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TESTIMONY
OF BEN JOHNSON, PH.D.
On Behalf of
The Residential Utility Consumer Office
Before the
Arizona Corporation Commission
Docket No. 01345A-08-0172

Introduction

- Q. Would you please state your name and address?**
- A. Ben Johnson, 3854-2 Killearn Court, Tallahassee, Florida.
- Q. What is your present occupation?**
- A. I am a consulting economist and president of Ben Johnson Associates, Inc.®, an economic research firm specializing in public utility regulation.
- Q. Are you the same Ben Johnson that filed revenue requirements testimony on December 19, 2008, and rate design testimony on January 9, 2009 in this proceeding?**
- A. Yes.

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Q. What is your purpose in providing this testimony?

A. Our firm has been retained by the Residential Utility Consumer Office ("RUCO") to assist with this proceeding. The purpose of my testimony is to describe various aspects of the settlement agreement that has been negotiated by Arizona Public Service Company's (APS), RUCO and various other parties, to discuss various factors that were considered by RUCO during the negotiation process, and to help explain some of the reasons why RUCO believes the agreement is in the public interest and should be approved by the Commission.

Background

Q. To provide some context, can you briefly discuss the background of this proceeding leading up to the settlement agreement?

A. Yes. APS' initial application for a rate increase was filed with the Commission on March 24, 2008. During the next few months several parties were allowed to intervene. On June 2, 2008, APS filed an Amended Application seeking a gross increase in rates of \$448.2 million (including fuel-related increases). In responsive testimony filed in December 2008, Staff proposed a total rate increase of approximately \$307 million, while RUCO proposed a total rate increase of about half that amount.

On June 6, 2008, APS filed a Motion for Approval of Interim Rates, requesting an interim rate increase of approximately \$115 million. On December 24, 2008, the Commission granted APS interim rates in the amount of \$65.2 million.

1 APS filed a notice of settlement discussions on January 23, 2009. The parties began
2 settlement discussions shortly thereafter. On March 5, the Hearing Division suspended the
3 procedural schedule to provide additional time for these discussions to continue. Procedural
4 conferences were held on April 7 and April 21, 2009. At the April 21 conference it was
5 announced that the parties had reached an agreement in principle on revenue requirement
6 issues. On May 4, 2009, the Settling Parties filed a Term Sheet outlining that agreement in
7 principle. A procedural order was issued on May 11, 2009 establishing deadlines for filing
8 testimony concerning the settlement agreement, and setting an evidentiary hearing for August
9 19, 2009.

10
11 **Q. Can you please briefly describe the settlement negotiations?**

12 A. Yes. The settlement negotiations were open to all parties to this proceeding, and throughout the
13 process there was very active participation by a most of these parties. Meetings were typically
14 held at the Commission's offices in Phoenix and were well attended. For instance, during most
15 of the meetings, APS, Staff and RUCO were each represented by their attorneys as well as
16 various staff members and subject matter experts. Arrangements were made to allow
17 participation in all of the meetings by telephone conference calls; this allowed Ralph Smith (on
18 behalf of the Staff) and myself, as well as various parties who were not physically located in
19 Arizona, to actively and cost-effectively participate in the negotiations.

20 Meetings were scheduled as frequently as two or three times per week, stretching over a
21 period of almost 5 months. Numerous issues were discussed during the negotiations, initially
22 focusing on the overall magnitude and timing of any potential increases in rates, but eventually
23 expanding to encompass numerous other issues, including essentially all of the issues raised by

1 the parties in their direct testimony concerning both revenue requirements and rate design, as
2 well as certain other issues that extended beyond the scope of those filings (e.g. Palo Verde
3 depreciation).

4 Many of these issues were highly complex and the parties entered the negotiations with
5 widely varying perspectives on the appropriate resolution of these issues; further complicating
6 matters, many of the issues were directly or indirectly interrelated with other issues. Additional
7 complexity was introduced by the fact that there were so many different participants, and an
8 effort was made to reach a global settlement that was acceptable to as many participants as
9 possible.

10 The fact that each party had a unique perspective, and that some issues (and sub-issues)
11 were more important to some parties than to others, made things more time consuming and
12 complex, but it also opened up opportunities for trying to find creative solutions to the issues –
13 not just trying to find a middle ground between the positions filed by the parties in their
14 testimony, but in some cases going “outside the box” to craft solutions that were acceptable to
15 all concerned, and were believed to be in the broad public interest.

16
17 **Q. Why did RUCO and other parties invest so much time and effort in these negotiations?**

18 A. As indicated by the lengthy duration of the negotiations, it was not easy to reach agreement
19 amongst so many different parties. There was a great deal of "give and take" during this
20 process, but there was also a strong awareness that the final product of the negotiating process
21 needed to be in the general public interest, since it would be submitted to the Commission for its
22 review and approval. Realizing that any proposed settlement would be subjected to close
23 scrutiny, the parties strived to achieve a global settlement of all the disputed issues, they tried to

1 find solutions to these issues that were satisfactory to as many parties as possible, and they also
2 sought solutions that were not only acceptable to the parties represented in the room, but were
3 also believed to be in the broad public interest, and thus would hopefully be acceptable to the
4 Commission.

5 When viewed from the perspective of RUCO or any other individual party, the proposed
6 settlement agreement is not exactly what that party would prefer seeing emerge from a fully
7 litigated proceeding. However, RUCO and the other parties recognized that decisions in a fully
8 litigated rate proceeding rarely conform to the preferences of any one party, and they recognized
9 that compromises reached through good faith negotiations had the potential for better achieving
10 their respective top priorities and more successfully advancing the broad public interest than
11 whatever decision would emerge from litigation – particularly in a complex case like this, where
12 there are so many parties pursuing so many different issues. A litigated resolution is heavily
13 influenced by various attributes and limitations of the litigation process, including time and
14 resource constraints, tactical mistakes during the litigation process, and other factors which
15 make the result of the process unpredictable, and can easily lead to results which are less than
16 satisfactory for all concerned. Given this background, it is easier to understand why so much
17 time and effort was invested in the negotiation process, and why the signatories feel that the
18 proposed agreement is in their interest and the public interest and why it should be approved by
19 the Commission. RUCO and other signatories support the agreement notwithstanding the fact
20 that it resolves various issues in a manner which is inconsistent with the recommendations they
21 initially submitted in their direct testimony.

1 **Key Features of the Settlement Agreement**

2

3 **Q. Can you briefly highlight some of the key provisions of the proposed settlement agreement**
4 **from RUCO's perspective?**

5 A. Yes. For the sake of brevity and expediency, I will not discuss every provision in the agreement.
6 Rather, I will focus on a few of the provisions that are particularly important to RUCO in
7 carrying out its responsibilities on behalf of residential ratepayers.

