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BEFORE THE ARIZONA CORPORATION COMMISSION

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Arizona Corporation Commission

Chairman

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Commissioner

JUL 12 1999

WILLIAM A. MUNDELL

Commissioner

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IN THE MATTER OF THE
APPLICATION OF ARIZONA PUBLIC
SERVICE COMPANY FOR APPROVAL
OF ITS STRANDED COST RECOVERY

DOCKET NO. E-01345A-98-0473

IN THE MATTER OF THE FILING OF
ARIZONA PUBLIC SERVICE
COMPANY OF UNBUNDLED TARIFFS
PURSUANT TO A.A.C. R14-2-1601 ET.
SEQ.

DOCKET NO. E-01345A-97-0773

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

DOCKET NO. RE-00000C-94-0165

**NOTICE OF FILING REBUTTAL
TESTIMONY OF KEVIN HIGGINS**

Pursuant to the Commission's Procedural Order dated June 23, 1999, counsel for Cyprus Climax Metals Company, ASARCO Incorporated and Arizonans for Electric Choice and Competition herein undersigned, hereby provides notice of the filing of the Rebuttal Testimony of Kevin C. Higgins in the above-captioned dockets.

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DATED this 12th day of July, 1999.

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1 **REBUTTAL TESTIMONY OF KEVIN C. HIGGINS**

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

3 A. Kevin C. Higgins, 39 Market Street, Suite 200, Salt Lake City, Utah, 84101.

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

5 A. I am employed by Energy Strategies, Inc. (ESI) as a senior associate. ESI is a
6 private consulting firm specializing in the economic and policy analysis applicable to
7 energy production, transportation, and consumption.
8

9 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?**

10 A. My testimony is being sponsored by Cyprus Climax Metals Company, ASARCO
11 Incorporated and Arizonans for Electric Choice and Competition (collectively,
12 hereinafter, "AECC")¹.
13

14 **Q. HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS PROCEEDING?**

15 A. Yes. I have filed direct testimony supporting the Settlement Agreement.

16 **Q. WHAT ISSUES WILL YOU BE ADDRESSING IN YOUR REBUTTAL**
17 **TESTIMONY?**

18 A. I will address the following areas in response to the direct testimony of other
19 parties: (1) unbundled rates for Standard Offer customers, (2) viability of the competitive
20 market for direct access customers, (3) the "shopping credit" for contract customers, and
21 (4) market power.
22

23 _____
24 ¹ Arizonans for Electric Choice and Competition is a coalition of energy consumers in favor of competition and
25 includes Cable Systems International, BHP Copper, Motorola, Chemical Lime, Intel, Honeywell, Allied Signal,
26 Boeing, Arizona School Board Association, National Federation of Independent Business, Arizona Hospital
Association, Lockheed Martin, Abbot Labs, and Raytheon.

1 **UNBUNDLED RATES FOR STANDARD OFFER CUSTOMERS**

2 **Q. A NUMBER OF PARTIES HAVE MAINTAINED THAT THE SETTLEMENT**
3 **AGREEMENT DOES NOT PROVIDE FOR THE UNBUNDLING OF**
4 **STANDARD OFFER RATES. IS THIS VIEW CORRECT?**

5 A. No. Section 2.1 of the Settlement Agreement plainly states: "Bills for Standard
6 Offer service shall indicate individual unbundled service components to the extent
7 required by the Electric Competition Rules." The proposed Rules spell out these
8 unbundled billing requirements in R14-2-1612.N. The customer's bill is the most
9 accessible source of pricing information for customers and requiring the inclusion of
10 unbundled pricing information in the Standard Offer bill has been an important objective
11 in the transition to competition. Thus, AECC sought to ensure that this provision was
12 reinforced in the Settlement Agreement. A number of witnesses seem to have missed or
13 disregarded this provision in their review of the Settlement Agreement, and assert that
14 there is no requirement in the Agreement to unbundle Standard Offer rates.² This
15 assertion, however, is incorrect.

16
17
18 **VIABILITY OF THE COMPETITIVE MARKET**

19 **Q. A NUMBER OF PARTIES HAVE ARGUED THAT THE "SHOPPING CREDIT"**
20 **IN THE SETTLEMENT AGREEMENT IS TOO LOW FOR VIABLE**
21 **COMPETITION TO TAKE PLACE. DO YOU WISH TO COMMENT ON THIS**
22 **POINT?**
23
24

25 ² See, e.g., Direct testimony of Harry J. Kingerski (Enron), pp. 7-16, esp. p. 12, lines 1-7; Direct testimony of Lee
26 Smith (Staff), p. 4, lines 16-18.

