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BEFORE THE ARIZONA CORPORATION COMMISSION

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

DOCKET NO. E-01345A-05-0816

**STAFF'S NOTICE OF FILING
TESTIMONY**

14 Staff hereby provides notice of filing its Direct Testimony on Rate Design in this Docket. An
 15 original and thirteen copies are submitted of the Prefiled Direct Testimony of Barbara E. Keene and
 16 Erinn Andreasen.

RESPECTFULLY SUBMITTED this 1st day of September, 2006.

Arizona Corporation Commission
DOCKETED

SEP -1 2006

DOCKETED BY	nr
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**DIRECT
TESTIMONY
OF
BARBARA KEENE
ERINN ANDREASEN**

DOCKET NO. E-01345A-05-0816

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

SEPTEMBER 1, 2006

BEFORE THE ARIZONA CORPORATION COMMISSION

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

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

RATE DESIGN

TESTIMONY

OF

BARBARA KEENE

PUBLIC UTILITIES ANALYST MANAGER

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

SEPTEMBER 1, 2006

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

This testimony recommends the following:

1. The EPS adjustor rate and caps should be increased to recover an additional \$4.25 million for the EPS Credit Purchase Program.
2. The EPS adjustor rate should be set at \$0.001392 per kWh with monthly caps per service of \$0.56 for residential customers, \$20.68 for non-residential customers, and \$62.04 for non-residential customers with demands of 3,000 kW or more.
3. The \$17,639,421 associated with Palo Verde outages that Staff has recommended to be disallowed should be removed from the Paragraph 19(d) Balancing Account and not be recovered from ratepayers. The exact amount of the disallowance would have to be determined at the time of the Decision because interest would continue to accrue until the effective date of the Decision.
4. Staff recommends that APS be allowed to recover the remaining balance in the Paragraph 19(d) Balancing Account through a surcharge. The surcharge rate would be about \$0.001029 per kWh, assuming that the amount to be recovered would be amortized over one year. However, the final surcharge rate will depend on how much interest has accrued by the time of the Decision in this case and on updated forecasts of kWh sales.

1 **INTRODUCTION**

2 **Q. Please state your name and business address.**

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

5
6 **Q. Have you previously filed testimony in this docket?**

7 A. Yes. I filed direct testimony addressing renewable energy for Arizona Public Service
8 ("APS"); in particular, funding for renewable resources, net metering, and green pricing
9 tariffs. That testimony also responded to Commissioner Mayes' July 17, 2006, letter
10 regarding the Renewable Energy Standard and Tariff ("REST").

11
12
13 **Q. What is the subject matter of your rate design testimony?**

14 A. My testimony will address a change in the Environmental Portfolio Standard ("EPS")
15 adjustor rate for Arizona Public Service ("APS") to recover costs for the EPS Credit
16 Purchase Program, and the establishment of a Power Supply Adjustor surcharge to recover
17 costs associated with nuclear plant outages that have not been found to be imprudent.

18
19 **CHANGE IN THE EPS ADJUSTOR RATE**

20 **Q. What is the Environmental Portfolio Standard?**

21 A. As discussed in Staff's direct testimony, the Environmental Portfolio Standard ("EPS"),
22 embodied in A.A.C. R14-2-1618, requires load-serving entities to derive a portion of the
23 retail energy they sell from solar resources or environmentally friendly renewable
24 electricity technologies.

25

1 **Q. How is the EPS funded?**

2 A. The costs of the EPS are recovered through the System Benefits Charge and through the
3 Environmental Portfolio Surcharge, approved by Decision No. 63354 on February 8,
4 2001, and established as an adjustment mechanism by Decision No. 67744 (APS rate case
5 settlement agreement). The surcharge is currently set at \$0.000875 per kWh with monthly
6 caps per service of \$0.35 for residential customers, \$13.00 for non-residential customers,
7 and \$39.00 for non-residential customers with demands of 3,000 kW or more.

8
9 **Q. How much funding did APS receive through the EPS adjustor during the test year?**

10 A. During the test year, APS received \$7.2 million through the EPS adjustor.

11
12 **Q. What does Staff recommend regarding the EPS adjustor?**

13 A. Staff recommends that the EPS adjustor rate and caps be increased to allow for more
14 funding of the EPS Credit Purchase Program.

15
16 **Q. Please describe the EPS Credit Purchase Program.**

17 A. As described in Staff's direct testimony, APS' EPS Credit Purchase Program reimburses
18 customers for a portion of the costs of renewable energy systems installed on their
19 properties. APS can then use the renewable energy credits associated with the systems to
20 help meet its EPS requirements.

21
22 **Q. What needs to be done regarding funding for the EPS Credit Purchase Program?**

23 A. Decision No. 68668 (April 20, 2006), provided that APS was to increase its allocation for
24 the program by an additional \$4.25 million and that any additional funds put into the
25 credit purchase program by APS at the direction of the Commission would be recovered in
26 rates as part of APS' ongoing general rate case.

