imbalance caused by the relative oversupply in the Western Systems*  
15 *Coordinating Council ("WSCC") of both capacity and energy. It is ironic to note that the*  
16 *existence of these same low operating cost "excess" generating units also served as the*  
17 *economic justification for the very interconnected regional transmission system that allows*  
18 *for a competitive generation market. These factors will keep market price below the*  
19 *industry's long run marginal cost of generation for at least the next seven (7) years.*  
20 *Schedule JED-3, which is attached to my testimony, shows that regional reserve margins*  
21 *exceed 12% (the level needed for reliable system operations) until that time. This*  
22 *oversupply of generation and the concomitant existence of a regional transmission grid*  
23 *were the direct results of traditional regulation's focus on reducing long run revenue*  
24 *requirements and maintaining extraordinarily high levels of reliability. These impact the*  
25 *entire region irrespective of any single utility's resource decisions. For example, APS is*  
26 *itself already purchasing capacity from others to reach even this 12% reserve margin.*

1           However, once the market imbalance has been rectified over time, and market prices  
2           approximate long run marginal cost, there is no need to continue stranded cost recovery.

3  
4   **Q.   WHAT ARE THE OTHER ADVANTAGES OF THE COMPANY'S PROPOSAL?**

5   A.   Although widely used or being considered as a measure of stranded costs in other  
6       jurisdictions, the "lost revenues" approach to stranded cost measurement has been  
7       criticized for its reliance on long range market price estimates, present value discount rates,  
8       etc. By merely reducing the period being examined for stranded costs, these problems can  
9       be greatly lessened. Under APS' proposal, they are eliminated entirely. The use of actual  
10      costs and market prices obviates the need for long range estimates. The calculation of  
11      these on an annual basis means no need for repeated true up proceedings and no arguments  
12      over what discount rate is to be applied to future estimated revenue and cost figures.  
13      Additionally, the calculation of APS generating costs during the Transition Period will  
14      automatically reflect any new generating costs incurred post-1996 to meet the Company's  
15      "standard offer" obligations.

16  
17   **Q.   FROM WHOM WOULD THE COMPANY'S STRANDED COSTS BE  
18       RECOVERED?**

19   A.   All APS customers (including partial requirements and standby or back up service  
20       customers) should bear a fair proportion of the Company's stranded costs during the  
21       designated Transition Period. For "Standard Offer" customers, the recovery would be  
22       implicit in the traditional rate setting process. For those customers taking advantage of  
23       direct access to acquire competitive generation services, there would have to be an explicit  
24       transition charge.

1 Q. **WHAT ABOUT THOSE CUSTOMERS THAT LEAVE THE APS SERVICE AREA**  
2 **OR WHO COMPLETELY DISCONNECT THEMSELVES FROM THE APS**  
3 **SYSTEM?**

4 A. Although an equitable argument can be made that these customers should also be assessed  
5 their share of stranded costs, as a practical matter, there is little way to collect such costs  
6 once the departing customer in question no longer receives any regulated services from the  
7 Company.

8 Q. **HOW WOULD THE ANNUAL LEVEL OF STRANDED COSTS BE ALLOCATED**  
9 **TO SPECIFIC CUSTOMER CLASSES AND RATE SCHEDULES?**

10 A. First of all, I make no claim of being a cost of service or rate design expert. However, it  
11 has long been APS' position that stranded costs should be allocated along traditional cost  
12 of service criteria and collected through a combination of kWh and kW distribution  
13 charges.

14 Q. **WHY ARE REGULATORY ASSETS NOT INCLUDED IN THE COMPANY'S**  
15 **MEASUREMENT OF STRANDED COSTS?**

16 A. In the Company's 1996 Rate Settlement (Decision No. 59601), the Commission ordered  
17 that all regulatory assets be amortized and collected in rates by 2004. Because these assets  
18 were both identified and their recovery assured in that proceeding, there is no need to  
19 separately address them now.

20  
21 Q. **DOES THE COMPANY'S PROPOSAL FOR THE MEASUREMENT AND**  
22 **RECOVERY OF STRANDED COSTS RAISE ANY UNIQUE ACCOUNTING**  
23 **ISSUES UNDER FASB NO. 71?**

24 A. No. We have developed an approach that essentially eliminates the many complex  
25 accounting issues that could otherwise arise under other approaches to stranded cost  
26 recovery.

1 **Q. HOW WOULD APS PROPOSE THAT MITIGATION BE HANDLED?**

2 A. The Commission should first understand the proper scope of what can reasonably be  
3 characterized as "mitigation." This includes expanded sales of competitive generation both  
4 within and without the Company's traditional service area and cost reductions reasonably  
5 achievable during the Transition Period. "Mitigation" does not entail any responsibility to  
6 engage in new and unrelated enterprises. "Mitigation" does not mean taking profits earned  
7 by either the utility or its affiliates in unrelated enterprises and using them to subsidize  
8 stranded cost recovery.

9  
10 With that understanding, I would initially point to past mitigation efforts. APS has been  
11 steadily reducing its costs since 1990, has reduced prices three (3) times, and will request  
12 an additional price reduction later this year. In determining the appropriateness of any  
13 future mitigation for 1999 and beyond, the Commission should not penalize the Company  
14 for its mitigation efforts prior to 1999.

15  
16 **IV. AMENDMENTS TO RULES**

17 **Q. IS APS PROPOSING ANY SPECIFIC CHANGES TO THE COMMISSION'S**  
18 **RETAIL ELECTRIC COMPETITION RULES?**

19 A. There are many changes necessary in the Rules but not necessarily to the Commission's  
20 Rule on Stranded Cost, A.A.C. R14-2-1607 ("Electric Competition Rule 1607"). The  
21 number of changes found appropriate by the Commission will in part depend upon the  
22 degree of uniformity regarding stranded cost measurement and recovery imposed by the  
23 Commission in this proceeding.

1 Q. ARE SOME GENERIC CHANGES IN THE RULES APPROPRIATE?

2 A. Yes. These include: (1) changing the definition of "stranded costs" to actually use the  
3 word "cost" and to allow inclusion of post-1996 costs; (2) deleting the first sentence from  
4 Electric Competition Rule 1607(J); and (3) amending Electric Competition Rule 1607(A)  
5 by substituting the word "reasonable" for the term "every feasible", adding the words  
6 "directly related to regulated utility services" after the word "measure" and, lastly, by  
7 striking the words "or offering a wider scope of services for profit, among others" and  
8 substituting therefor the words "or reducing generation/purchased power costs."

9  
10 The first sentence of subsection J is inconsistent with the definition of stranded costs used  
11 in the Electric Competition Rules. It is also inconsistent with subsection H of the very  
12 same Electric Competition Rule. Both the Legal Issues Working Group and the Stranded  
13 Costs Working Group have favored amending this provision. Finally, Electric  
14 Competition Rule 1608 should be amended to specifically include nuclear fuel disposal as  
15 part of the nuclear decommissioning costs already expressly covered by the proposed  
16 "System Benefits Charge" ("SBC").

17  
18 The Company's third proposed amendment eliminates the impossible and never ending  
19 task of attempting to examine **every** conceivable business venture that might turn a profit  
20 and then determine whether or not the utility should have engaged in this or that venture.  
21 It avoids the troublesome cross-subsidy issue that has so vexed potential competitors of  
22 non-utility services. Lastly, it also eliminates the likelihood that the Commission will push  
23 "Affected Utilities" into foolish business ventures in an effort to meet an impossibly high  
24 standard of mitigation, thus creating the possibility of yet additional stranded costs.

25  
26

1 In Electric Competition Rule 1608, the Commission has already recognized the need to  
2 recover nuclear decommissioning costs as part of the SBC. Nuclear fuel disposal is an  
3 inherent part of total nuclear plant decommissioning, and it is just as vital that there be an  
4 assured source of funds in the future to pay for that fuel disposal. Although at the present  
5 time, the amount assessed by the Department of Energy is only 1 mill per kWh, actual  
6 costs for this service in the future are necessarily uncertain. APS' proposal to limit the  
7 period for which stranded costs would be measured and recovered was premised on the  
8 belief that nuclear fuel disposal would be handled outside the stranded cost process.  
9

10 **Q. HAVE YOU PROVIDED A SPECIFIC MARK-UP OF THE RULES AS**  
11 **REQUESTED IN THE DECEMBER PROCEDURAL ORDERS?**

12 A. Yes. It is attached as Schedule JED-4.

#### 13 **V. CONCLUSION**

14  
15 **Q. IN CONCLUSION, WOULD YOU CARE TO AGAIN SUMMARIZE YOUR**  
16 **MAJOR POINTS?**

17 A. Yes. The Commission must address the stranded cost "issue" prior to the advent of retail  
18 competition in 1999. This will necessitate a filing by each "Affected Utility" although  
19 such filing would, in the case of APS, not seek a specific "total" stranded cost amount.  
20 Moreover, the filing need not involve a full-blown general rate proceeding. For its part, the  
21 Company would propose to make its first annual filing within thirty (30) days of the final  
22 order in this proceeding.