1 A. Certainly a higher "shopping credit" makes competitive alternatives more
2 attractive and competition more viable. In negotiating the Settlement Agreement, AECC
3 sought to achieve the maximum shopping credit achievable while still providing
4 customers the benefit of reduced Standard Offer rates. This consideration is important
5 because the simplest way to increase the shopping credit would be to refrain from
6 reducing Standard Offer rates. However, it is not in customers' interests to forego
7 guaranteed Standard Offer rate reductions in order to maintain a higher shopping credit.
8 Therefore, I disagree with the suggestion of Mr. Williamson that consideration be given
9 to obtaining a higher shopping credit through lowering the Standard Offer reductions.³

11 I believe that Standard Offer rate reductions and a viable competitive market can
12 coexist. The Settlement Agreement seeks a balance by providing for annual reductions in
13 the direct access unbundled tariffs that meet or exceed the Standard Offer reductions,
14 which results in annual increases of the shopping credit. At the time the Settlement
15 Agreement was executed in May, the shopping credit for all classes of customers
16 provided sufficient "head room" for viable competition, given the prices in the NYMEX
17 Palo Verde futures market, which averaged 25.5 mills per kwh (shaped to include off-
18 peak periods) for the upcoming year. This price in May was in the middle range of the
19 prices of the preceding nine months, which fluctuated between an approximate low of
20 24.3 mills in September 1998 to an approximate high of 27.0 mills in November 1998.

23 **Q. SINCE THE COMPLETION OF THE SETTLEMENT AGREEMENT, HAVE**
24 **WHOLESALE MARKET PRICES INCREASED?**

25 _____
26 ³ See Direct testimony of Ray Williamson (Staff), p. 8, line 26.

1 A. Yes, they have. We have now entered the summer season, generally a period of
2 relatively high wholesale market prices in Arizona. This year is no exception, and
3 NYMEX Palo Verde futures prices have risen some eleven percent since mid-May to an
4 average of 28.5 mills per kwh (shaped to include off-peak periods) for the upcoming year.
5 This price increase certainly squeezes, and in some cases, eliminates competitive
6 margins, particularly for customers in the industrial class (over 3 MW), although many
7 small to middle-sized commercial customers (under 500 kw) can still realize savings in
8 the competitive market, even at these higher prices.
9

10 **Q. PLEASE PROVIDE AN EXAMPLE THAT SHOWS THE POTENTIAL FOR**
11 **COMMERCIAL CUSTOMER SAVINGS AT THESE HIGHER PRICES.**

12 A. The situation for a 500-kw customer with a 50 percent load factor is illustrated in
13 Exhibit KCH-R1, Schedule 1, which shows the "incremental competitive margin" at
14 these higher prices. The "incremental competitive margin" is a measure of "head room"
15 and refers to the margin available for the ESP to cover its own costs and to offer savings
16 to the customer below the Standard Offer rate. With the NYMEX Palo Verde market at
17 28.5 mills, the incremental competitive margin for this customer is about 4 percent of the
18 Standard Offer price in 2000, and 5 percent in 2001. For a smaller commercial customer,
19 the margin is greater, as shown in Schedule 2, which illustrates the case of a 200-kw
20 customer. This customer would have an incremental competitive margin of 11 percent in
21 2000, and 12 percent in 2001. The reason for the higher margin is that Standard Offer
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rates for commercial customers are significantly higher at lower usage levels, making the competitive option more attractive.

Q. ARE THERE WAYS TO MITIGATE THE TYPE OF PRICE RISK ASSOCIATED WITH THE RECENT JUMP IN WHOLESALE MARKET PRICES?

A. Yes. The Settlement Agreement provides a price hedge for customers by offering them the option of Standard Offer service at rates that are guaranteed to decline through June 30, 2004. Apart from the Standard Offer service option, price risk can be mitigated through a CTC that “floats” inversely with market prices (with appropriate “head room” built in). While I see merit in this approach, it was not the direction the parties ultimately pursued in the Settlement Agreement because parties sought certain advantages inherent in a fixed CTC approach.

Q. WHAT ARE THE ADVANTAGES TO THE FIXED CTC APPROACH VERSUS A FLOATING CTC?

A. Under the fixed CTC arrangement in the Settlement Agreement, market participants are provided certainty regarding regulatory price parameters in advance, including the total amount of stranded cost, the level of CTC, the rates for unbundled services, etc. This is certainly advantageous, but there are also risks because the participants may be advantaged or disadvantaged when there are changes in market prices. The squeeze in competitive margins resulting from the recent surge in market prices is an example of the latter.

1 **Q. DO YOU EXPECT ANY RELIEF FROM THE SQUEEZE ON COMPETITIVE**
2 **MARGINS?**

3 A. Forecasting prices is a hazardous endeavor, and there are absolutely no guarantees
4 as to the direction prices will move. Last summer, temperatures were relatively mild.
5 Nonetheless, July NYMEX prices for the upcoming year rose ten percent over the levels
6 in May of that year, then subsided later in the summer. If the current NYMEX futures
7 market were to follow a similar seasonal pattern, one might expect a softening of
8 wholesale prices toward the end of this summer. This timing would coincide with the
9 start-up of retail competition. Regardless of the direction prices move, some relief would
10 come when the shopping credit is increased on January 1, 2000, due to the scheduled
11 reduction in both the CTC and the regulatory asset charge (included in the unbundled
12 distribution rate).
13
14

15 **Q. DO YOU HAVE ANY COMMENTS ON THE PROPOSAL BY MS. SMITH FOR**
16 **INCREASING THE SHOPPING CREDIT?**

17 A. Yes. Ms. Smith proposes to increase the shopping credit by reducing the CTC in
18 varying amounts for different customer classes, and deferring collection of the shortfall
19 until after July 1, 2004, subject to a wholesale market price test.⁴ Taken in isolation, Ms.
20 Smith's proposal generally favors the objectives AECC pursued in negotiation. As I have
21 indicated above, AECC endeavored to achieve the highest feasible shopping credit in its
22 negotiations with APS. A significant part of this negotiation addressed stranded costs
23 and the size of the CTC. In agreeing to settle at a stranded cost figure of \$350 million,
24

25
26 ⁴ Direct testimony of Lee Smith (Staff), p. 14, line 21 to p. 17, line 22.