8 While my discussion is intentionally brief and selective, a failure to mention other
9 provisions should not be interpreted as an indication that RUCO considers those provisions to
10 be unimportant or insignificant. While each of the parties had different priorities during the
11 negotiation process, it is important to recognize that the settlement represents a balanced
12 compromise reflecting the differing priorities of many different parties. RUCO supports the
13 agreement in its entirety, and urges the Commission to adopt all of the provisions of the
14 agreement without modification, even if certain provisions are not a major priority for RUCO,
15 because all of the provisions were important to reaching a global settlement of the case – one
16 that is satisfactory to all of the parties to the agreement.

17 Section II of the settlement includes a "General Rate Case Filing Plan" which provides
18 that APS will not file its next two rate cases before June 1, 2011 and June 1, 2013, respectively.
19 Further, new base rates cannot become effective before July 1, 2012.

20 Section III of the settlement agreement provides that the interim rate increase approved
21 by the Commission will not be subject to refund. The agreement further provides for an
22 additional non-fuel Base Rate increase of \$131.1 million, a revenue increase of \$11.2 million
23 associated with establishing new base fuel levels, and encompasses an increase of \$137.2

1 million to recover base fuel costs. The total revenue increase under the agreement is \$344.7
2 million, inclusive of the interim increase and those portions of the rate increase which have
3 previously been recovered through the Power Supply Adjustor.

4 Section VII of the agreement requires APS to reduce its expenses by an average annual
5 basis of \$30 million per year over a 5 year period beginning in 2010. The total expense
6 reduction shall be a minimum of \$150 million, and no annual reduction shall be less than \$25
7 million.

8 Section VIII of the agreement requires APS to make certain financial commitments.
9 First, the Company must provide additional equity of no less than \$700 million by December 31,
10 2014. Second, the Company commits to using its best efforts to maintain investment grade
11 financial ratios and to improve its financial ratings with the rating agency community. Third,
12 APS will strive to achieve a capital structure with no more than 52% debt/total capital, as
13 calculated by the credit rating agencies, by December 31, 2012.

14 Section X of the proposed agreement modifies the treatment of Schedule 3 (line
15 extension) proceeds. Currently, line extension fees are recorded as Contributions in Aid of
16 Construction (CIAC). The agreement allows APS to record these proceeds as revenue from
17 January 1, 2010 to either December 31, 2012 or the conclusion of the Company's next general
18 rate case, whichever occurs first. Section X also requires APS to withdraw its Impact Fee and
19 System Facilities Charge proposals.

20 Section XI of the agreement allows APS to adjust depreciation rates for its Palo Verde
21 plant to be consistent with the Palo Verde license extension the Company is seeking to receive
22 from the Nuclear Regulatory Commission. The decreased depreciation expenses will go into
23 effect when the license extension is approved, or January 1, 2012, whichever is later, and the
24 benefit of these lowered expenses will be flowed through to customers at the time new base

1 rates next become effective – most likely in July 2012, or shortly thereafter.

2 Section XII provides incentives for the Company to limit Executive compensation to test
3 year levels, and to strive to achieve the performance measurements set forth in Section XIII.
4 The latter section establishes specific operational and financial performance measurements for
5 APS, relating to energy efficiency, expense reductions, capital structure improvements and other
6 important goals. The agreement includes detailed reporting requirements which obligate APS
7 to provide information to the Commission regarding these issues. As well, Section XIII ensures
8 that an independent third party (selected by Staff) shall conduct a benchmarking analysis of
9 APS’ operational and cost performance, relative to a comparable group of at least 30 other
10 investor-owned electric-only utilities.

11 Section XIV of the agreement establishes new energy efficiency goals, calling for
12 energy savings of 1.0% 1.25% and 1.5% for the years 2010, 2011 and 2012, respectively.

13 Section XVII of the proposed agreement provides that the increased revenues allowed or
14 confirmed by the settlement will be applied on an equal percentage basis to all rate schedules.

15 Section XX of the agreement requires APS to make additional demand response
16 commitments, including a new residential critical peak pricing rate program to be offered on a
17 pilot basis.

18
19 **Settlement Rate Increase**

20
21 **Q. How does the revenue increase included in the proposed settlement compare to the level of**
22 **revenues recommended by the parties in their previously filed direct testimony?**

23 A. The \$345 million increase included in the settlement is less than the amount requested by APS,

1 but more than the amount recommended by RUCO, Staff and AECC. As summarized in the
2 table in paragraph 3.8 of the agreement, APS originally requested an increase of \$448 million.
3 RUCO recommended against any further increase beyond the \$170 million or so that had
4 already been accomplished through the Power Supply Adjustor, while Staff and AECC
5 recommended increases of \$307 and \$347 million, respectively. The revenue increase included
6 in the settlement is significantly more than what RUCO recommended, as set forth in my direct
7 testimony, but it is less than \$50 million higher than the amounts recommended by the Staff and
8 AECC, and it is more than \$100 million lower than the amount requested by APS.

9
10 **Q. Can you help explain why RUCO agreed to a settlement that provides a rate increase that**
11 **is so much greater than you recommended?**

12 A. Yes. Although there were many factors that influenced RUCO's decision to the settlement, I
13 will focus on three of those factors.

14 First, RUCO considered the litigation risks associated with these issues. These litigation
15 risks were of greater than normal concern in this particular instance, because of the complexity
16 of the issues (involving numerous different adjustments), and the fact that both the Staff and
17 AECC had filed testimony with recommendations accepting many of the Company's proposed
18 post-test year adjustments. In my direct testimony, I explained RUCO's objections to these sorts
19 of "attrition" related adjustments as follows:

20 In the Company's filing, it proposes a mish-mash of different
21 adjustments, calculated as of different dates. No overarching principle
22 has been put forward to justify the particular mix of adjustments and
23 calculation dates, and the end result deviates greatly from the Company's
24 actual operating experience during the test year....

25 The Company has proposed an ad hoc mixture of adjustments
26 with no consistency to the dates used for the various adjustments, and no

1 consistency in determining the scope of each adjustment...
2 my general approach has been to start with a specific cut-off date,
3 [the end of the test year] and then to remove all of the attrition-related
4 adjustments that are inconsistent with that cut-off date.
5

6 If these issues had been fully litigated, I would have emphasized the theoretical and
7 conceptual advantages of using a “pure” historical test year, with fewer mismatches and greater
8 internal consistency. However, as a practical matter, it seemed unlikely that this “purist”
9 viewpoint would ultimately prevail in this case – particularly since APS, Staff, and AECC were
10 all using a “mish-mash of different adjustments, calculated as of different dates.” The Staff
11 accepted this approach with considerable reluctance, because of the current extraordinary
12 circumstances, but regardless of the reason, RUCO essentially stood alone in recommending use
13 of a more consistent or “pure” approach to developing the revenue requirement in this case.

14 Under these circumstances, there seemed to be a significant chance that RUCO might
15 ultimately fail to prevail on these issues. Furthermore, there was no way to predict the outcome
16 – the final result adopted by the Commission would presumably be whatever emerged from the
17 litigation process. No one at RUCO could predict the outcome of that litigation process in
18 advance, since it would partly depend on the outcome of events during the hearing process.