23  
24 The measurement and recovery of stranded costs (excluding regulatory assets) should be  
25 limited to the period of generation market imbalance or roughly the period through 2006.  
26 This not only avoids extended and speculative arguments over events far into the future

1 and whose present value is even less significant, but provides for an orderly transition to  
2 fully market-based and deregulated competitive generation prices and provides some  
3 certainty to APS customers as to the duration of their stranded cost responsibility. The  
4 "lost revenues" method is a reasonable calculation of stranded costs during the  
5 aforementioned Transition Period.

6  
7 APS already has regulatory approval for the amortization and collection of regulatory  
8 assets, and thus has excluded regulatory assets from its calculation and recovery of  
9 stranded costs. Similarly, the costs associated with disposal of nuclear fuel burned prior to  
10 1997 or during the Transition Period to serve "Standard Offer" customers is best treated as  
11 a component of nuclear plant decommissioning under the SBC. Finally, stranded costs  
12 should include costs necessarily incurred after 1996 to meet the Company's continuing  
13 service obligations under the Rules.

14  
15 All APS customers should pay their fair share of stranded costs. Such costs should be  
16 allocated to specific customer classes and rate elements using traditional cost of service  
17 and rate design criteria.

18  
19 The Commission's rule on stranded cost should be amended consistent with my comments  
20 herein. A detailed legislative style mark up of the rules is attached to my testimony as  
21 Schedule JED-4.

22  
23 **Q. DOES THIS CONCLUDE YOUR DIRECT WRITTEN TESTIMONY?**

24 **A. Yes.**

SCHEDULE JED-1

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Jack E. Davis is Executive Vice President of Commercial Operations for Arizona Public Service Company. As Executive Vice President of Commercial Operation, Mr. Davis has responsibility for Bulk Power Trading, Transmission Planning and Operations, Customer Service, Marketing and Economic Development, and Pricing, Regulation and Planning.

Mr. Davis graduated from New Mexico State University in 1969 with a Bachelor of Science Degree in Medical Technology and in 1973 with a Bachelor of Science in Electrical Engineering. He joined Arizona Public Service Company that same year and has held various supervisory and managerial positions in both the System Planning and Power Contracts and Systems Operations Departments. In 1990, Mr. Davis was named Director of System Development and Power Operation and thereafter promoted to Vice-President of Generation and Transmission in 1993. In October 1996, he was named Executive Vice President of Commercial Operations.

Mr. Davis is the President of the Western Energy Supply and Transmission, Vice Chairman of the Western Systems Coordinating Council (WSCC), a member of the WSCC Board of Trustees, and (past chairman of the WSCC Regional Planning Policy Committee), a member of the National Electric Reliability Council Board of Trustees, President of the Western Systems Power Pool and a member of the Southwest Regional Transmission Association Board of Trustees. Additionally, he is a registered professional electrical engineer in the State of Arizona.

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## SCHEDULE JED-2

### APS STRANDED COST METHODOLOGY

#### Four Step Approach to Calculate Stranded Cost Recovery Charge ("SCRC") for APS

● **STEP 1 Determination of Hourly Market Prices.**

Market prices will be determined by reference to the California PX market in dollars per MWH for the Southern California Hub as adjusted for:

1. Transmission wheeling (if any)
2. Administrative charges by the ISO/PX.
3. Transmission losses

This hourly price is the Market Price at Palo Verde.

● **STEP 2 Determination of APS Retail Market Revenues.**

Actual hourly loads are multiplied by hourly market price from Step 1 to determine hourly revenues which could have been produced if APS were to sell its power supply in the competitive market. Summation of this hourly dollar value across daily / monthly / annual hours produces annual revenues.

● **STEP 3 Determination of the Actual Power Supply Costs.**

The actual costs will be obtained from relevant financial and accounting data. Examples of the costs include:

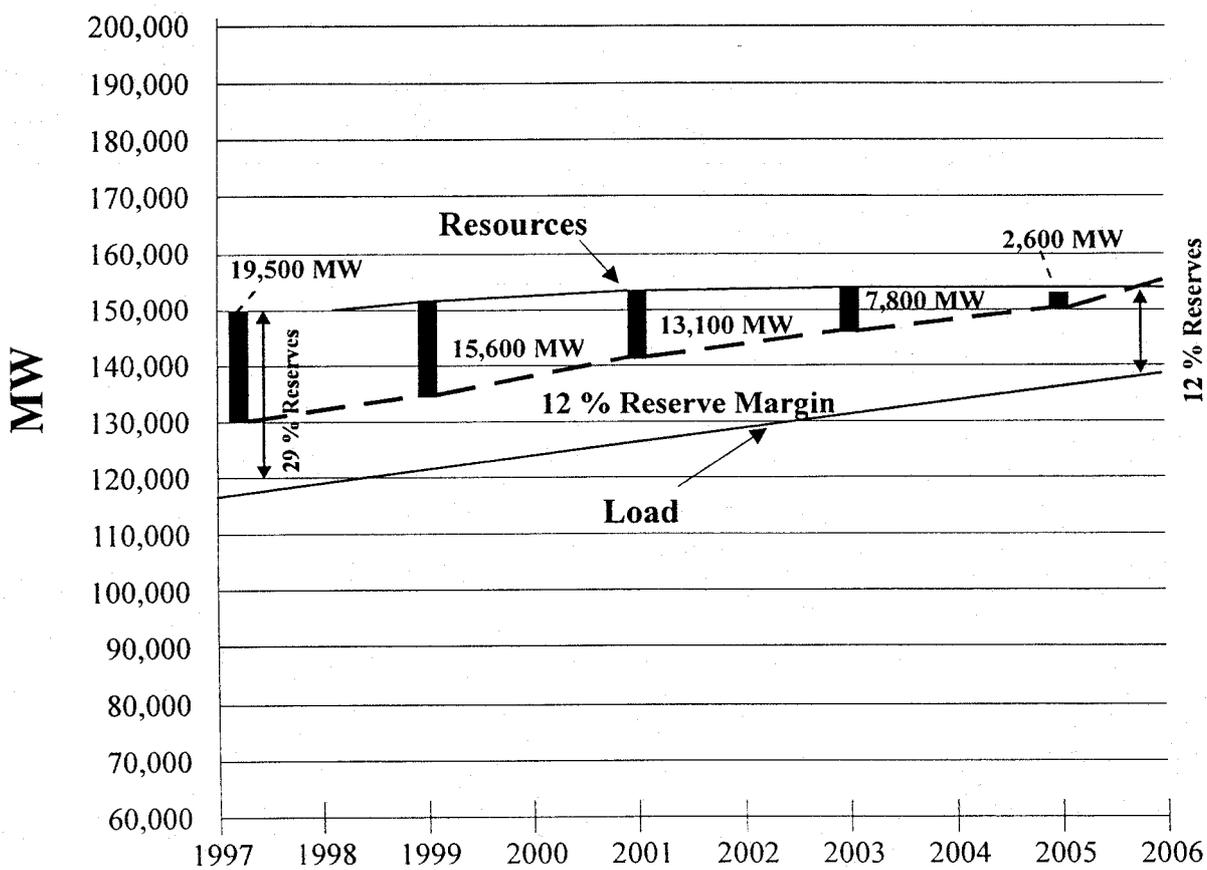
1. Fuel costs
2. Purchased power costs
3. O&M Costs including A&G allocation
4. Depreciation expenses
5. Interest expenses
6. Taxes (other than income)
7. Common and preferred shareholder equity expenses and
8. State and Federal Income taxes

● **STEP 4 Calculation of the SCRC.**

If the amount of APS costs (Step 3) is greater than APS Retail Market Revenues (Step 2), the difference will then be allocated among APS rate classes under traditional cost allocation and rate design principles and will be charged to customers taking competitive generation service on a demand and/or energy basis, depending on the customer's class.