1 the parties adopted a compromise position, relinquishing, for the purposes of settlement,
2 positions on stranded cost that they otherwise advocated. AECC, of course, preferred a
3 smaller amount of stranded cost and a lower CTC. In contrast, APS sought a much
4 higher stranded cost recovery and therefore a higher CTC would have resulted. Thus, the
5 Settlement Agreement must be viewed in total, as a package resulting from those
6 settlement negotiations.
7

8 **Q. YOU STATED THAT MS. SMITH'S PROPOSAL FOR LOWERING THE CTC**
9 **"GENERALLY" FAVORS THE OBJECTIVES AECC PURSUED IN**
10 **NEGOTIATION. ARE THERE SPECIFIC ASPECTS OF HER PROPOSAL**
11 **THAT DIFFER FROM AECC'S NEGOTIATING OBJECTIVES?**

12 A. Yes. While the near-term benefit of a lower CTC (in isolation) is appealing for
13 customers, the potential deferral of stranded cost recovery beyond 2004 involves a trade-
14 off between near-term and longer-term costs and benefits. In other words, there is
15 something to be said for getting stranded cost recovery over with sooner rather than later.
16 A related issue is the credit toward stranded cost recovery that is attributable to customers
17 who remain on the Standard Offer. Given that a fixed amount (\$350 million) is to be
18 recovered, lowering the CTC in the early years (for potential deferral to later years) could
19 have the perverse effect of under-crediting stranded cost recovery from Standard Offer
20 customers in the earlier period. This point is most obvious in the case of 1999. Although
21 the Settlement Agreement strives to implement retail access as soon as feasible, it will be,
22 at best, late 1999 before competition can occur. Yet application of the CTC toward
23 stranded cost recovery will apply retroactively back to January 1 – with all customers, of
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1 course, on the Standard Offer. With that point in mind, it is preferable for as much
2 stranded cost recovery to be attributable to 1999 as possible, alleviating the burden in
3 future years, rather than lowering the CTC for 1999 – at the cost of a higher CTC later.

4 **SHOPPING CREDIT FOR CONTRACT CUSTOMERS**

5
6 **Q. DO YOU WISH TO COMMENT ON MS. SMITH'S DISCUSSION OF THE**
7 **SHOPPING CREDIT FOR CONTRACT CUSTOMERS?**

8 A. Yes. Ms. Smith states that she calculates a shopping credit for contract customers
9 of 3.5 cents – which exceeds her calculation of the shopping credit for customers in the
10 Extra-Large General Service class. She states that this does not seem appropriate and
11 could be construed as prior discrimination.⁵

12 I strongly disagree with Ms. Smith's assessment. The treatment of contract
13 customers in the Settlement Agreement follows the proportionality provision in the
14 proposed Rules and implements the requirement in the Commission's Stranded Cost
15 Order that states that "No customer or customer class shall receive a rate increase as a
16 result of stranded cost recovery by an Affected Utility"⁶ In the Settlement
17 Agreement, this objective is met by setting unbundled rates for these customers that
18 continue the level of contribution to stranded cost recovery that is implicit in the
19 customers' current bundled-service contract rates. This approach is essentially the same
20 one used by FERC in determining stranded cost for contract customers under its
21 jurisdiction.
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26 ⁵ Direct testimony of Lee Smith (Staff), p. 21, lines 1-12.

⁶ Arizona Corporation Commission Decision No. 61677 (April 27, 1999) Docket No. RE-00000C-94-0165.

1 **Q. DOES MS. SMITH CORRECTLY REPRESENT THE SHOPPING CREDIT FOR**
2 **CONTRACT CUSTOMERS?**

3 A. No. The shopping credit for contract customers is not 3.5 cents as she has
4 calculated, but ranges from 2.7 to 3.1 cents, the lowest shopping credit range of all
5 customer classes.⁷ The shopping credit, as Ms. Smith uses the term, is equal to the
6 difference between the customer's rate for Standard Offer service and the direct access
7 unbundled pricing components (i.e., unbundled costs exclusive of generation,
8 transmission, and ancillary services). In calculating the shopping credit for contract
9 customers, Ms. Smith apparently uses the E-34 tariff as the customers' Standard Offer
10 rate; such an application, however, is not correct, because contract customers do not pay
11 the E-34 rate for Standard Offer service – their Standard Offer rates are the *contract* rates
12 they pay for bundled service. To measure whether a contract customer can benefit from
13 retail access you need to compare the costs of the competitive option with the customer's
14 contract price with the utility. The contract customer's shopping credit, therefore, is the
15 difference between the bundled price for power in the contract and the direct access
16 unbundled pricing components, which, as I have stated, ranges from 2.7 to 3.1 cents per
17 kwh.
18