19 Thus, during the negotiation process RUCO did not view the choice as being between its
20 direct testimony and whatever result emerged from the give and take of negotiation. Rather, the
21 choice was between whatever result emerged from the negotiating process and the result that
22 would emerge from the litigation process. However, the negotiation result was always clearly in
23 view (and was being influenced by RUCO), whereas the possible litigation result was uncertain
24 and unpredictable. To adapt a cliché – RUCO compared a bird in the hand to the possibility of
25 two in the bush, but it was very much aware of the fact that under the current circumstances the
26 odds were against capturing at least one of the birds in the bush.

1 Second, RUCO concluded that the unusual current economic circumstances when
2 combined with APS' less-than-ideal financial condition, created an extraordinary situation
3 which justified softening its stance with respect to deviations from the historical test year. This
4 is consistent with the rationale given by the Commission in explaining why it granted interim
5 rate relief in this case, and the rationale given in the Staff's direct testimony, explaining why it
6 accepted so many of the Company's proposed post-test year adjustments. This is also consistent
7 the following comments in my direct testimony, in which I recognized that the current unique
8 circumstances might justify some deviation from the Commission's normal past practices:

9 While RUCO is not recommending any other attrition compensation, to
10 the extent the Commission concludes that additional compensation is
11 warranted by the unique circumstances of this case, particularly the weak
12 status of APS' credit metrics, a reasonable approach to calculating that
13 compensation is set forth in the appendix to my testimony.
14

15 Third, RUCO viewed the settlement as a negotiated package. While RUCO accepted a
16 revenue increase that was larger than it originally advocated, the Company accepted an increase
17 that was less than it originally requested, and it accepted many other provisions and obligations
18 which will advance the public interest – provisions and obligations that might not be imposed in
19 a fully litigated proceeding.

20 Accordingly, I recommend that the Commission evaluate the settlement agreement as a
21 whole, including concessions and commitments made by APS that go beyond anything that was
22 recommended by RUCO or other parties in their direct testimony, including commitments to
23 strengthen APS' financial metrics, commitments concerning the timing of future rate cases, and
24 commitments relating to performance measures, a benchmarking study, executive compensation,
25 renewable energy sources and energy efficiency. With the settlement, residential customers
26 know what to expect from APS over the next few years, and they will receive the benefit of

1 additional commitments and assurances that might not otherwise be attainable.

2

3 **Q. Couldn't the Commission accept the portions of the settlement which it finds most**
4 **appealing, while rejecting other provisions?**

5 A. The Commission might have the legal right to do so, but I do not think it would be wise to
6 follow a “chinese menu” approach in reviewing the settlement agreement. In this case, where
7 the settlement is so comprehensive both with respect to the issues and the parties, it would be
8 preferable for the Commission to evaluate the agreement in its entirety, rather than evaluating
9 the attractiveness of individual provisions. Among other problems, a “chinese menu” approach
10 would have a very unfortunate chilling effect on future settlement negotiations. Public Utilities
11 will be less willing to negotiate in good faith if they are fearful that concessions they make
12 might be used against them in the Commission's final order, without their receiving the
13 offsetting benefit of concessions made by RUCO and other intervenors during the negotiating
14 process.

15

16 **Q. Are there specific additional provisions that particularly influenced RUCO's decision to**
17 **accept the settlement rate increase?**

18 A. Yes. RUCO took into consideration several closely related provisions, including the equity
19 infusion and capital structure commitments included in Section VIII; the timing of future rates
20 cases described in Section II; and the cost cutting commitments included in Section VII. And,
21 of course, RUCO was aware of other provisions in the agreement, relating to energy efficiency,
22 performance measures, reporting requirements, benchmarking, and many other issues, that also
23 advance the public interest.

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Extraordinary Financial and Economic Events

Q. You have alluded to extraordinary events in the financial markets and the overall economy. Before explaining their relevance to RUCO's view of the settlement, can you please describe the events in question, and provide evidentiary support for your interpretation of these events, as well as their relevance to the agreement?

A. Yes. During the months leading up to the negotiations, and continuing through the period in which the agreement was being negotiated we have recently seen extraordinary events occurring in the financial markets and the broader economy. With the benefit of hindsight, these unusual events can be traced back to 2007, as the upward trend in home prices stalled, and troubles in the financial sector became increasingly apparent.

By January 22, 2008, Bank of America and Wachovia reported dramatic declines in their earnings, with 4th quarter earnings that were down 95% and 98%, respectively from the prior year. Both companies attributed this dismal performance to disruptions in the capital markets and the slowing economy. On March 17, 2008 Bear Stearns was acquired by JP Morgan Chase, under pressure from and with the assistance of the federal government. The Federal Reserve provided extraordinary financial support for the transaction; immediately prior to this “shotgun marriage”, Bear Stearns' stock price had dropped from \$172 to \$2, as weaknesses in its balance sheet became increasingly apparent, and investors began to question the firm's viability.

Over the course of the following months, other indications of trouble emerged. For instance, on April 14, 2008, Wachovia announced a \$393 million first-quarter loss and a 41% cut to its dividend, and indicated that it would need to raise \$7 billion in capital. Similarly, on

1 June 9, 2008, Lehman Brothers Holdings announced that it would report a quarterly loss of
2 nearly \$3 billion, the first loss since the company went public. But during this period most
3 observers assumed these were isolated incidents involving specific, limited problems involving
4 particular firms; very few realized the extent to which a bubble in home prices had occurred, or
5 that it would lead to a financial “panic” reminiscent of the one that occurred in 1929.

6 The first really strong indication that the problems might be serious enough to adversely
7 threaten the entire economy occurred on September 7, 2008, when the US Treasury bailed out
8 Government-sponsored but privately owned mortgage companies Freddie Mac and Fannie Mae
9 in an attempt to avoid a collapse of the housing market. While in some ways a subtle change
10 (making previously implicit assurances of federal support for these firm's debt increasingly
11 explicit), in other ways this was an extremely significant event. Over the prior decade, these
12 publicly traded, profit-making firms' “book of business” (their assets plus the mortgage
13 securities they've guaranteed) had grown to a total of about \$5.2 trillion, which was nearly as
14 large as the entire \$5.3 trillion of external debt then owed by the US Government. While this
15 bailout was probably unavoidable under the circumstances at the time, it didn't end the financial
16 and housing crisis, nor did it bring an end to federal bailout attempts on the scale of tens of
17 billions, and even hundreds of billions, of dollars.

18 A week later, on September 15, 2008 Lehman announced that it had filed Chapter 11
19 bankruptcy - at the time the largest bankruptcy in U.S. history. The next day, on September 16,
20 2008, the Federal Reserve agreed to an \$85 billion bailout of troubled insurance giant AIG.

21 On October 3, 2008, the Federal Government announced a \$700 billion Troubled Asset
22 Relief Program for the purchase of "troubled" bank assets. But, even this extraordinary program
23 was not the end of the line. On November 25, 2008, the Federal Reserve announced an
24 additional \$800 billion package intended to help support the financial sector of the economy.