SCHEDULE JED-3

WSCC Loads & Resources  
(Summer)



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**SCHEDULE JED-4**  
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**R14-2-1601. Definitions**

8. "Stranded Cost" means the verifiable net difference between:
- a. The ~~value~~ COST of all the prudent jurisdictional assets and obligations necessary to furnish electricity (such as generating plants, purchased power contracts, fuel contracts, and regulatory assets) ~~acquired or entered into prior to the adoption of this Article.~~ under traditional regulation of Affected Utilities; and
  - b. The market value of those assets and obligations directly attributable to the introduction of competition under this Article.

**R14-2-1607. Recovery of Stranded Cost of Affected Utilities**

- A. The Affected Utilities shall take ~~every feasible~~ REASONABLE, cost-effective measures DIRECTLY RELATED TO REGULATED UTILITY SERVICES to mitigate or offset Stranded Cost by means such as expanding wholesale or retail markets, ~~or offering a wider scope of services for profit, among others~~ OR REDUCING GENERATION/PURCHASED POWER COSTS.
- B. The Commission shall allow recovery of unmitigated Stranded Cost by Affected Utilities.
- C. A working group to develop recommendations for the analysis and recovery of Stranded cost shall be established.
  - 1. The working group shall commence activities within 15 days of the date of adoption of this Article.
  - 2. Members of the working group shall include representatives of staff, the Residential Utility Consumer Office, consumers, utilities, and other Electric Service Providers. In addition, the Executive and Legislative Branches shall be invited to send representatives to be members of the working group.
  - 3. The working group shall be coordinated by the Director of the Utilities Division of the Commission or by his or her designee.
- D. In developing its recommendations, the working group shall consider at least the following factors:
  - 1. The impact of Stranded Cost recovery on the effectiveness of competition;
  - 2. The impact of Stranded Cost recovery on customers of the Affected Utility who do not participate in the competitive market;
  - 3. The impact, if any, on the Affected Utility's ability to meet debt obligations;

**SCHEDULE JED-4**

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4. The impact of Stranded Cost recovery on prices paid by consumers who participate in the competitive market:
5. The degree to which the Affected Utility has mitigated or offset Stranded Cost:
6. The degree to which some assets have values in excess of their book values:
7. Appropriate treatment of negative Stranded Cost:
8. The time period over which such Stranded Cost charges may be recovered. The Commission shall limit the application of such charges to a specified time period:
9. The ease of determining the amount of Stranded Cost:
10. The applicability of Stranded Cost to interruptible customers:
11. The amount of electricity generated by renewable generating resources owned by the Affected Utility.

E. The working group shall submit to the Commission a report on the activities and recommendations of the working group no later than 90 days prior to the date indicated in R14-2-1602.

F. The Commission shall consider the recommendations and decide what actions, if any, to take based on the recommendations.

G. The Affected Utilities shall file estimates of unmitigated Stranded Cost. Such estimates shall be fully supported by analyses and by records of market transactions undertaken by willing buyers and willing sellers.

H. An Affected Utility shall request Commission approval of distribution charges or other means of recovering unmitigated Stranded Cost from customers who reduce or terminate service from the Affected Utility as a direct result of competition governed by this Article, or who obtain lower rates from the Affected Utility as a direct result of the competition governed by this Article.

I. The Commission shall, after hearing and consideration of analyses and recommendations presented by the Affected Utilities, staff, and intervenors, determine for each Affected Utility the magnitude of Stranded Cost, and appropriate Stranded Cost recovery mechanisms and charges. In making its determination of mechanisms and charges, the Commission shall consider at least the following factors:

1. The impact of Stranded Cost recovery on the effectiveness of competition:
2. The impact of Stranded Cost recovery on customers of the Affected Utility who do not participate in the competitive market:

**SCHEDULE JED-4**  
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- 3. The impact, if any, on the Affected Utility's ability to meet debt obligations:
- 4. The impact of Stranded Cost recovery on prices paid by consumers who participate in the competitive market:
- 5. The degree to which the Affected Utility has mitigated or offset Stranded Cost:
- 6. The degree to which some assets have values in excess of their book values:
- 7. Appropriate treatment of negative Stranded Cost:
- 8. The time period over which such Stranded Cost charges may be recovered. The Commission shall limit the application of such charges to a specified time period:
- 9. The ease of determining the amount of Stranded Cost:
- 10. The applicability of Stranded Cost to interruptible customers:
- 11. The amount of electricity generated by renewable generating resources owned by the Affected Utility.

J. ~~Stranded Cost may only be recovered from customer purchases made in the competitive market using the provisions of this Article.~~ Any reduction in electricity purchases from an Affected Utility resulting from self-generation, demand side management, or other demand reduction attributable to any cause other than the retail access provisions of this Article shall not be used to calculate or recover any Stranded Cost from a consumer.

K. The Commission may order an Affected Utility to file estimates of Stranded Cost and mechanisms to recover or, if negative, to refund Stranded Cost.

L. The commission may order regular revisions to estimates of the magnitude of Stranded Cost.

**R14-2-1608. System Benefits Charges**

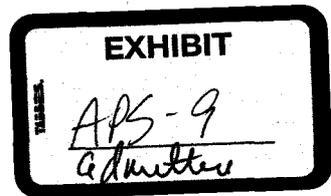
A. By the date indicated in R14-2-1602, each Affected Utility shall file for Commission review non-bypassable rates or related mechanisms to recover the applicable pro-rata costs of System Benefits from all consumers located in the Affected Utility's service area who participate in the competitive market. In addition, the Affected Utility may file for a change in the System Benefits charge at any time. The amount collected annually through the System Benefits charge shall be sufficient to fund the Affected Utilities' present Commission-approved low income, demand side management, environmental, renewables, and nuclear power plant decommissioning AND NUCLEAR FUEL DISPOSAL programs.

B. Each Affected Utility shall provide adequate supporting documentation for its proposed rates for System Benefits.

**SCHEDULE JED-4**  
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- C. An Affected Utility shall recover the costs of System Benefits only upon hearing and approval by the Commission of the recovery charge and mechanism. The Commission may combine its review of System Benefits charges with its review of filings pursuant to R14-2-1606.
- D. Methods of calculating System Benefits charges shall be included in the workshops described in R14-2-1606(I).



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**BEFORE THE ARIZONA CORPORATION COMMISSION**

**REBUTTAL TESTIMONY**  
**OF**  
**JACK E. DAVIS**

**On Behalf of**  
**Arizona Public Service Company**  
**Docket No. RE-00000C-94-0165**

**February 4, 1998**

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1 I. INTRODUCTION  
2

3 Q. WOULD YOU PLEASE STATE YOUR NAME AND BUSINESS ADDRESS?

4 A. My name is Jack E. Davis, and my business address is 400 North Fifth Street, Phoenix,  
5 Arizona 85004.

6 Q. ARE YOU THE SAME JACK E. DAVIS WHO FILED DIRECT TESTIMONY IN  
7 THIS PROCEEDING ON JANUARY 9, 1998?

8 A. Yes.

9 Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY IN THIS  
10 PROCEEDING?

11 A. I will briefly respond to comments made by witnesses Rosenberg, Rose, Rosen, Cooper  
12 and the Goldwater Institute to the effect that the regulatory compact, under which public  
13 service corporations have operated since the beginning of regulation in this State, is  
14 somehow a fiction created by the utilities, and that in the interest of these witnesses'  
15 vision of a competitive electric market, is a concept that should be ignored in this  
16 proceeding.

17  
18 II. SUMMARY

19  
20 Q. WOULD YOU PLEASE SUMMARIZE YOUR TESTIMONY?

21 A. A fair review of the Commission's involvement in Palo Verde shows that the agency (1)  
22 certificated the plant before it was constructed, (2) continually and contemporaneously  
23 reviewed the Company's resource planning process during its construction both internally  
24 and through nationally recognized outside consultants, (3) granted rate increases and  
25 financing approvals necessary to fund construction, (4) adopted an incentive program to  
26 encourage the Company to complete the plant as soon as possible, (5) conducted a multi-  
27 million dollar retrospective "prudence" audit of construction costs and planning decisions  
28 that found APS acted reasonably in virtually all respects, and (6) adopted final

1 ratemaking treatment for the facility. Given this "step-by-step" partnership, I do not see  
2 how any witness can reasonably claim that the Commission has no obligation to the  
3 Company to provide for recovery of prudently incurred Palo Verde costs during the  
4 transition to a fully competitive retail generation market.