19
20 **Q. WHAT WOULD BE THE CONSEQUENCES OF ALTERING THE PROVISIONS**
21 **OF THE SETTLEMENT AGREEMENT THAT ADDRESS DIRECT ACCESS**
22 **SERVICE FOR CONTRACT CUSTOMERS?**
23

24
25 ⁷ Ms. Smith's calculation of the shopping credit for the Extra-Large Customer Class does not appear to include the
26 primary voltage discount that will apply to the unbundled distribution rate for the majority of these customers.
Applying this discount would increase her shopping credit calculation for this class by about 1 mill to 3.1 cents.

1 A. This provision is an integral component of the Settlement Agreement. AECC
2 would not have agreed to a settlement without a satisfactory resolution of this issue.
3 Further, a simple inspection of the unbundled tariffs for contract customers would reveal
4 that the overwhelming number of kilowatt-hours in this group comes from copper mines
5 – one of which has already announced a major shut down due to the depressed state of the
6 industry. Altering the Settlement to the detriment of contract customers would send a
7 disastrous signal to the copper industry that its participation in retail access would only be
8 permissible if it were accompanied by an increase in rates administered by the
9 Commission.
10

11 **MARKET POWER**

12 **Q. WITNESSES FROM ENRON HAVE RAISED MARKET POWER CONCERNS.**
13 **DO YOU WISH TO COMMENT ON THIS ISSUE?**
14

15 A. Yes. As Arizona moves forward with retail competition regulators must be
16 vigilant with regard to market power, both vertical (which pertains to the relationship
17 between generation, transmission, distribution, and retailing) and horizontal (which
18 pertains to market dominance in the provision of a competitive service, e.g., generation).
19 Such ongoing regulatory vigilance is necessary irrespective of the Settlement Agreement.
20 Concerns about market power are not exacerbated by the Settlement Agreement. To the
21 contrary, the agreement takes steps to alleviate such concerns.
22

23 **Q. HOW DOES THE SETTLEMENT AGREEMENT TAKE STEPS TO**
24 **ALLEVIATE MARKET POWER CONCERNS?**
25
26

1 A. Vertical market power concerns will be greatly alleviated with the formation of a
2 Regional Transmission Organization (RTO) as proposed by FERC in its Notice of Public
3 Rulemaking dated May 13, 1999. The Settlement Agreement (Section 7.6) obligates APS
4 to support the formation of the Desert STAR Independent System Operator (ISO) –
5 which is being designed to meet the requirements of an RTO that would serve the
6 Southwest. On behalf of retail customers, I have been very involved with other
7 stakeholders in this effort, along with Mr. Delaney (Enron) and APS.

9 Further, since it is widely recognized that Desert STAR will not be ready in time
10 to facilitate the initiation of retail access in Arizona, stakeholders have formed the
11 Arizona Independent Scheduling Administrator (AISA), which is intended to ensure non-
12 discriminatory access to the transmission system during the interim. The Settlement
13 Agreement requires APS to actively support the formation of the AISA and to modify its
14 open access transmission tariff (OATT) to be consistent with any FERC-approved AISA
15 protocols.

17 **Q. ARE YOU PERSONALLY FAMILIAR WITH THE DEVELOPMENT OF THE**
18 **AISA?**

19 A. Yes. I serve on the AISA Board, representing retail customers, and have been very
20 active on its Operating Committee, which has prepared draft protocols for implementing
21 retail access. Mr. Delaney (Enron) also serves on the Board, and both Enron and APS
22 have been actively involved in the development of the draft protocols. These draft
23 protocols must still be reviewed and approved by the AISA Board, and then submitted to
24 FERC for approval as part of an AISA Tariff filing.

1 **Q. MR. DELANEY MAINTAINS THAT THE AISA WILL NOT QUALIFY AS AN**
2 **RTO.⁸ DO YOU AGREE?**

3 A. Yes. But the AISA was never intended to assume the scope of responsibilities of
4 an RTO. The AISA is strictly an interim organization, intended to provide the necessary
5 assurance that transmission access is allocated and managed fairly for the implementation
6 of retail competition. Accordingly, it provides an alternative dispute resolution process
7 and protocols governing transmission allocation, scheduling, must-run generation,
8 ancillary services, energy imbalances, and emergency operations, among others. But the
9 AISA does not take control over the operation of the grid. That responsibility will be the
10 role of Desert STAR.
11

12 **Q. IN HIS TESTIMONY, MR. DELANEY EXPRESSES CONCERNS ABOUT**
13 **MARKET POWER IN THE PHOENIX AREA.⁹ DO YOU WISH TO COMMENT**
14 **ON THIS ISSUE?**

15 A. There is no question that during times of heavy demand, APS will have
16 considerable horizontal market power in the Phoenix area due to the limited transmission
17 import capability into Phoenix. At such times, load must be met by generation that is
18 located in the Phoenix area, all of which is currently owned or controlled by APS or SRP.
19 Under a traditional monopoly model, there is no concern with this circumstance.
20 However, in a competitive market, a mitigation strategy must be employed to address
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25 ⁸ Direct testimony of Tom Delaney (Enron), p. 10, line 22 to p. 11, line 5.