1 Meanwhile, these extraordinary bailout efforts were accompanied by an extraordinary easing of
2 monetary policy, as the Federal Reserve began slashing short term interest rates and expanding
3 the money supply in an attempt to avert panic and increase liquidity. By December 16, 2008,
4 the benchmark Fed rate had been cut to near zero.

5 While the downturn and related government bailout efforts started in the housing and
6 financial sectors, the problems quickly engulfed the manufacturing sector as well. Quarterly
7 sales of the "all manufacturing" group tracked by the U.S. Census Bureau and the Federal Trade
8 Commission declined by 11.1% and 22.1% during the 4th quarter of 2008 and first quarter of
9 2009, in sharp contrast with increases at annualized rates of 11.6%, 13.2% and 9.8% in the first
10 three quarters of 2008.

11 The impact on the entire economy can be vividly seen in the U.S. Gross Domestic
12 Product (GDP), which increased at annualized rates of .9% and 2.8% respectively, during the
13 first two quarters of 2008, extending a pattern of strong economic growth which began in 2003.
14 Conditions softened in the third quarter, when GDP fell at an annual rate of .5%, then turned
15 sharply worse in the 4th quarter of 2008, when GDP declined at a 6.3% annual rate. News of
16 this sharp downturn was officially confirmed while the settlement negotiations were underway,
17 and the downturn continued during the negotiations. Current estimates indicate that GDP was
18 declining at an annual rate of about 5.5% during the first quarter of 2009, despite near-zero
19 short term interest rate, a multi-trillion dollar expansion of the Federal Reserve's balance sheet,
20 and other extraordinary attempts at propping up the economy.

21 On December 19, 2008 the US Government's bailout efforts expanded beyond the
22 financial sector, as it decided to pump \$17.4 billion into GM and Chrysler in hopes of preventing
23 the collapse of these industrial giants. During the first quarter of 2009, while the settlement
24 negotiations were underway, it became increasingly clear that this initial \$17.4 billion taxpayer

1 bailout might not be sufficient to save these firms. GM subsequently reported a 1st quarter
2 2009 loss of \$6 billion, following on the heels of a \$31 billion annual loss during 2008. And, on
3 April 30, 2009, Chrysler filed for chapter 11 bankruptcy, with devastating consequences for
4 bond holders and other debtors. On June 1, 2009, GM followed suit by also filing for
5 bankruptcy protection. As this is written, it remains unclear how much money the US
6 Government will eventually pump into these firms, or to what effect, and it remains uncertain
7 how far the economy will decline, or how long the recession will last.

8
9 **Q. What has occurred in the national labor market during this time period?**

10 A. Labor conditions have deteriorated as problems that initially emerged in specific market sectors
11 and geographic areas have gradually expanded into larger areas and more sectors of the
12 economy. In January 2008, the national unemployment rate stood at just 4.9%. Unemployment
13 had climbed slightly to 5.1% by March 2008, increasing to 5.8% in July 2008. Then, as the
14 financial crisis and federal bailout efforts began to dominate the headlines, the rate of
15 unemployment began to escalate. By January 2009 the national unemployment rate had reached
16 7.6%, and conditions continued to deteriorate throughout the negotiations. By April 2009, when
17 an agreement in principal was announced, the unemployment rate had reached 8.9% and the end
18 was not in sight. As this testimony was written, the most recent data available was for May,
19 2009 when unemployment had increased to 9.4%.

20
21 **Q. How has the housing market performed during this period?**

22 A. In January, 2008 there were 1,083,000 new housing starts, as reported by the Census Bureau.
23 While the bubble in housing prices began to burst in some markets during 2007, nationally the

1 housing market was slow to react to the shift from a pattern of ever-increasing housing prices to
2 one of stagnation or decline. In fact, during June, 2008 new housing starts nationwide remained
3 at about the same level as six months earlier – 1,078,000, or less than half the prior peak of
4 2,273,000 which occurred near the peak of the housing price bubble, in January 2006.

5 As housing prices slumped, mortgage lenders became increasingly risk averse,
6 foreclosures escalated and potential home buyers became more cautious. As conditions in the
7 financial sector deteriorated and news of government bailout efforts hit the headlines, the
8 housing sector went into a sharp decline, with falling housing prices spreading to more and
9 more parts of the country. As a result, housing starts began dropping rapidly, falling to a low of
10 454,000 in April, 2009 before edging up to 532,000 in May 2009 – roughly half the level of the
11 prior year, and less than one fourth the level experienced during the 2006 peak.

12
13 **Q. How has the stock market reacted to these extraordinary events?**

14 A. The Dow Jones Industrial Average stood at 13,044 at the beginning of 2008, just modestly
15 below a new all-time high that was reached a few months earlier. By September and October of
16 2008, as financial markets tightened and fears of a deep recession began to spread, the Dow
17 plunged below 9,000, then began fluctuating wildly. The Dow finished the year off its
18 November low, but it was still down 36 percent – its worst annual performance since the Great
19 Depression.

20 As the new year started, optimism was spreading that perhaps the worst was over and a
21 bottom had formed. However, by February 2009, it starting dropping again. The market
22 continued to drop sharply during the early stages of the negotiations, decisively breaking
23 through the prior year-lows and falling all the way to a new low of 6,594 on March 5, 2009. Not

1 only had the market failed its “test” of the lows experienced in November 2008, the Dow
2 breached the psychologically important 7,000 level – a level last experienced in 1997.

3 Because the Dow had declined more than 50% relative to its level at the beginning of
4 2008, some observers suggested at least a temporary correction was overdue, while others
5 argued the worst might finally be over and the bottom had finally been reached. While many of
6 the classic signs of a market bottom were missing, market psychology improved, and the market
7 rallied sharply during the remainder of March and April. By the time an agreement in principal
8 was announced in late April, the Dow was again trading above 8,000.

9 The recent rally has certainly been positive, with the Dow trading in the vicinity of 8,500
10 as this was written in late June, 2009. It remains to be seen whether the bear market has
11 actually ended, or the recent upward movement in prices has been a classic “bear market rally”
12 (lulling investors into thinking the worst is over, before inflicting more pain).

13
14 **Q. How have interest rates and the credit markets behaved during this time period?**

15 A. In January, 2008, yields on 3 month treasuries were 2.82%. By June of 2008, short term yields
16 had dropped to 1.89%, as the economy slowed and monetary policy eased. Then, in response to
17 further deterioration in the economy and a resulting lessening of credit demand, as well as the
18 massive easing of monetary policy, short term rates plummeted, with yields on 3 month
19 treasuries declining to essentially zero by December, 2008. More recently, 3 month treasuries
20 were yielding just 0.18% in May, 2009.

21 Although long term interest rates have not moved in synch with short term rates, they
22 have also experienced some dramatic changes. In January, 2008, yields on 30 year Treasury
23 bonds were 4.33%. In June of 2008, long term yields had actually increased slightly, to 4.69%,

1 despite the gradual weakening of the economy. But, as the financial crisis and federal bailouts
2 began to dominate the headlines, investors became increasingly worried about all forms of risk,
3 which made US Government debt increasingly attractive, relative to other, riskier options.
4 Yields on 30 year Treasury bonds plummeted to 2.87% in December 2008, before investors
5 pulled back, as they became increasingly nervous about the long term inflationary implications
6 of recent monetary and fiscal policy. By May, 2009, yields on 30 year Treasury bonds had
7 moved back up to 4.23%.