5  
6 **III. REGULATORY COMPACT**

7  
8 **Q. WITNESSES ROSENBERG AND ROSE CHALLENGE THE RECOVERY OF**  
9 **ANY STRANDED COSTS BASED ON THEIR PERCEPTION AND**  
10 **APPLICATION OF ECONOMIC PRINCIPLES. OTHER WITNESSES**  
11 **PROPOSE THAT UTILITIES BE PERMITTED TO RECOVER**  
12 **SIGNIFICANTLY LESS THAN THE FULL AMOUNT OF NARROWLY**  
13 **DEFINED "STRANDED COSTS." HAVE ANY OF THESE WITNESSES**  
14 **MEANINGFULLY ADDRESSED THE PRACTICAL CONSEQUENCES OF**  
15 **THEIR POSITIONS?**

16 **A.** Not in my opinion. Their recommendations, if adopted by the Commission, would give  
17 new meaning to the characterization of economics as the "dismal science." Aside from  
18 the question of basic fairness and equity, the financial consequences of such an approach  
19 would indeed be dismal for the State of Arizona, its electric utilities, and utility financial  
20 markets.

21 **Q. THE GOLDWATER INSTITUTE SUMMARIZES THE REASONS WHY**  
22 **UTILITIES SHOULD BE PERMITTED TO RECOVER THEIR STRANDED**  
23 **COSTS, BUT SUGGESTS THAT THESE REASONS MAY BE BASED ON "THE**  
24 **NAÏVE ASSUMPTION THAT NONE OF THE PARTIES INVOLVED BEHAVE**  
25 **STRATEGICALLY (A EUPHEMISM THAT ROUGHLY MEANS 'TAKING**  
26 **ADVANTAGE OF THE SYSTEM')...," AND THEREFORE PROFITED**  
27 **BEYOND OTHERWISE REASONABLE RATES OF RETURN. IN YOUR**  
28 **EXPERIENCE, HAVE APS AND OTHER PUBLIC SERVICE CORPORATIONS**  
29 **IN ARIZONA BEEN ABLE TO "TAKE ADVANTAGE OF THE SYSTEM?"**

1 A. I can't speak specifically for other public service corporations, but during the 25 years  
2 I've been with APS, I've seen no evidence that APS has been able to "game" the system  
3 to earn unreasonable profits. In fact, excluding Allowances for Funds Used During  
4 Construction ("AFUDC"), much of which would be disallowed under these witnesses  
5 proposals, APS has earned less than its allowed rate of return on a cash basis in 15 of the  
6 last 18 years.

7 I don't know what time period was addressed or what regions of the country were  
8 included in the *Business Strategy Review* study the Institute describes, but I strongly  
9 suspect the data is based on electric utility earnings in regions where there was little or no  
10 growth, which certainly has not been the case in Arizona. In addition, I seriously doubt  
11 that the study corrected any utility profits above the allowed rates of return to remove the  
12 effects of AFUDC, an accounting anomaly unique to regulated public utilities. These  
13 allowances are known within the industry and in financial circles as "funny money,"  
14 because no cash is actually received by the utility, yet the allowance is reflected in its  
15 income statement. This concept was designed by regulatory bodies to amortize a return to  
16 the utility for funds advanced for the construction of new facilities over the life of the  
17 asset, rather than permit the utilities to include construction work in progress ("CWIP")  
18 in rate base. Depending on the amount of these allowances, they can result in a significant  
19 overstatement of returns both in years when such returns were less than the rate allowed  
20 by the regulatory agencies and when they exceed the allowed rate, thereby understating  
21 actual under-recoveries and inflating years of over-recoveries.

22 **Q. WITNESS ROSENBERG AND ROSE DENY THE EXISTENCE OF A**  
23 **REGULATORY COMPACT THAT JUSTIFIES THE RECOVERY OF**  
24 **STRANDED COSTS BY ARIZONA PUBLIC SERVICE CORPORATIONS. DO**  
25 **YOU AGREE WITH THEIR POSITION?**

26 A. Not at all. Their position conflicts with everything I have observed in Arizona for the last  
27 25 years. Throughout its existence, APS has recognized and honored its duty to serve all  
28 of its customers, profitable or otherwise.

1 In return for performing this duty, APS has been allowed an *opportunity* to earn a  
2 reasonable rate of return for its shareholders, subject to continuing Commission  
3 oversight. This is the so-called "regulatory compact" or "regulatory bargain" to which the  
4 utilities continually allude (and witnesses Rosenberg, Rose, and Cooper continually  
5 choose to disparage), for it represents the very essence of the utilities' reason for  
6 existence since regulated electric service began in Arizona early this century.

7 **Q. HAS THE COMMISSION SHARED APS' VISION OF ITS REGULATORY**  
8 **OBLIGATION TO SERVE?**

9 A. Yes. Throughout my years with APS, the Commission has continually expressed a strong  
10 interest in our load and resource projections and the basis and methods used to calculate  
11 those projections. This interest could not have arisen solely from the Commission's  
12 concerns regarding APS' need for future rate increases, since it always has had the power  
13 to exclude from rates those facilities that were imprudently constructed. Its interest was  
14 presumably based on its concern that the Company's generation and other supply plans  
15 might be insufficient to provide its customers with a reliable source of power at  
16 reasonable cost – an interest that would be totally immaterial in absence of the regulatory  
17 compact and APS' duty to serve. For example, in its Decision No. 48139 (August 1,  
18 1977), the Commission stated:

19 One of the areas of great concern to this Commission has been the load  
20 forecasting methodology of APS. The Company, as mentioned above, proposes to  
21 quadruple in size within the next ten years. This is the result of their load  
22 projections forecasting a tremendous growth in power usage within the  
23 certificated area. We have reviewed and will continue to review the load  
24 forecasting methodology of the Company. After reviewing the same we conclude  
25 that historically it has been quite sophisticated and accurate.

26 **Q. WHAT IS THE SOURCE OF APS STRANDED COSTS?**

27 A. Leaving aside APS' regulatory assets, which have already been addressed by the  
28 Commission, APS' stranded costs result almost exclusively from its interest in the Palo  
29 Verde Nuclear Generating Station ("Palo Verde".) If ever there was a plant that was  
30 planned, constructed, and operated under the Commission's regulatory microscope, this is  
31 it. Starting even before the Commission's decision to grant the Company a certificate of

1 environmental compatability to build the facility, the Commission's participation in  
2 decisions that affected the ultimate costs of Palo Verde, including its stranded costs, was  
3 deep and far-reaching.

4 **Q. WILL YOU PLEASE GIVE US A BRIEF DISCRPTION OF THAT**  
5 **PARTICIPATION?**

6 A. Certainly. On May 5, 1972, APS and Salt River Project entered into a Memorandum of  
7 Understanding that initiated the Palo Verde project (then known as the Arizona Nuclear  
8 Power Project or "ANPP"). In that same year, a nuclear resource appeared in our planned  
9 loads and resources reports that we are required to file annually with the Commission. It  
10 is my understanding that these reports were first required by the Commission in order to  
11 assure that the generation planning of public service corporations was sufficient to fulfill  
12 their legal obligation to serve their projected loads over a specified span of years.

13 Let me paint a brief picture of the prevalent atmosphere in the early seventies. During that  
14 period, when APS was facing double-digit demand growth, Company planners were  
15 working in a stable regulatory environment in which commitments to large, base-load  
16 power stations were welcomed. Customers, regulators, and Company officials were  
17 accustomed to investments in new technology bringing lower costs. Regulators generally  
18 focused on determining the size of rate decreases.