26 ⁹ Direct testimony of Tom Delaney (Enron), p. 4, line 20 to p. 5, line 5.

1 such extensive market power. This situation is the well-known “must-run generation”
2 condition.

3 **Q. HOW IS MUST-RUN GENERATION ADDRESSED IN THE SETTLEMENT**
4 **AGREEMENT?**

5 A. As I stated above, the Settlement Agreement requires APS to comply with the
6 AISA protocols, one of which addresses must-run generation. According to the draft
7 protocol, market participants will be told in advance how much local generation will be
8 necessary to meet customer needs in Phoenix. Through their scheduling coordinators,
9 ESPs will be able to meet their local generation requirement a number of ways, including:
10 (1) acquiring additional transmission into Phoenix from another market participant, (2)
11 contracting with a local generation provider (such as SRP or a merchant plant), (3)
12 reducing demand through load reduction programs, and (4) purchasing “must-offer
13 energy” from APS. “Must-offer energy” refers to energy that APS is obligated under the
14 protocol to make available to scheduling coordinators at APS’ cost-of-service. The must-
15 offer obligation arises due to APS’ market power during must-run conditions. This
16 approach was developed by stakeholders in the AISA Operating Committee, and I believe
17 it is a very reasonable way to address the Phoenix must-run situation for the near future,
18 at least until there is a more diverse ownership of local generation facilities, or until
19 Desert STAR implements a must-run protocol of its own.
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1 **Q. MR. DELANEY ALSO EXPRESSES CONCERN ABOUT THE CREATION OF**
2 **THE APS GENERATING AFFILIATE.¹⁰ DO YOU WISH TO COMMENT ON**
3 **THIS ISSUE?**

4 A. Yes. Mr. Delaney is concerned that the creation of the APS generating affiliate
5 will lead to market power abuses, and he sees this as a problem with the Settlement
6 Agreement. However, the requirement to separate competitive assets from the regulated
7 portion of the company is a requirement of the Electric Competition Rules. Therefore,
8 the need for vigilance against market power abuse arises first in the application of the
9 Rules. The issue at hand is the need for a code of conduct with respect to affiliate
10 transactions. As I stated in my direct testimony, the establishment of effective rules
11 governing affiliate relationships is an integral part of successfully implementing retail
12 competition. In the proposed Electric Competition Rules, this function had been fulfilled,
13 in part, by the "Affiliate Transactions" section. Unfortunately, however, that section was
14 deleted from the proposed Rules and replaced with a requirement for Affected Utilities to
15 file a code of conduct within ninety days of the adoption of the Rules.
16

17
18 The Settlement Agreement contemplates that APS' code of conduct filing will
19 proceed in accordance with the Commission's proposed Rules as modified. The parties to
20 the Settlement Agreement are free to participate in any such code of conduct proceeding
21 and to advocate their own positions at such time. In the meantime, APS will adhere to a
22 voluntary, interim code of conduct, that will be served on the parties within thirty days of
23 Commission approval of the Settlement Agreement.
24

25
26 ¹⁰ Direct testimony of Tom Delaney, p. 4, lines 5-18.

1 Given that the "Affiliate Transactions" section of the proposed Rules has been
2 deleted, the approach taken in the Settlement Agreement is the most reasonable way to
3 address code of conduct issues without adding further delay to the start of competition.

4 **Q. DOES THE SETTLEMENT AGREEMENT PERMIT APS TO ENGAGE IN**
5 **PRICING BEHAVIOR THAT ABUSES GENERATION MARKET POWER?**
6

7 A. No. The APS generating affiliate will be under the jurisdiction of FERC, which
8 should be expected to evaluate the market power conditions prevailing when the
9 affiliate's wholesale pricing requirements are determined.

10 **Q. DR. ROSENBERG'S TESTIMONY PROVIDES AN EXAMPLE OF HOW A**
11 **CHANGED CAPITAL STRUCTURE CAN CAUSE HIGHER CAPITAL COSTS**
12 **FOR A UTILITY'S REGULATED SUBSIDIARY.¹¹ DOES THE SETTLEMENT**
13 **AGREEMENT ALLOW APS TO UNILATERALLY RESTRUCTURE ITS**
14 **CAPITAL STRUCTURE FOR ITS REGULATED SUBSIDIARY TO THE**
15 **DETRIMENT OF RATEPAYERS?**
16

17 A. No, because the capital structure of the regulated subsidiary will remain under the
18 scrutiny of the Commission. I agree with Dr. Rosenberg that it is important that the
19 regulated affiliate not be allowed to end up with a more costly capital structure as a result
20 of the corporate restructuring. Clearly, the final say in this matter rests with the
21 Commission, which will be determining APS' allowed rate-of-return in the rate case
22 scheduled to be completed by 2004. I believe it would be foolish for APS to present the
23 Commission with a disadvantageous capital structure for its regulated affiliate, because it
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26 ¹¹ Direct testimony of Alan Rosenberg, p. 5, line 15 to p. 8, line 7.