8 Interest rates on corporate bonds have also fluctuated widely over the past 18 months, at
9 least partly in response to large shifts in attitudes toward risk. Aaa rated corporate bonds were
10 yielding 5.33% in January, 2008, or approximately 1% more than the corresponding yield on
11 Treasury bonds. At the end of 2008, these low risk corporate bonds were yielding 5.05%, just
12 slightly lower than when the year began, whereas Treasury bond yields had declined sharply.
13 As a result, the lowest risk corporate bonds were yielding nearly 2.2% higher than the
14 corresponding yield on Treasury bonds. Since Aaa corporate bonds are normally viewed as
15 being only one notch more risky than Treasury bonds, this unusually large gap suggests the
16 “flight to quality” that temporarily benefited Treasury bonds did not fully extend to even the
17 highest quality corporate bonds.

18 The market for higher risk corporate bonds has been even more volatile and unfavorable.
19 Yields on Baa corporate bonds were 6.54% in January, 2008, representing a premium of 1.21%
20 relative to Aaa bonds, or about 2.21% relative to Treasury bonds. Toward the end of 2008, fears
21 of further collapse of the financial system scared investors away from higher risk alternatives,
22 pushing Treasury yields sharply lower, while the yield on Baa bonds moved in the other
23 direction, climbing to 8.43%. The result was an extraordinary large gap of 3.38% between Baa
24 and Aaa bond yields in December 2008, and an even more extreme gap of 5.56% between Baa

1 how deep the current recession will be, how long it will last, or what its full implications will be
2 for financial markets, the energy markets, the Arizona economy, or APS specifically. There is
3 no way of knowing whether credit markets will soon return to normal, whether market
4 conditions will remain poor, or whether they will further worsen. If the recession proves to be
5 deeper, or more long lasting than most market participants currently anticipate, or if risk
6 aversion intensifies even further, the adverse implications for APS and its customers could be
7 quite severe, particularly if APS were to lose its investment grade bond rating.

8 Under these extraordinary circumstances, RUCO concluded that it would not be prudent
9 to continue to insist upon strict reliance on a historical test year with minimal post-test year
10 adjustments. Consistent with this shift in priorities, RUCO decided that the interests of
11 residential customers would best be advanced by pushing APS to strengthen its financial
12 metrics, and to take extraordinary steps to protect APS' investment grade bond rating, even if
13 this might require somewhat higher electric rates in the short term. RUCO concluded that the
14 downside risks of losing the bond rating, or losing access to credit markets on favorable terms
15 during these turbulent times outweighed any benefits that might be gained from lower rates
16 during the short term.

17 Succinctly stated, these extraordinary economic and financial conditions in combination
18 with APS' marginal financial metrics led RUCO to accept a rate increase that was substantially
19 larger than I originally recommended. RUCO believes residential customers will be better
20 served by accepting the rate increase called for by the settlement, because this significantly
21 reduces the risk of losing APS' investment grade bond rating at a particularly inopportune time
22 – when financial markets are unusually jittery and firms with less than stellar credit risk losing
23 access to capital markets.

1 **Attrition**

2

3 **Q. Can you clarify how current economic conditions relate to the attrition issue, and how the**
4 **attrition issue relates to the settlement rate increase?**

5 A. Yes. In its direct testimony, the Company contends that it has underearned by \$321 million
6 from 2003-2007, and projects an additional shortfall of at least \$380 million will occur through
7 2010 under present conditions. As I explained in my direct testimony, there is no expectation
8 that earnings will exactly match the allowed rate of return. However, such a substantial level of
9 under-earning occurring over a prolonged period is troubling. As I explained in Appendix B
10 attached to my direct testimony, the phenomenon of a utility's profitability eroding over time is
11 referred to as "attrition". A variety of factors can contribute to attrition, including changes in the
12 utility's revenues, expenses and investment. If growth in investment and growth in expenses
13 outpaces growth in revenues, attrition will occur.

14 In most cases attrition is attributed to one or more of the following: inflation; growth in
15 capital investment per KWH or per customer; and, regulatory lag (which delays recovery of cost
16 increases). Typically, inflationary pressures outstrip the benefits of increasing economies of
17 scale, technological progress and increasing operating efficiency. Assuming the utility is
18 allowed to pass fuel and purchased power cost increases through to consumers, the most likely
19 circumstance in which a utility might experience continued erosion of its profitability (attrition)
20 is when the utility is investing substantial amounts in additional plant and equipment with
21 higher unit costs than its existing facilities – assuming the adverse impact of inflation on these
22 new investments outweighs the beneficial impact of increased economies of scale that often
23 accompanies such growth.

1 In Appendix B to my direct testimony I concluded that APS has been suffering from
2 "mild" attrition, and that attrition was expected to continue. My conclusions were based upon
3 an examination of historical and projected financial and operating data for the years 2005-2010.
4 In developing my estimates, I focused my attention on the 2005-2007 time period, with a more
5 limited consideration of the partly projected 2005-2010 time period, and the longer 1997-2007
6 historical time period. I also noted that the Commission may want to consider a larger amount
7 of attrition compensation than was implied by the data from this time period, if it wanted to
8 further strengthen the Company's financial position.

9 During the settlement negotiations, as I have explained, RUCO shifted its focus away
10 from the 2007 test year and began to place greater emphasis on current 2009 and near-future
11 (2010-2014) financial and economic conditions. During this shift in focus, it became
12 increasingly apparent that the relatively mild rate of attrition that had been experienced over the
13 2005-2007 time period might worsen over the next few years.

14 The current unusual economic conditions, particularly the collapse of housing prices,
15 reduction in stock market values, and increase in unemployment, result in increased
16 uncertainties concerning the current and near-future rate of attrition. Given the factors that
17 contribute to attrition, and the specific problem of continuing high levels of investment without
18 concomittant revenue growth, there was reason to be concerned that a relatively mild attrition
19 problem might have become something much more serious.

20 While the long term population trends favoring migration into states like Florida and
21 Arizona are unlikely to suddenly reverse course, there is greater-than-normal uncertainty
22 concerning the rate of migration into APS' service territory during the next few years. Baby
23 boomers may decide to postpone their retirements in response to losses in their 401Ks; working
24 people may decide to move to the Sun Belt in hopes of finding a job – or they may decide to

1 stay where they are until housing prices stabilize and labor market conditions improve.

2 All that can be said with any confidence at the moment is that there is a great deal of
3 uncertainty concerning near-term growth rates. Yet, APS must continue to invest to maintain
4 reliability and to accommodate growth that has already occurred, and to some extent it needs to
5 continue to invest in anticipation of the resumption of growth which will presumably occur at
6 some point in the future. Until revenue growth materializes, APS faces the need to finance
7 investments without an immediate influx of revenues from new customers. Hence, this is a time
8 of unusual uncertainty concerning the rate of attrition.