19 While it was not generally recognized at the time, economies of scale in generation  
20 actually began to level off about 1970. During the seventies, a period of high inflation  
21 and stagnant economic growth, electric utilities were shaken by a succession of events --  
22 the oil crises of 1973 and 1979, and stringent environmental regulations on coal burning,  
23 among others. Fuel prices rose rapidly. Coal prices nearly doubled from 1968 to 1975,  
24 and that fuel was under increasing scrutiny from environmentalists. Plans for new hydro  
25 projects, such as the Bridge Canyon Dam, also faced tremendous environmental  
26 opposition. In Arizona, natural gas shortages resulted in a 1974 gas moratorium.  
27 Subsequently, wellhead prices increased by nearly a factor of ten. Oil prices tripled twice  
28 during the decade.

1 Accordingly, it is not surprising that nuclear generation was all the rage during the early  
2 seventies. Meetings were held throughout the Southwest to give utilities an opportunity  
3 to participate in ANPP in order to avoid future charges of a conspiracy to monopolize the  
4 Southwest's electric market through the use of this cheap electric power resource with  
5 which it was feared no outsider could complete. Even the Sierra Club did not oppose Palo  
6 Verde.

7 Subsequently, however, as the construction costs of Palo Verde rose and schedules  
8 slipped with each new licensing requirement of the Nuclear Regulatory Commission, the  
9 plant came under ever-increasing scrutiny by this Commission.

10 **Q. PLEASE PROVIDE A DISCRPTION OF SOME OF THE PROCEEDINGS**  
11 **BEFORE THIS COMMISSION RELATED TO PALO VERDE AND THE**  
12 **CONCLUSIONS THAT WERE REACHED.**

13 A. Although the Commission and its independent consultants (Ebasco, Peat Marwick,  
14 Decision Focus) had previously reviewed and approved Palo Verde on at least three prior  
15 occasions, and had approved numerous financings and at least one interim rate increase to  
16 allow Palo Verde construction to continue, perhaps the most significant of the  
17 proceedings was the audit of Palo Verde initiated by the Commission on January 30,  
18 1984, in Decision No. 53909. In addition to authorizing an interim rate increase to allow  
19 the continuance of Palo Verde construction, the Commission ordered Staff to obtain  
20 assistance in drafting a RFP to hire independent experts to investigate APS' management  
21 of the Palo Verde project, as well as the past, present, and future economic vitality of the  
22 project. A Four-State Monitoring Committee was created to represent the regulatory  
23 bodies of the home states of the participating utilities, and Ernst & Whinney was hired as  
24 the Project Manager.

25 The audit was conducted in three phases beginning in December 1984, with Phase I being  
26 an overview study and a preparation for a diagnostic report of areas requiring further  
27 detailed analysis. Phase II involved hiring of additional consultants to perform detailed  
28 studies. Phase III prepared and compiled the results of the studies into a final report.

1 Phase I was completed in November 1985, and APS produced 947,286 pages of  
2 documents for review. Both the ACC Utilities and Legal Divisions participated in the  
3 selection of Ernst & Whinney and the review of documentation. Phase II ended in  
4 February 1986 with the hiring of additional consultants.

5 The Commission was independently involved and met with Ernst & Whinney in March  
6 1986 to finalize details for Phase III. At that time it became an Arizona-only audit,  
7 beginning in October 1986, and ended with a final report on March 24, 1989, over five  
8 years after the RFP was issued. This audit required APS to provide about 4 million pages  
9 of documents, and respond to 606 sets of data requests and over 260 direct interviews.

10 The Commission's auditor found that APS reasonably decided to build and to continue  
11 building Palo Verde. The audit found net cost savings. While the auditor quantified  
12 unreasonable project costs at \$60 million, about 1% of total project costs, it also  
13 quantified over \$5.8 billion in reasonable costs. Additionally, the auditor quantified costs  
14 saved (above reasonable) totaling between \$278.6 to \$306.9 million due to the project's  
15 exceptional management. The final report also confirmed that Palo Verde was well  
16 conceived and well constructed.

17 Finally, on January 11, 1990, APS filed an application for a permanent increase in  
18 electric rates related to placing Palo Verde Unit 3 in service. This resulted in Decision  
19 No. 57649, dated December 6, 1991, wherein the Commission concluded the prudence  
20 audit and approved a settlement between Staff and the Company pursuant to which APS  
21 agreed to an after-tax write off of the carrying value of certain PaloVerde-related assets  
22 totaling \$407 million, thereby closing the books on the issues involving the prudence of  
23 the Company's Palo Verde investment and whether a portion of the plant represented  
24 excess capacity.

25 Of course, the prudence audit was not the only forum where the Commission addressed  
26 Palo Verde issues. On July 5, 1985, APS filed an application seeking a rate increase,  
27 which included a request to include Palo Verde CWIP in rate base. Previously, the  
28 Commission had refused CWIP inclusion for Palo Verde as an incentive to more rapidly

1 complete its construction. In Decision No. 54204, issued October 11, 1984, the  
2 Commission reversed its position on Palo Verde CWIP, recognizing that APS' service  
3 territory "has been among the fastest growing areas in the United States."

4 Phase II of the same proceeding, which required ten days of hearings, resulted in  
5 Decision No. 54247, dated November 28, 1984, in which an incentive program was  
6 developed to hasten the completion of Palo Verde and the inclusion of some \$200 million  
7 of CWIP in rate base was authorized.

8 On September 12, 1984, APS filed an application with the Commission requesting an  
9 order to implement various proposed financings during 1984 and subsequent years with  
10 which to fund the construction of Palo Verde, among other things. The financings were  
11 approved by the Commission in Decision No. 54230, dated November 8, 1984.

12 On December 18, 1985, APS filed an application for a rate increase (the "Palo Verde 2  
13 case"). During a three-month long hearing, the Palo Verde project was again re-  
14 examined from every conceivable angle by a number of witnesses, including Dr. Rosen. I  
15 cannot help but note the Commission's comments on his testimony in Decision No.  
16 55931, dated April 1, 1988. In rejecting Dr. Rosen's proposed "economic excess  
17 capacity adjustment, the Commission stated:

18 In 1982, Mr. Rosen testified before the FERC that a combination of conservation  
19 and a sell-off of Palo Verde 3 would result in substantial net savings over the life  
20 of that Unit, but a sell-off of Palo Verde 2 would result in a cumulative net loss of  
21 about \$100 million by the year 2000.... Therefore, at that time Mr. Rosen  
22 recommended that "while proceeding with the basic conservation/Palo Verde 3  
23 sell-off plan, APS should continue to construct and retain its ownership share in  
24 units 1 and 2. However, continued consideration should be directed towards a  
25 possible sell-off of at least part of unit 2."

26 Five years later, in this proceeding, Mr. Rosen testified that APS should not have  
27 continued with Unit 2, but should have stopped construction or sold its ownership  
28 share in that Unit during the first-half of 1981. According to Mr. Rosen, the  
29 regression analysis he made for his December, 1982 testimony before the FERC  
30 was only "preliminary", and in 1982 he was not in a position to thoroughly  
31 evaluate the economics of Palo Verde on the basis of the data available through  
32 1980

1 APS presented extensive rebuttal evidence by a number of witnesses concerning  
2 Mr. Rosen's presentation, including his "retrospective regression analysis".... Mr.  
3 Rosen's opinion is not sufficient support for a finding that construction of and  
4 retaining the ownership interest in Palo Verde 2 was imprudent....

5 Decision No. 55931, pages 67-68.

6 **Q DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?**

7 **A** Yes it does.

Oasis, Admin (OASIS, 05:00 PM 2/25/98 , Hot Paths from AZPS Transmissi



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BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN  
COMMISSIONER-CHAIRMAN  
RENZ D. JENNINGS  
COMMISSIONER  
CARL J. KUNASEK  
COMMISSIONER

DOCKET NO. U-0000-94-165

IN THE MATTER OF THE COMPETITION IN )  
THE PROVISION OF ELECTRIC SERVICES )  
THROUGHOUT THE STATE OF ARIZONA )

DIRECT TESTIMONY  
OF  
ENRIQUE A. LOPEZLIRA

EXHIBIT  
*admitted*  
*AG-1*

**TESTIMONY OF ENRIQUE A. LOPEZLIRA  
ON BEHALF OF ARIZONA ATTORNEY GENERAL'S OFFICE**

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1 Arizona electric markets. I became a member of the Stranded Costs Working Group on January  
2 8, 1997, and participated with the Chief Counsel for the Antitrust Unit in the Legal Issues  
3 Working Group. I have read extensively from widely accepted publications on the effects of  
4 electric industry restructuring on various segments of the marketplace, and have reviewed the  
5 comments of the interested parties in the Stranded Costs and Legal issues working groups. I have  
6 also reviewed various published methodologies for valuation and payment of stranded costs, and  
7 have consulted with individuals in California, Pennsylvania and Virginia regarding their  
8 experience in electric utility restructuring. I have also read and analyzed the testimony of the  
9 affected utilities filed in this docket. I have analyzed this voluminous information in light of  
10 accepted principles of economics with respect to which method of valuation and calculation of  
11 stranded costs will be most efficient, rapid and fair within the context of free market principles.