1 would be doing so at its own risk. Certainly, in approving the Settlement Agreement, the
2 Commission may see fit to serve notice that it will be paying careful attention to the
3 capital structure of the regulated affiliate that results from the corporate restructuring.

4 **Q. IN HIS TESTIMONY, MR. KINGERSKI MAINTAINS THAT APS WILL BE**
5 **ALLOWED TO DEFER RECOVERY OF STANDARD OFFER COSTS UNTIL**
6 **AFTER JULY 1, 2004 AND CITES THIS AS AN EXAMPLE OF PREDATORY**
7 **PRICING IN THE SETTLEMENT AGREEMENT.¹² DO YOU WISH TO**
8 **COMMENT ON THIS POINT?**

9
10 A. Under the Settlement Agreement, APS is allowed such a deferral only in the
11 limited case of customers who return to Standard Offer service after having left for the
12 competitive market and by returning cause APS to incur commodity costs that are not
13 otherwise recoverable under standard offer rates. In general, however, there is no deferral
14 of costs associated with Standard Offer service. Prior to July 1, 2004, APS is completely
15 at risk for recovery of costs associated with this service.
16

17 **CONCLUSION**

18 **Q. PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY.**

19 A. The membership of AECC has participated diligently in the electric competition
20 process conducted by the Commission through numerous rounds of hearings and
21 workshops. The Settlement Agreement represents a good faith effort by AECC, other
22 customer interests, and APS to resolve the many impediments that have heretofore
23 stymied the implementation of retail access. Even with approval of the agreement by the
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26 ¹² Direct testimony of Harry J. Kingerski (Enron), p. 10, line 10 to page 11, line 10.

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Commission, it would not be the final word on the subject, but just a first – albeit significant -- step. Still ahead lies final adoption of the AISA protocols (which should continue to evolve over time), the establishment of a Code of Conduct to be approved by the Commission, the development of Desert STAR, and continued regulatory oversight pertaining to market power issues. I recommend that the Commission approve the Settlement Agreement and allow retail access to proceed, bearing in mind that the implementation of retail access is not yet complete.

Q. DOES THIS COMPLETE YOUR REBUTTAL TESTIMONY?

A. Yes, it does.

Incremental Competitive Margin for a Commercial-sized APS Customer

Customer Assumptions
 Competitive supply available
 Annual kWh consumption 2,190,000
 Load Factor 50%
 KW 500
 Line loss factor Transmission 2.50%
 Line loss factor Distribution 4.30%
 Forward Price Inflation (beyond 18 months) 2.00%
 NYMEX PV Prices adjusted for weekend and off-peak periods, as of 07/07/99