9

10

11 **Bond Ratings and Credit Metrics**

12

13 **Q. You've alluded to APS' bond ratings as one of the factors considered by RUCO. For the**
14 **convenience of the Commission, can you please briefly summarize the key facts supporting**
15 **this aspect of your analysis?**

16 A. Yes. APS credit ratings are BBB-, Baa2, and BBB by S&P, Moody's and Fitch, respectively.
17 APS is rated on the lowest tier of "investment grade" credit by S&P, it is rated only 1 notch
18 higher by Moody's and Fitch, and the Company's credit metrics provide little reason to hope that
19 this situation will improve anytime soon. The weak rating is partly due to the fact that APS has
20 generated relatively weak earnings, and partly due to the fact that APS has long term purchased
21 power contracts which are interpreted by the credit rating agencies in a similar manner to debt.

22 As a result, some of the quantitative credit metrics are borderline for continuation of its
23 existing, relatively weak, bond rating. APS claims that if the Commission does not grant

1 adequate and timely relief, "the Company's credit metrics will reach non-investment grade by
2 the end of 2009, which could result in a credit downgrade with devastating financial results to
3 both APS and its customers." [Brant Direct Testimony, p. 37]

4
5 **Q. To what extent do the rating agencies focus on financial performance in evaluating credit**
6 **ratings?**

7 A. The rating agencies consider the interaction of business and financial risk, together with actual
8 financial performance (credit metrics) during the ratings process. The S&P rating agency
9 analyzes financial risk both qualitatively and quantitatively, "mainly with financial ratios and
10 other metrics that are calculated after various analytical adjustments are performed on financial
11 statements prepared under GAAP." [Attachment DEB-4, p. 12] S&P provides the following
12 indicative financial risk ratios for U.S. utilities:

13

	Cash Flow		Debt Leverage
	FFO/Debt (%)	FFO/Interest (x)	Total Debt/Capital (%)
Modest	40-60	4.0-6.0	25-40
Intermediate	25-45	3.0-4.5	35-50
Aggressive	10-30	2.0-3.5	45-60
Highly Leveraged	Below 15	2.5 or less	Over 50

14 Source: Attachment DEB-4, p. 12

15
16 **Q. Where does APS fall on this matrix?**

17 A. As I explained in my direct testimony, according to S&P's June 25, 2008 report, APS' "Funds
18 From Operations" (FFO)/Debt ratio is 16%, FFO/Interest ratio is 4, and debt to total capital is
19 57% [S&P Ratings Direct, June 25, 2008; APS13070, p. 2] APS' FFO/Debt ratio is particularly

1 problematic, placing the Company just barely above the "highly leveraged" category. The rate
2 increase called for in the settlement will increase the numerator of this ratio, helping to move
3 the Company toward a more favorable category for this metric. However, the 57% debt ratio
4 still places APS near the unfavorable end of the range for the "Aggressive" financial risk
5 category. As I will explain below, under the settlement agreement, APS is committed to taking
6 steps to improve both its FFO/Debt and its debt/total capital ratio as measured by the rating
7 agencies. These steps should help move the Company away from the "Aggressive" or "Highly
8 Leveraged" categories, toward the less risky "Intermediate" category.

9
10
11 **Q. What would be the effect of a downgrade of APS' bond ratings?**

12 A. APS' ratings are currently toward the low end of the industry range, and any substantial further
13 degradation could put the Company into one of the "junk" bond categories. The most obvious
14 reason for concern is the impact of any further downgrading on the interest rates which would
15 be paid by the Company when it needs to raise additional debt capital. As ratings decrease, the
16 required interest on new issuances increases. These increased debt costs lead to higher costs for
17 customers over the life cycle of the debt issuance (typically 20 years). However, as I explained
18 in my direct testimony, the risk associated with a downgrade go beyond measurable differences
19 in interest rates. At a time when financial markets continue to be unusually jittery, there is some
20 risk (however remote) that a further deterioration in APS' financial metrics could make it very
21 difficult, if not impossible, for APS to acquire the funds it needs to finance its construction
22 program.

1 **Q. Can you further elaborate on how bond ratings relate to the settlement?**

2 A. Both stock and bond market conditions continue to be unfavorable for firms needing to raise
3 capital. This is particularly true for firms with Baa and lower bond ratings that may need
4 additional debt financing. There is uncertainty regarding how long these problems will persist
5 or whether financial market conditions will improve or worsen over the next few years. There is
6 also a possibility that the rating agencies will tighten the requirements for maintaining an
7 investment grade bond rating, either de facto or de jure. Such a tightening could plausibly
8 emerge during the next few years, as the bond rating agencies react to rising defaults, increased
9 government scrutiny of their ratings, and ongoing criticism of their failure to adequately warn
10 against the risks which triggered the recent financial crisis and massive government bailout
11 efforts. Needless to say, while this risk may be somewhat remote, it is nevertheless significant
12 in this case, because APS has an ongoing need to access the credit markets, and it cannot simply
13 place its construction program on hold until market conditions improve.

14 During a financial crisis or tight credit environment, even firms with an investment
15 grade bond rating may find it more difficult than normal to issue additional debt or equity.
16 Having a bond rating toward the low end of the utility industry, the Company may find it
17 difficult to fully fund its planned capital construction program – bearing in mind that merely
18 offering to pay higher than normal interest rates wouldn't necessarily solve the problem, since
19 the very need to offer such high rates could be perceived as a sign of weakness, pushing away
20 more risk-averse investors and making it harder to raise capital in the future. For instance, the
21 FFO/interest ratio will further deteriorate if APS is required to pay higher interest rates on new
22 issuances – a phenomena which is indicative of the increased default risks to bond holders when
23 a firm is under pressure to keep borrowing even during unfavorable credit conditions.

1 Were it to lose the ability to access the debt market at attractive rates, APS would be left
2 with relatively limited and unattractive options. It could stop paying dividends (which would
3 effectively force Pinnacle West to do the same thing), and attempt to meet its financing needs
4 entirely through internally generated cash flow. It could slow, or halt, all but the most urgently
5 needed construction projects, but if this were to continue for very long, it could result in a
6 reduction in service reliability, or require extraordinary measures to maintain reliability, such as
7 rolling brownouts during peak hours, or a temporary moratorium on new service connections in
8 order to constrain demand to fit within the capabilities of the system.

9
10
11 **Q. Can you explain the equity infusion described in section VIII ?**

12 A. The financial metrics relied upon by rating agencies that are most problematic for APS are the
13 Total Debt/Capital ratio and the FFO/Debt ratio. Both of these ratios can be improved by
14 reducing the Company's imputed debt levels, as measured by the rating agencies. The \$700
15 million equity infusion is one of the steps APS has committed to take in order to improve these
16 metrics and strengthen its bond rating.