12

13 **Q: What is the purpose of your current testimony?**

14 A: I have been asked to testify about the recommendations of my office with respect to the  
15 methodologies for calculation and payment of stranded costs that are the most compatible with the  
16 free-market philosophy of deregulation and that will remove potential barriers to rapid competition  
17 that stranded costs could impose.

18

19 **Q: Based on your study and analysis, have you come to some conclusions?**

20 A: Yes I have.

21

22 **B. Summary of Testimony**

23

24 **Q: Please summarize your conclusions for this record.**

25 A: The rules should be modified in a number of instances to clearly identify those markets to  
26 which stranded cost analysis can apply, to apply a free-market philosophy wherever possible, to  
27 define stranded costs for efficient calculation and to eliminate unnecessary regulation and  
28 administrative proceedings. Stranded costs should be calculated in every case using a market-

1 value approach. As explained below, for investor-owned utilities this calculation should be done  
2 using a stock market value approach. The stranded costs should be collected from all users  
3 through a fixed, non-bypassable monthly charge (based on historic usage and not future usage),  
4 and paid directly to investors through a stranded cost recovery fund over five years. For non-  
5 investor owned utilities and cooperatives, stranded costs should be evaluated on an asset-  
6 divestiture (or bid-auction) basis and paid in the same way.

7

### 8 **C. Responses to the Commissions's Nine (9) Stranded Cost Issues**

9

10 **Q: Regarding the Commission's Issue Number 1, (AG Priority number 2), should the**  
11 **Electric Competition Rules be modified regarding stranded costs, if so, how?**

12 **A:** Yes. R14-2-1601 should be amended to add definitions that distinguish the markets to be  
13 deregulated from those that will continue to be regulated, and relevant market definitions must be  
14 included in the rules. The rules need to clarify that, in the deregulated markets, antitrust law and not  
15 regulatory process governs. The rules should state that they do not afford an exemption from antitrust  
16 scrutiny of activities in the deregulated markets.

17 R14-2-1601 should include a definition of "Product Market", that recognizes that the product  
18 or service line can be distinguished from other product or service lines in the same industry.  
19 The product market definition should identify the following distinct product and service lines: a) retail  
20 generation and services; b) wholesale generation and services c) transmission services; d) distribution  
21 services; and e) marketing and customer services, including demand management. A clear  
22 delineation of each of these product markets should easily enable the commission and the stakeholders  
23 to distinguish between assets and obligations that fall within the deregulated generation and retail  
24 services product markets and those that fall within other regulated markets.

25 The Rules should state that no asset or obligation used or useful for producing a product other  
26 than the deregulated products should be considered as stranded.

27 R14-2-1601 should also contain a definition of geographic market as an area in which a  
28 producing firm sells or could sell the identified product. The geographic market for generation

1 services is nationwide and the state of Arizona is a geographic sub-market. No smaller geographic  
2 sub-markets are necessary or desirable, specifically not smaller territories defined by regulation. The  
3 rules should specify that the relevant geographic market for generation and retail marketing services  
4 is statewide. The relevant geographic market for transmission and distribution are statewide.

5 There is no competitive justification basis for dividing the State into smaller geographic  
6 markets, as the Rules' CC&N procedure appears to continue to do. Therefore my office  
7 recommends that the rules be amended to eliminate the CC&N limitations before stranded costs are  
8 fixed, to eliminate future market uncertainty that will affect values. This will aid in the calculation  
9 of stranded costs, because the market value of generation assets in a statewide geographic market is  
10 a truer reflection of the future value of the assets as an ongoing concern.

11 Moreover, qualification to compete through application to the Commission should be in the  
12 form of a license, not a CC&N procedure, again to create market certainty at the outset of competition.  
13 This would facilitate ease of entry, and will further efficiencies in the transition to competition, which  
14 will support a faster determination of stranded costs and more finality to the risks and rewards of  
15 investing in the deregulated entities.

16 A statewide geographic market definition for both generation and retail services resolves an  
17 anomaly in the rules. The rules currently do not regulate marketing companies. These companies,  
18 selling the retail generation services product, will operate in an unregulated environment, because low  
19 entry barriers allow substantial competition to occur. Absent amendment, the rules would allow  
20 companies to contact users and offer services, before knowing whether competitive generation could  
21 be available in a given geographic area. With the geographic market for both deregulated products  
22 defined as being statewide more meaningful stranded cost market evaluations of an entity can be  
23 made, based on a certainty that there are no regulatory limitations to the geographic markets in which  
24 the affected entities can compete.

25 The market definitions should reduce stranded costs in that the value of companies as  
26 competitors in new markets could be immediately made, without the need to revisit the market value  
27 issues in the future. This has the added benefit of avoiding additional inefficiencies costs. These  
28 definitions will also enable affected utilities' management to assess the desirability of restructuring

1 debt and renegotiating long-term obligations (and territorial market restrictions found in agreements)  
2 in the context of additional market opportunities available to them as competitors, rather than in the  
3 context of an uncertain partially-regulated environment.

4 In Rule 14-2-1601(8), the definition of “stranded costs” should be amended to clarify that  
5 stranded costs only occur in product markets that have become or are to become competitive markets,  
6 and that assets used in producing generation and distribution products, that will continue to be  
7 regulated, are not stranded. This will provide clear limitations on the number and type of costs that  
8 can be asserted as stranded, and will reduce the need for costly administrative assessments. Since they  
9 are not dedicated to products to be sold in a competitive market, under any theory of recovery, assets  
10 dedicated to distribution and transmission of electricity are entitled to zero stranded costs. The rules  
11 should also specify that recovery of stranded costs must be limited to historic generation costs. Future  
12 costs are not stranded, as they are subject to recovery (or loss) in a competitive environment.

13 R14-2-1607(A) should clarify the phrase “offering a wider scope of services for profit.” The  
14 rules should specifically prohibit affected utilities from mitigating stranded costs by using revenues  
15 from unregulated competitive non-core services. Such cross-subsidization creates inefficient  
16 distortions in both markets. Further, affected utilities currently have market power in the regulated  
17 geographic and product markets. Allowing cross-subsidization of non-core activities could promote  
18 abuse of market power through unfair access to users as a customer base, curtailing competition in  
19 other non-regulated markets.

20 R14-2-1607(B) is vague and implies that affected utilities deserve 100% recovery of  
21 unmitigated stranded costs, with no duty to economize. Full recovery of stranded costs implies that  
22 management had no influence on the firm’s investment decision, which cannot be true. All firms,  
23 whether regulated or not, are subject to bad investment decisions by management. Allowing 100%  
24 recovery of unmitigated stranded costs would shift 100% of this business risk from investors to  
25 ratepayers. Therefore, the Rule should be amended to provide that affected utilities should not be  
26 allowed to recover more than 70% of the unmitigated stranded costs. Allowing less than 100%  
27 recovery of stranded costs creates incentives for affected utilities to undertake mitigation efforts in  
28 order to survive in a competitive environment. 70% is a reasonable number based on the experience

1 of other states, which, after extensive investigation, have allowed 60% (New Hampshire), 67%  
2 (Illinois), 77% Pennsylvania, and 100% (Massachusetts), and is also compatible with private studies  
3 that have recommended between 60% and 80%.