Date	Standard Offer	Distribution	Transmission	Unbundled Cost	CTC	Ancillary	Market Price	Market Price adjusted for Line Losses	Total Competitive Cost	Incremental Competitive Margin	Incremental Competitive Margin
	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kWh	\$/kWh	%
Sep-99	\$0.07610	\$0.02970	\$0.00368	\$0.00115	\$0.00675	\$0.00092	\$0.04202	\$0.04488	\$0.08707	-\$0.01098	-14%
Oct-99	\$0.07522	\$0.02932	\$0.00358	\$0.00115	\$0.00653	\$0.00089	\$0.02715	\$0.02900	\$0.07045	\$0.00477	6%
Nov-99	\$0.06836	\$0.02683	\$0.00368	\$0.00115	\$0.00675	\$0.00092	\$0.02364	\$0.02525	\$0.06438	\$0.00398	6%
Dec-99	\$0.06750	\$0.02629	\$0.00356	\$0.00115	\$0.00653	\$0.00089	\$0.02608	\$0.02785	\$0.06628	\$0.00123	2%
Jan-00	\$0.06750	\$0.02518	\$0.00356	\$0.00115	\$0.00591	\$0.00089	\$0.02317	\$0.02475	\$0.06144	\$0.00906	9%
Feb-00	\$0.07025	\$0.02622	\$0.00395	\$0.00115	\$0.00655	\$0.00098	\$0.02109	\$0.02252	\$0.06137	\$0.00888	13%
Mar-00	\$0.06750	\$0.02518	\$0.00356	\$0.00115	\$0.00591	\$0.00089	\$0.02155	\$0.02302	\$0.05971	\$0.00779	12%
Apr-00	\$0.06836	\$0.02550	\$0.00368	\$0.00115	\$0.00611	\$0.00089	\$0.02225	\$0.02376	\$0.06113	\$0.00723	11%
May-00	\$0.07515	\$0.02809	\$0.00356	\$0.00115	\$0.00591	\$0.00089	\$0.02089	\$0.02576	\$0.06192	\$0.01324	18%
Jun-00	\$0.07610	\$0.02845	\$0.00368	\$0.00115	\$0.00611	\$0.00092	\$0.02412	\$0.02576	\$0.06807	\$0.01003	13%
Jul-00	\$0.07403	\$0.02809	\$0.00356	\$0.00115	\$0.00591	\$0.00089	\$0.02695	\$0.02946	\$0.07907	-\$0.00504	-7%
Aug-00	\$0.07403	\$0.02809	\$0.00356	\$0.00115	\$0.00591	\$0.00089	\$0.04936	\$0.05272	\$0.09232	-\$0.01829	-25%
Sep-00	\$0.07496	\$0.02845	\$0.00368	\$0.00115	\$0.00611	\$0.00092	\$0.04241	\$0.04529	\$0.08580	-\$0.01065	-14%
Oct-00	\$0.07409	\$0.02809	\$0.00356	\$0.00115	\$0.00591	\$0.00089	\$0.02737	\$0.02823	\$0.06232	\$0.00526	7%
Nov-00	\$0.06733	\$0.02550	\$0.00368	\$0.00115	\$0.00611	\$0.00089	\$0.02451	\$0.02618	\$0.06354	\$0.00379	6%
Dec-00	\$0.06649	\$0.02518	\$0.00356	\$0.00115	\$0.00591	\$0.00089	\$0.02703	\$0.02887	\$0.06556	\$0.00083	1%
Jan-01	\$0.06649	\$0.02417	\$0.00356	\$0.00115	\$0.00446	\$0.00089	\$0.02363	\$0.02524	\$0.05947	\$0.00702	11%
Feb-01	\$0.06920	\$0.02517	\$0.00395	\$0.00115	\$0.00494	\$0.00089	\$0.02151	\$0.02297	\$0.05916	\$0.01003	14%
Mar-01	\$0.06649	\$0.02417	\$0.00356	\$0.00115	\$0.00446	\$0.00089	\$0.02198	\$0.02348	\$0.05771	\$0.00878	13%
Apr-01	\$0.06733	\$0.02448	\$0.00368	\$0.00115	\$0.00461	\$0.00092	\$0.02270	\$0.02424	\$0.05908	\$0.00825	12%
May-01	\$0.07403	\$0.02696	\$0.00356	\$0.00115	\$0.00446	\$0.00089	\$0.02131	\$0.02276	\$0.05978	\$0.01425	19%
Jun-01	\$0.07496	\$0.02730	\$0.00368	\$0.00115	\$0.00461	\$0.00089	\$0.02460	\$0.02628	\$0.06394	\$0.01102	15%
Jul-01	\$0.07292	\$0.02696	\$0.00356	\$0.00115	\$0.00446	\$0.00089	\$0.03769	\$0.04025	\$0.07778	-\$0.00436	-6%
Aug-01	\$0.07292	\$0.02696	\$0.00356	\$0.00115	\$0.00446	\$0.00089	\$0.05035	\$0.05377	\$0.09078	-\$0.01788	-25%
Sep-01	\$0.07383	\$0.02730	\$0.00368	\$0.00115	\$0.00461	\$0.00089	\$0.04326	\$0.04620	\$0.08366	-\$0.01003	-14%
Oct-01	\$0.07298	\$0.02696	\$0.00356	\$0.00115	\$0.00461	\$0.00089	\$0.02792	\$0.02982	\$0.06684	\$0.00614	8%
Nov-01	\$0.06632	\$0.02448	\$0.00368	\$0.00115	\$0.00461	\$0.00089	\$0.02500	\$0.02670	\$0.06154	\$0.00478	7%
Dec-01	\$0.06549	\$0.02417	\$0.00356	\$0.00115	\$0.00446	\$0.00089	\$0.02757	\$0.02945	\$0.06388	\$0.00182	3%
Annual Summary	\$0.07132	\$0.02683	\$0.00363	\$0.00115	\$0.00603	\$0.00091	\$0.02839	\$0.03032	\$0.06888	\$0.00244	4%
2000 Average	\$0.07025	\$0.02576	\$0.00363	\$0.00115	\$0.00455	\$0.00091	\$0.02896	\$0.03093	\$0.06693	\$0.00332	5%

Incremental Competitive Margin for a Commercial-sized APS Customer

Customer Assumptions
 Competitive supply available
 Annual kWh consumption 876,000
 Load Factor 50%
 KW 200
 Line loss factor Transmission 2.50%
 Line loss factor Distribution 4.30%
 Forward Price Inflation (beyond 18 months) 2.00%
 NYMEX PV Prices adjusted for weekend and off-peak periods, as of 07/07/99