17 In this regard, it is important to realize that the credit agencies impute other obligations
18 to the debt category when calculating APS' capital structure, in addition to the debt amounts
19 reported by APS on its balance sheet and used in financing its rate base. These imputed
20 amounts generally arise out of long term legal obligations, such as the Palo Verde lease-back
21 arrangement and long term purchase power agreements, which have many of the characteristics
22 as long term debt. Because the rating agencies view these long term contractual obligations as
23 being like debt, they view APS as being highly leveraged. Standard and Poor's states:

1 We view the financial profile of PWCC and APS to be ‘aggressive’,
2 which reflects: year-end debt to total capitalization of 57% (adjusted for
3 items such as power purchases and operating leases) [See, Staff
4 Attachment RCS-2]
5

6 APS' imputed debt is also the denominator of the FFO/debt ratio, which is solidly in the
7 “Aggressive” category, and just barely above the “Highly Leveraged” category.

8 The settlement includes provisions that will reduce the level of imputed debt and
9 increase the level of funds from operations, thereby improving both the numerator and the
10 denominator of the FFO/debt ratio. For instance, the rate increase will improve the numerator,
11 while the equity infusions will improve the denominator. Section VIII requires APS to provide
12 additional equity of no less than \$700 million by December 31, 2014; it also requires APS to
13 strive to maintain investment grade financial ratios and improve its financial ratings with the
14 rating agency community; and, to attempt to achieve a capital structure with no more than 52%
15 debt/total capital, as calculated by the credit rating agencies, by December 31, 2012.

16 All of these provisions are inter-related, and tend to reinforce each other. Probably the
17 most significant provision is the one committing APS to attempt to reduce its debt/total capital
18 from the current level of around 57% to 52%, which will also improve the FFO/debt ratio.

19

20

21 **Timing of Future Rate Cases**

22

23 **Q. Can you explain the provisions concerning the timing of various rate increases?**

24 A. Yes. Section II of the settlement provides that APS' will not file its next two rate cases before
25 June 1, 2011 and June 1, 2013, respectively. Section II also provides that new base rates cannot

1 become effective before July 1, 2012. The first provision is particularly significant, since it
2 ensures that the substantial rate increase included in the agreement is not immediately followed
3 by another rate increase request.

4 At a minimum these provisions ensure that the Staff, RUCO and other parties are given a
5 “breather” of a year or more, during which they won't need to be concerned with any APS rate
6 cases, and can instead focus on other priorities. Similarly, these provisions provide customers
7 with a greater degree of stability and predictability concerning electric rates over the next few
8 years. While it's never pleasant to contemplate a rate increase, at least customers are being given
9 plenty of advance notice, and thus they can better plan their household budgets, evaluate options
10 for more energy efficient appliances, and so forth.

11 Since there is no way to know how quickly APS would file any future rate cases, or
12 whether the Commission would accept an immediate refiling, it is difficult to evaluate the full
13 impact of these provisions. But, APS would likely file rate cases as quickly and as frequently as
14 feasible, absent this provision. It certainly could be argued that a new rate case should not be
15 filed before new rates have gone into effect for some reasonable minimum period of time. But,
16 I am not aware of any administrative rule or statutory requirement that would prevent APS from
17 filing a new rate case as quickly as possible after the existing case is resolved. Absent this
18 provision or some other legal impediment, APS could potentially file its next rate case within 30
19 days after receiving a decision in this case, forcing the Commission to decide whether or not to
20 accept such a filing.

21 If a decision in this case were issued in October or November 2009, APS could
22 conceivably file a new case in late 2009 or early 2010. This contrasts with Section II of the
23 agreement, which specifies that the next case will not be filed before June 1, 2011 (roughly 18
24 months later). Hence, it is fair to say that this portion of the agreement not only reduces

1 uncertainty but it also benefits the parties and customers by ensuring that APS “stays out” for a
2 significantly longer period than might otherwise occur.

3
4
5 **Cost Cutting**

6
7 **Q. Can you explain the benefits of the cost cutting commitments included in Section VII?**

8 A. Yes. Section VII requires APS to reduce its expenses by an average annual basis of \$30 million
9 per year over a 5 year period beginning in 2010. The total expense reduction shall be a
10 minimum of \$150 million. Finally, no annual reduction shall be less than \$25 million. These
11 cost reductions will benefit customers by reducing the Company's future revenue requirement,
12 thereby reducing the need for, and magnitude of, any future rate increases. As well, these cost
13 reductions will increase the numerator of APS' FFO/debt ratio, helping to maintain or improve
14 APS' bond rating.

15 Cost control and increased efficiency is particularly important during a challenging
16 economic environment like the current one. In a competitive industry during times like these,
17 the strongest, best managed firms find ways to cut costs and maintain their financial viability
18 despite challenging market conditions; less well managed firms often go bankrupt, or lose
19 ground competitively. Needless to say, it is impossible to directly simulate these sorts of
20 competitive pressures in a regulated monopoly environment. The threat of bankruptcy is
21 obviously not the best way to pressure management, labor unions, or others to cut costs and
22 increase efficiency when the firm is providing a vital public service like electricity. However,
23 this provision serves to increase the pressure to make difficult decisions in order to cut costs and

1 improve efficiency – the same sort of external pressure which arises in competitive industries
2 during an economic recession. This sort of pressure can push management into making difficult
3 decisions like choosing which employees to keep and which to let go, or to negotiate other
4 concessions from unions which would otherwise seem just too painful to attempt, or to negotiate
5 better pricing from suppliers or to find new suppliers if the existing ones won't cooperate.

6
7
8 **Performance Measures, Reporting and Benchmarking**

9
10 **Q. Can you briefly explain the performance measures, reporting requirements and**
11 **benchmarking provisions contained in Section XIII?**

12 A. Section XIII of the agreement establishes certain priorities, in the form of operational and
13 financial goals for APS. These include maintaining and improving its financial strength,
14 encouraging energy efficiency, increasing reliance on renewable energy, and reducing operating
15 expenses. As well, Section XIII provides a practical administrative framework to assist the
16 Commission and other parties in periodically evaluating APS' progress toward achieving these
17 goals.

18 More specifically, APS has agreed to periodically provide reports with detailed
19 information regarding customer service, reliability, safety and financial operations, and it APS
20 has agreed to finance a benchmarking analysis that will provide valuable information that the
21 Commission and the parties can use to assist them in evaluating how well APS is performing
22 relative to other utilities. The benchmarking analysis will be performed by an independent third
23 party selected by the Staff; and it will provide detailed information comparing APS' operational

1 and cost performance relative to a peer group of at least 30 other investor-owned electric-only
2 utilities – firms with characteristics that are reasonably comparable to those of APS with respect
3 to total revenue, number of customers, nuclear generation, ownership of generation, customer
4 density, customer growth and fuel and resource mix.

5
6
7 **Other Settlement Provisions**

8
9 **Q. What other provisions of the Agreement would you like to discuss?**

10 A. I would like to briefly discuss: the Palo Verde depreciation changes contained in Section XI; the
11 modified treatment of Schedule 3 proceeds contained in Section X; the Section XVII provisions
12 regarding the spread of the rate increase across rate schedules; and, the demand response
13 commitments included in Section XX.