4 R14-2-1607(G) should require only one filing of the results of the market-value transactions  
5 used, before retail choice begins

6 R14-2-1607(H) implies (1) a "wires" charge is an acceptable recovery mechanism for  
7 unmitigated stranded costs; (2) that unmitigated stranded costs should only be recovered from  
8 customers who leave the affected utilities' systems or alternatively, who remain in the affected  
9 utilities' systems but reduce their energy consumption; (3) that the recovery mechanism for  
10 unmitigated stranded costs will be different for each affected utility; and (4) that recovery of  
11 unmitigated stranded costs will continue indefinitely. A "wires" charge is not an acceptable recovery  
12 mechanism, because it affects future energy consumption, and does not fairly allocate the burden of  
13 stranded generation costs between those users who have consumed little electricity and those who  
14 have consumed much more. Unmitigated stranded costs must be recovered from all users regardless  
15 of which generator, broker or retailer, they choose in a competitive environment, as well as  
16 independent of future energy consumption. And, the recovery mechanism should be the same for all  
17 affected utilities. The Rule should make this clear.

18 R14-2-1607(K) is not necessary if a market value approach for calculating unmitigated  
19 stranded costs is used.

20 R14-2-1607(L) is not necessary if a market value approach for calculating unmitigated  
21 stranded costs is used.

22 The Rules should specifically prohibit cross-subsidization, for the reasons already stated. This  
23 cross-subsidization prohibition would end when competition is fully established.

24 The rules should specifically require that affected utilities afford "open access" to their  
25 regulated transmission and distribution systems in accordance with FERC rules. If competition is  
26 expanded for the generation and retail services sectors of the industry, while transmission and  
27 distribution remain regulated, vertically integrated providers have incentives to favor their own  
28 generators and retailers with better access. Vertically integrated entities "own" the ability to transmit

1 and distribute efficiently at regulated rates, while everyone else could face delays, interruptions, or  
2 greater power losses in the transmission and distribution services which are essential facilities in a  
3 competitive generation and marketing environment. Many antitrust concerns arise from the (forward  
4 or backward) vertical integration of a utility which bottlenecks an essential facility. Open access rules  
5 would remove this potentially anticompetitive barrier to entry and prevent the abuse of transmission  
6 or distribution market power. This issue is highly relevant to stranded costs because it allows rapid  
7 evaluation of firms who will not be able to misuse distribution market power to their competitive  
8 advantage in the deregulated product markets.

9 For the same reasons, the rules should prohibit collusive under sizing. While antitrust  
10 enforcement may prevent collusive under sizing of transmission and distribution capacity and FERC  
11 under EPCRA has the regulatory authority to order expansion of the transmission grid, the policy of  
12 facilitating competition inherent in the Rules should expressly recognize and prohibit this positioning  
13 in order to prevent anticompetitive limitations. The Rules' defining the impermissible use of  
14 regulated products create additional market certainty for investors valuing "stranded" assets in a  
15 competitive marketplace.

16  
17 **Q. With respect to ACC Issue no. 2, (AG Priority 9), when should "Affected Utilities" be**  
18 **required to make a "stranded cost" filing pursuant to A.A.C. R14-2-1607?**

19 **A:** After the rules under which restructuring will occur are established, and prior to introducing  
20 retail customer choice, so users can know what they may have to pay for stranded costs. This advance  
21 calculation creates certainty in the market both for users who are asked to choose between existing  
22 providers rates-plus-stranded costs, and new providers' offers. Based on the experience in  
23 Pennsylvania, where a competitor offered to pay stranded costs and reduce rates further than the  
24 settlement on stranded costs offered by an affected utility, we believe that competitors will want to  
25 reduce rates to more-than-offset the stranded costs to be paid by users, and that the market will  
26 therefore drive rates to their lowest competitive levels.

27  
28 **Q: With respect to ACC Issue no 3, (AG Priority 6), what costs should be included as part**

1 **of "stranded costs" and how should those costs be calculated?**

2 A: The calculation of stranded costs and the mechanism used to recover these costs, if improperly  
3 done, can lead to a significant barrier to entry into the market. Such a barrier can discourage  
4 investment, reduce the number of competitors, and lead both to an under-supply of low cost power  
5 and an increase in the probability of market concentration and monopoly pricing. Proper identification  
6 of competitive product markets is key in identifying possible anticompetitive impacts from stranded  
7 costs awards.

8 As to the recommended calculation methodology and assumptions made including any  
9 determination of the market clearing price, we concluded that, as to investor-owned utilities, stranded  
10 costs are losses imposed on stockholders for unanticipated losses caused by regulatory requirements.

11 Therefore, we believe that the shareholders should have a claim for payment against the stranded  
12 recovery fund, into which stranded costs are paid.

13 The market value of stranded costs should be calculated using a true market mechanism, and  
14 the most economically sensitive measure of the actual loss. For investor owned utilities, the value  
15 should be the difference between the book value of the company before deregulation, and the value  
16 of their stock holdings after. Because speculation about how much stranded costs will be recovered  
17 will influence the stock price, the utility will have to split its stock. That is, each investor will receive  
18 one share of A stock and one share of B stock for every original share she owns at the time of the split.  
19 The A stock gives the investor the usual rights and benefits of a shareholder. The B shares give their  
20 holders sole claim against stranded costs recovered by the utility. A short time after the stock split  
21 or the implementation of competition begins (whichever is later), the stranded costs for the company  
22 are calculated as the difference between the net book value of company before deregulation, and the  
23 average of the market value of A stock over a fixed period after the split. The net book value is the  
24 regulatory value of the utility. If the net book value is greater than the stock value, the investors will  
25 receive payment. The payment should be less than 100% of the difference, to build in a management  
26 incentive to keep interim costs and obligations competitive. Stranded costs should be paid over no  
27 more than 5 years, into a stranded cost recovery fund administered by the corporation commission.  
28 Investors's claims will be paid be paid at the end of 5 years. The coupons will not affect the investor-

1 owned utilities' principal stock value, but will affect the coupon trade.

2 As to non-investor owned affected utilities, we believe that stranded costs should be assessed  
3 through an alternative market-based method like auction or divestiture. As to SRP, should it become  
4 relevant, the stranded value of the privatized water subsidy should be a market-based mechanism  
5 similar to stock value, such a would be the case if the subsidy were placed in a privatized, spun-off  
6 entity trading in water subsidy future value.

7 Because the amount paid for the assets is a management risk, only prudent assets can be  
8 considered as relevant to stranded costs. Only historic generation assets and obligations should be  
9 considered for inclusion in stranded cost calculations . Of these assets and obligations, only those that  
10 regulators required, not those that management elected to acquire or create, should be considered  
11 stranded. Assets and obligations involved in producing products that will continue to be regulated are  
12 not stranded. Assets dedicated to distribution and transmission of electricity are entitled to zero  
13 stranded costs.

14

15 **Q: With respect to ACC issue no. 4, (AG Priority 4), should there be a limitation on the time**  
16 **frame over which "stranded costs" are calculated?**

17 A: This question is irrelevant if the calculation method is a market value approach, because the  
18 stranded cost calculation would consider only the pre-competition and post-competition market  
19 values.

20

21 **Q: With respect to ACC 5, (AG Priority 5), should there be a limitation on the recovery time**  
22 **frame for "stranded costs"?**

23 A: Yes, stranded cost should be paid over no more than 5 years. A long recovery period prolongs the  
24 transition to full retail competition, and the period of market uncertainty created by stranded cost  
25 recovery. A five year period offers utilities a reasonable amount of time to recover their stranded  
26 costs, and allows full competition to commence sooner rather than later.

27

28 **Q: With respect to ACC issue no. 6, (AG Priority 1), how and who should pay for "stranded**

1 **costs” and who, if anyone, should be excluded from paying for stranded costs?**

2 A: Stranded losses are sunk costs. In a free market environment, historical sunk costs should not  
3 drive future economic decisions. Users, not potential suppliers, should pay the stranded costs. The  
4 payment should not be a “wires” charge, but a “meters” charge, based on historical usage up to the  
5 time of the calculation of stranded costs. The historical period should be from the beginning of 1996  
6 to the end of 1997. During this period, it was common knowledge that deregulation was coming, but  
7 unknown how stranded costs would be paid. During this period, therefore, users did not change  
8 consumption patterns based on the he possibility of paying sunk costs. Either approach is fair to all  
9 classes of users, whose contribution is directly based on the benefit of regulated generation they  
10 received. New competitor-suppliers should not be charged for stranded costs, because to do so would  
11 create unnecessary barriers to entry for smaller would-be suppliers. It is anticipated that some  
12 suppliers may wish to pay the stranded cost obligations of consumers as a marketing strategy.