Date	Standard Offer	Distribution	Transmission	Unbundled Cost	CTC	Ancillary	Market Price	Market Price adjusted for Line Losses	Total Competitive Cost	Incremental Competitive Margin	Incremental Competitive Margin %
	\$/MWh	\$/MWh	\$/MWh	\$/MWh	\$/MWh	\$/MWh	\$/MWh	\$/MWh	\$/MWh	\$/MWh	%
Sep-99	\$0.08668	\$0.03389	\$0.00368	\$0.00115	\$0.00675	\$0.00092	\$0.04202	\$0.04488	\$0.09127	-\$0.00458	-5%
Oct-99	\$0.08556	\$0.03338	\$0.00356	\$0.00115	\$0.00653	\$0.00089	\$0.02715	\$0.02900	\$0.07451	\$0.01105	13%
Nov-99	\$0.07794	\$0.03042	\$0.00368	\$0.00115	\$0.00675	\$0.00092	\$0.02364	\$0.02525	\$0.06817	\$0.00977	13%
Dec-99	\$0.07677	\$0.02996	\$0.00356	\$0.00115	\$0.00653	\$0.00089	\$0.02608	\$0.02785	\$0.06895	\$0.00683	9%
Jan-00	\$0.07677	\$0.02869	\$0.00356	\$0.00115	\$0.00591	\$0.00089	\$0.02317	\$0.02475	\$0.06496	\$0.01525	15%
Feb-00	\$0.08051	\$0.03011	\$0.00395	\$0.00115	\$0.00655	\$0.00098	\$0.02109	\$0.02252	\$0.06526	\$0.01382	19%
Mar-00	\$0.07877	\$0.02869	\$0.00356	\$0.00115	\$0.00591	\$0.00089	\$0.02155	\$0.02302	\$0.06323	\$0.01355	18%
Apr-00	\$0.07794	\$0.02913	\$0.00368	\$0.00115	\$0.00611	\$0.00092	\$0.02225	\$0.02376	\$0.06476	\$0.01318	17%
May-00	\$0.08540	\$0.03246	\$0.00356	\$0.00115	\$0.00611	\$0.00092	\$0.02089	\$0.02231	\$0.06580	\$0.01960	23%
Jun-00	\$0.08668	\$0.03246	\$0.00368	\$0.00115	\$0.00591	\$0.00089	\$0.02412	\$0.02576	\$0.07008	\$0.01660	19%
Jul-00	\$0.08412	\$0.03197	\$0.00356	\$0.00115	\$0.00591	\$0.00089	\$0.04936	\$0.05272	\$0.09621	-\$0.01208	-14%
Aug-00	\$0.08538	\$0.03246	\$0.00368	\$0.00115	\$0.00611	\$0.00092	\$0.04241	\$0.04529	\$0.08962	-\$0.00423	-5%
Sep-00	\$0.08428	\$0.03197	\$0.00356	\$0.00115	\$0.00591	\$0.00089	\$0.02737	\$0.02923	\$0.07272	\$0.01156	14%
Oct-00	\$0.07562	\$0.02913	\$0.00368	\$0.00115	\$0.00591	\$0.00089	\$0.02703	\$0.02818	\$0.06717	\$0.00959	12%
Nov-00	\$0.07562	\$0.02869	\$0.00356	\$0.00115	\$0.00591	\$0.00089	\$0.02737	\$0.02887	\$0.06908	\$0.00854	9%
Dec-00	\$0.07562	\$0.02754	\$0.00356	\$0.00115	\$0.00446	\$0.00089	\$0.02151	\$0.02297	\$0.06280	\$0.01641	17%
Jan-01	\$0.07930	\$0.02890	\$0.00395	\$0.00115	\$0.00494	\$0.00098	\$0.02198	\$0.02348	\$0.06108	\$0.01454	19%
Feb-01	\$0.07562	\$0.02754	\$0.00356	\$0.00115	\$0.00446	\$0.00089	\$0.02270	\$0.02424	\$0.06257	\$0.01420	19%
Mar-01	\$0.07677	\$0.02797	\$0.00368	\$0.00115	\$0.00461	\$0.00092	\$0.02131	\$0.02276	\$0.06351	\$0.02061	24%
Apr-01	\$0.08412	\$0.03069	\$0.00356	\$0.00115	\$0.00461	\$0.00089	\$0.02460	\$0.02628	\$0.06779	\$0.01759	21%
May-01	\$0.08285	\$0.03069	\$0.00356	\$0.00115	\$0.00446	\$0.00089	\$0.03769	\$0.04025	\$0.08101	\$0.00185	2%
Jun-01	\$0.08285	\$0.03116	\$0.00368	\$0.00115	\$0.00446	\$0.00089	\$0.05035	\$0.05377	\$0.09452	-\$0.01167	-14%
Jul-01	\$0.08285	\$0.03116	\$0.00368	\$0.00115	\$0.00461	\$0.00092	\$0.04326	\$0.04620	\$0.08772	-\$0.00362	-4%
Aug-01	\$0.08302	\$0.03069	\$0.00356	\$0.00115	\$0.00446	\$0.00089	\$0.02792	\$0.02982	\$0.07057	\$0.01245	15%
Sep-01	\$0.07562	\$0.02797	\$0.00368	\$0.00115	\$0.00461	\$0.00092	\$0.02500	\$0.02670	\$0.06503	\$0.01059	14%
Oct-01	\$0.07449	\$0.02754	\$0.00356	\$0.00115	\$0.00446	\$0.00089	\$0.02757	\$0.02945	\$0.06705	\$0.00744	10%
Nov-01											
Dec-01											
Annual Summary											
2000 Average	\$0.08120	\$0.03061	\$0.00363	\$0.00115	\$0.00603	\$0.00091	\$0.02839	\$0.03032	\$0.07265	\$0.00854	11%
2001 Average	\$0.07998	\$0.02938	\$0.00363	\$0.00115	\$0.00455	\$0.00091	\$0.02896	\$0.03093	\$0.07055	\$0.00943	12%