14
15 **Q. Can you explain the Palo Verde depreciation changes contained in Section XI?**

16 A. Yes. These provisions allows APS to adjust depreciation rates for its Palo Verde plant to be
17 consistent with the Palo Verde license extension the Company hopes to receive from the Nuclear
18 Regulatory Commission (NRC).

19 The plant is being depreciated based on the duration of its existing license. However,
20 there are no physical or technical constraints that would preclude the possibility of using the
21 plant for longer than its original license. Hence, the Company is asking the NRC for a license
22 extension. If the license extension were granted but depreciation rates were not reduced, the
23 plant would be fully depreciated sometime around the end of its existing license term, and thus

1 it would have a zero net cost on the balance sheet and in rate base from that point forward.

2 Under standard accounting rules, however, depreciation rates should appropriately be reduced if
3 the license extension is granted, to ensure that the cost of the plant is spread over its entire life
4 cycle. As well, by modifying the depreciation rates, inter-generational equity is improved, by
5 ensuring that customers in the later years of the plant's life make some contribution to the cost
6 of the plant, rather than receiving a "free ride."

7 The key issue dealt with in the settlement agreement is the timing of the depreciation
8 change, which will go into effect on the date when the NRC approves the Palo Verde license
9 extension, but not earlier than January 1, 2012 . Absent this provision, there is no way to predict
10 when APS would file for a depreciation rate change, or when the Commission might authorize
11 such a change. Under the terms of the agreement, the new depreciation rates will probably go
12 into effect during 2012, at a time when the next rate case will likely be under review by the
13 Commission. Aside from clarifying what might otherwise be a contentious issue, the main
14 benefit of this provision is to provide APS with a short term boost to its 2012 earnings per share
15 (and earned return on equity). Because the depreciation change will improve APS' earnings,
16 this provision reduced the uncertainties concerning this issue for APS, making it easier for APS
17 to accept a delay in the next rate case until no earlier than June 1, 2012, as set forth in Section II.

18
19 **Q. Can you please elaborate on the potential impact of this provision on APS, its customers
20 and stockholders?**

21 A. Yes. This provision will potentially boost APS' earnings per share during 2012 without having
22 any immediate adverse impact on customers. In effect, APS' earnings per share may be
23 temporarily increased without requiring customers to pay higher rates. This logically follows

1 because depreciation is a non-cash accounting entry. Hence, this provision doesn't have any
2 immediate impact on the amount of cash being paid by customers to APS. As well, it has no
3 impact on APS' cash flow or its cash-related financial metrics, such as the FFO/Debt ratio. That
4 isn't to say that the provision is unimportant. By clarifying the timing of this anticipated
5 accounting change, this provision eliminates one of the uncertainties facing APS, making it
6 easier to reach agreement on the rate case scheduling provisions in Section II.

7 There is one other effect worth noting: due to this provision, accumulated depreciation
8 may be slightly lower in future rate cases than it might otherwise be. Lower annual Palo Verde
9 related depreciation charges will reduce accumulated depreciation, which in turn will increase
10 net plant and APS' rate base in future years. Any impact to customers (and benefit to APS) in
11 future rate cases will be determined by the rate of return times the difference in rate base
12 amount, scaled up for income tax effects. The extent of this impact, if any, would depend on
13 when APS might otherwise have filed for a depreciation rate change, and when any such filing
14 would otherwise go into effect (be approved by the Commission). If this provision does result
15 in a slightly lower balance for accumulated depreciation in the 2011 and subsequent rate cases, it
16 will, in turn, result in slightly higher rates for customers and thus provide somewhat higher
17 earnings and cash flows to APS and its stockholder in future years.

18 Parenthetically, I would also note that if the life extension is granted, the cost of shutting
19 down the plant will be deferred further into the future. In turn, this will eventually result in a
20 reduction in the Systems Benefit Charge, which will further benefit customers. However, this
21 issue will be handled by the Commission in a future proceeding, and is not resolved by the
22 settlement agreement.

1 **Q. Can you now explain Section X of the Agreement, relating to Schedule 3 (line extension)**
2 **proceeds?**

3 A. Yes. Currently, line extension fees are recorded as CIAC. Section X of the proposed agreement
4 modifies the treatment of these funds by allowing APS to temporarily record these proceeds as
5 revenue. This temporary accounting treatment will boost APS' earnings per share during 2012
6 without having any immediate impact on the amount of cash flowing from customers to the
7 Company. In turn, this will increase net plant and APS' rate base in future years. The impact on
8 customers (and benefit to APS) in future rate cases will be determined by the rate of return
9 times the difference in rate base amount, scaled up for income tax effects. This provision was
10 included in the agreement in an effort to close the gap between the respective parties positions
11 on certain issues, and was particularly helpful in reaching agreement on the rate case scheduling
12 provisions in Section II, because it will improve APS' earnings per share and return on equity
13 during 2012. The magnitude of this impact will depend on the amount of Schedule 3 payments
14 received during 2012, which in turn will depend on the extent to which in-migration and
15 customer growth have begun to accelerate by that time.

16
17 **Q. Can you briefly explain Section XVII of the Agreement, concerning the Revenue Spread?**

18 A. Yes. Section XVII of the proposed agreement resolves the revenue spread issue using a highly
19 simplified approach. It provides that each retail rate schedule will receive an equal percentage
20 total base rate increase, inclusive of the interim rate increase, and inclusive of fuel and
21 purchased power costs that are incorporated into base rates.

22
23

1 **Q. Finally, can you please comment on Section XX of the Agreement, particularly with**
2 **regard to Critical Peak Pricing?**

3 A. Yes. Section XX of the agreement includes several noteworthy provisions. It not only calls for
4 approval of a new demand response super peak time-of-use rate for residential customers, as
5 proposed by APS in the direct testimony of Charles Miessner, but it also calls for the creation of
6 a new residential critical peak pricing (CPP) pilot program. The CPP rate is intended to provide
7 participating customers with strong, clear price signals that are narrowly focused on a limited
8 number of specific hours of each year. The agreement calls for APS to provide participating
9 customers with notice of each critical peak period, via email, text message or telephone
10 message, at least 6 hours in advance of the commencement of each critical peak period. This
11 will ensure that participating customers have an opportunity to adjust their thermostats, avoid
12 running their dishwasher or doing their laundry, or take other actions to reduce their load during
13 the peak time period.

14 There is no reason to believe that a CPP approach won't be successful with residential
15 customers. In the case of both commercial and residential customers, opportunities exist for
16 customers to respond to narrowly focused, timely price signals. By testing this concept with
17 both General Service and residential customers, the Company will more quickly gain experience
18 with the CPP approach – and it is quite possible that the CPP approach will actually be more
19 popular with residential customers than with business customers.

20
21 **Q. Does this conclude your testimony concerning the settlement agreement, which was**
22 **prefiled on July 1, 2009?**

23 A. Yes.