13

14 **Q: With respect to ACC issue no. 7, (AG Priority 8), should there be a true-up mechanism**  
15 **and, if so, how would it operate?**

16 A: No. The only true-up is the market value. One of the major inefficiencies in an  
17 administrative-dependent method for calculating stranded costs is that it requires periodic true-up  
18 proceedings. The costs of these proceedings will be born by existing ratepayers, and under some  
19 methodologies would become a part of stranded costs. Abuse of regulatory proceedings has, in other  
20 deregulated industries, become a barrier to new entity. With the one-time valuation methodologies we  
21 propose, the true-up is performed by the marketplace. There is no need for subsequent true-up  
22 proceedings which create uncertainty in the market, and would create new regulatory burdens on the  
23 deregulated market players.

24

25 **Q: With respect to ACC issue no. 8, (AG Priority 3), should there be price caps or a rate**  
26 **freeze imposed as part of the development of a stranded cost recovery program and if so, how**  
27 **should it be calculated?**

28 A: No. Rate caps are regulatory and can have the effect of creating a floor for future prices. Rate

1 stability is not in the public interest if those rates create a barrier to competition. Governmental rate  
2 manipulation is contradictory to the express objective of deregulation.

3  
4 **Q: With respect to ACC issue no 9, (AG Priority 7), what factors should be considered for**  
5 **“mitigation” of stranded costs?**

6 A: If the methodology proposed by my office is employed, mitigation is not an issue; the market  
7 will decide what costs or obligations add and subtract from the value of the firm. If another method  
8 is employed, then mitigation requires that assets and obligations acquired did not create risky excess  
9 capacity or be based upon erroneous forecasts. And, asset and obligation decisions made after 1994  
10 were made in anticipation of deregulation in the short term, and require a greater demonstration of  
11 economizing. As stated above, revenues from non-core businesses of the affected utilities should  
12 not be used to mitigate stranded costs, so as to prevent abuse of market power and injury to  
13 competition in non-core markets.

14  
15 **Q: Do you have an opinion regarding the implications of the Statement of Financial**  
16 **Accounting Standards No. 71 resulting from the recommended stranded cost calculation and**  
17 **recovery methodology?**

18 A: No. The market will be able to ascertain the value of a firm within the context of whatever  
19 regulatory or legal burdens under which the firms must operate.

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BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN  
COMMISSIONER-CHAIRMAN  
RENZ D. JENNINGS  
COMMISSIONER  
CARL J. KUNASEK  
COMMISSIONER

IN THE MATTER OF THE COMPETITION IN )  
THE PROVISION OF ELECTRIC SERVICES )  
THROUGHOUT THE STATE OF ARIZONA )  
 )  
 )

DOCKET NO. U-0000-94-165  
  
COMPREHENSIVE SUMMARY OF  
ATTORNEY GENERAL'S PREFILED  
TESTIMONY AND REBUTTAL TESTIMONY

The Electric Competition Rules **should be modified** regarding stranded costs in a number of instances to:

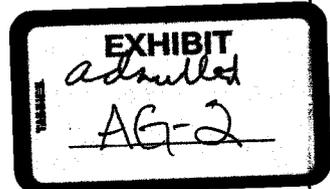
- **Identify the markets** to which stranded cost analysis can apply
- **Apply a free-market philosophy** wherever possible
- **Better define stranded costs** for efficient calculation and to
- **Eliminate unnecessary regulation** and administrative proceedings
- **Eliminate CC&N market limitations**

Affected Utilities” **should not be required to make a “stranded cost” filing** pursuant to A.A.C. R14-2-1607 because:

- The **market-determined number** will be quicker and more accurate
- Only the market can identify **those assets that will gain value** under competition

Stranded costs should be **calculated quickly after the rules become certain** because:

- Market certainty will generate **rapid competition to benefit users**
- **Less burden on taxpayers and ratepayers** of continued regulatory proceedings



1 Stranded costs should be calculated in every case using a **market-value approach**  
2 because:

- 3 • The market is more likely to result in **zero stranded costs**
- 4 • The market price is the **true measure** of what has, in fact, become uneconomic
- 5 • Stranded costs will be calculated **quicker and more accurately**

6  
7 For investor-owned utilities this calculation should be done using a **split-stock market**  
8 **value approach**, and for non-investor owned utilities and cooperatives, stranded costs  
9 should be evaluated on an **asset-divestiture (or bid-auction) basis** because:

- 10 • It is the **fastest and most accurate** way
- 11 • It will **not undervalue assets**
- 12 • Value will be established by those with a **financial stake in the outcome**
- 13 • **Investors are protected** from future uncertainty
- 14 • **Ratepayers and taxpayers are protected** from future uncertainty and error
- 15 • **Faster competition** will occur

16  
17 The **administrative calculation method proposed is not the best choice** because:

- 18 • It will take **too long**
- 19 • It is **continued regulation**
- 20 • It is too costly putting **unnecessary burdens on taxpayers and ratepayers**
- 21 • It **promotes inefficiency**
- 22 • It continues **market uncertainty**

23  
24 **Net Loss Revenue is a poor choice** of calculation methodologies because:

- 25 • It fails to account for **management error**
- 26 • It is **too uncertain**
- 27 • It is bound to contain **errors**
- 28 • It will **undervalue some assets**

- 1 • It is more likely to **overestimate stranded costs**
- 2 • It requires **costly administrative true-ups**

3

4 The only relevant time frame for calculating market values is at the **time the rules become**  
5 **certain.**

6

7 Stranded costs should be **paid over no more than five (5) years** because:

8

- 9 • A longer period creates additional **market uncertainty**

10

11 **All historic users should pay pro-rata** for stranded costs because:

12

- 13 • Historic users received any **benefit of regulation**
- 14 • **Larger users should pay more** than smaller users
- 15 • Burdening new competition with stranded costs is a **barrier to competition**
- 16 • **Competitive retail rates should offset any increase** due to stranded costs

17

18 Stranded costs should be **collected from all users** through a fixed, non-bypassable  
19 **monthly charge** because:

20

- 21 • Wires, access and **exit charges are an unnecessary impediment to competition**
- 22 • A monthly charge is **fairer and more efficient**
- 23 • a stranded cost recovery fund is **simple to administer**
- 24 • True-up proceedings are **unnecessary and too costly**

25

26 There should be **no price caps or rate freeze** imposed as part of the development of a  
27 stranded cost recovery program because:

28

- 1 • Rate caps **deny the benefit of lower competitive rates**
- 2 • Rate caps are completely **regulatory**
- 3 • Rate caps **allow inefficiencies** to continue
- 4 • Rate caps will become a floor for **future rate cap increase petitions**

5

6 The only factor that should be considered for “mitigation” of stranded costs is:

7

- 8 • **less than 100%** recovery to reflect **investor risk**
- 9 • **less than 100%** recovery to **induce efficiencies** in the phase-in period

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1 because the competitive market price may be lower than the rate set under regulation, the  
2 underlying assets are "uneconomic" in all markets, across all industries. The falsity of this  
3 assumption is proven by recent sales of formerly regulated assets in other parts of the country, like  
4 California and New England, where they were sold at prices way above book value. There is no  
5 administrative methodology that can generate an order saying that a utilities assets under  
6 competition are three or four times more valuable than their book value and, therefore, an  
7 administrative evaluation is less likely to lead to zero stranded costs. Only a market can reflect  
8 real-world enhanced values, and this has happened in other instances in other states applying a  
9 market approach.

10         The stock market-value approach for calculating stranded costs would solve all the  
11 problems with the net loss revenue approach. It is simple, because it does not get bogged down in  
12 accounting rules and definitions. It is quick, because it saves on the time and money involved in  
13 true-up hearings and other administrative proceedings. It provides a "net" measure of stranded  
14 costs because it automatically offsets undervalued assets, such as the value of opening up new  
15 generation markets to other affected utilities, against overvalued stranded assets. It is  
16 economically efficient, because its speed and simplicity reduce the uncertainty for consumers,  
17 competitors and investors. And, it is fair both to shareholders because it compensates them  
18 directly, and residential users because it saves them from being burdened by paying for only truly  
19 uneconomic assets, if any.

20         The net loss revenues approach is merely a mechanism for arriving at a market value of  
21 those assets which are made uneconomic, not by management error, but by the shift to  
22 competition. It is a poor substitute for a true market measure, which can be achieved more quickly  
23 and with greater certainty and enhanced benefit to all classes of users.

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