1 **Q. How should the EPS adjustor rates be changed to recover the additional \$4.25**
2 **million?**

3 A. In response to Staff's data request BEK 18-1, APS has estimated that the rate and caps
4 would change as follows in order to collect an additional \$4.25 million and maintain the
5 proportions between customer classes:

6 Rate: \$0.001392 per kWh

7 Caps: \$0.56 per residential service per month

8 \$20.68 per non-residential service per month

9 \$62.04 per non-residential service with demands of more than 3,000 kW

10

11 **Q. Why should the proportions between customer classes be maintained?**

12 A. As discussed in Staff's direct testimony, paragraph 63 of the settlement agreement
13 approved by Decision No. 67744 provides that any change in EPS funding requirements
14 shall be collected from APS' customers in a manner that maintains the proportions
15 between customer categories embodied in the current EPS surcharge. Maintaining the
16 proportions between customer categories requires that the rate and caps be multiplied by
17 the same number. In this case, the rate and caps would be multiplied by an estimated
18 1.5907 to achieve total funding through the EPS adjustor of \$11.45 million (\$7.2 million
19 plus \$4.25 million).

20

21 **ESTABLISHMENT OF A POWER SUPPLY ADJUSTOR SURCHARGE**

22 **Q. Please describe the Power Supply Adjustor ("PSA").**

23 A. The PSA, established by Decision No. 67744, tracks changes in APS' cost of obtaining
24 power supplies and allows APS to recover or refund changes in its fuel and purchased
25 power costs. The annual adjustor rate is reset on each February 1 with a \$0.004 limit over
26 the term of the PSA. Decision No. 68437 provides that any amount outside the \$0.004

1 bandwidth is put into a "Paragraph 19(d) Balancing Account." Surcharges may be
2 approved by the Commission to recover or refund amounts in the Paragraph 19(d)
3 Balancing Account. An amount approved for collection through a surcharge is removed
4 from the Paragraph 19(d) Balancing Account and placed in a Surcharge Account to record
5 collections through the surcharge and calculate the balance remaining to be collected.
6 Each month, interest is applied to all of the PSA accounts, based on the one-year Nominal
7 Treasury Constant Maturities rate contained in the Federal Reserve Statistical Release, H-
8 15, on the first business day of the calendar year.

9
10 **Q. What is currently in the Paragraph 19(d) Balancing Account?**

11 A. After the February 2006 reset of the adjustor rate, \$59,858,187 was entered into the
12 Paragraph 19(d) Balancing Account. Decision No. 68646 authorized a surcharge to
13 recover \$15.3 million, beginning in May 2006. Therefore, \$15.3 million was removed
14 from the Paragraph 19(d) Balancing Account and placed in a Surcharge Account. The
15 balance in the Paragraph 19(d) Balancing Account, plus interest, relates to costs associated
16 with outages of the Palo Verde Nuclear Generating Station ("Palo Verde"). Decision No.
17 68646 stated that it was premature to grant a surcharge on those costs at that time in light
18 of the Commission's on-going inquiry regarding unplanned 2005 outages at Palo Verde.

19
20 **Q. What has Staff recommended in regard to those costs associated with Palo Verde
21 outages?**

22 A. Staff witness William R. Jacobs summarized in his direct testimony the conclusions and
23 recommendations made in the report concerning the operation of Palo Verde in 2005 filed
24 in Docket No. E-01345A-05-0826. One of the recommendations was that the
25 Commission should disallow the costs resulting from outages identified as avoidable and
26 imprudent. The amount (including the cost of replacement power, lost opportunity sales,

1 and interest through August 2006) is \$17,639,421. The exact amount of the disallowance
2 would have to be determined at the time of the Decision because interest would continue
3 to accrue until the effective date of the Decision.

4

5 **Q. What impact would the recommended disallowance have on the Paragraph 19(d)**
6 **Balancing Account?**

7 A. The disallowed amount should be removed from the Paragraph 19(d) Balancing Account
8 and not be allowed to be recovered from ratepayers.

9

10 **Q. What should happen to the remaining balance in the Paragraph 19(d) Balancing**
11 **Account?**

12 A. Staff recommends that APS be allowed to recover the remaining balance through a
13 surcharge.

14

15 **Q. What amount would be recovered through the surcharge?**

16 A. Removing the disallowed amount would leave \$28,464,512 in the Paragraph 19(d)
17 Balancing Account. However, the final amount will depend on how much interest has
18 accrued by the time of the Decision in this case.

19

20 **Q. What would be the surcharge rate?**

21 A. Staff estimates the surcharge rate to be about \$0.001029 per kWh, assuming that the
22 amount to be recovered would be amortized over one year. However, the final surcharge
23 rate will depend on how much interest has accrued by the time of the Decision in this case
24 and on updated forecasts of kWh sales.

25

1 **Q. What would be the impact of a surcharge on a typical residential customer?**

2 A. Assuming that the final surcharge would be \$0.001029 per kWh, the surcharge would add
3 \$1.01 to the bill of an E-12 customer with average July 2005 consumption of 981 kWh
4 and \$0.84 to the bill of an E-12 customer with median consumption of 818 kWh. Like all
5 PSA rates and surcharges, this proposed surcharge would not apply to customers on E-3
6 and E-4 rate discount schedules.

7

8 **SUMMARY OF STAFF RECOMMENDATIONS**

9 **Q. Please summarize Staff's recommendations.**

10 A. Staff's recommendations are as follows:

- 11 1. The EPS adjustor rate and caps should be increased to recover an additional \$4.25
12 million for the EPS Credit Purchase Program.
- 13 2. The EPS adjustor rate should be set at \$0.001392 per kWh with monthly caps per
14 service of \$0.56 for residential customers, \$20.68 for non-residential customers,
15 and \$62.04 for non-residential customers with demands of 3,000 kW or more.
- 16 3. The \$17,639,421 associated with Palo Verde outages that Staff has recommended
17 to be disallowed should be removed from the Paragraph 19(d) Balancing Account
18 and not be recovered from ratepayers. The exact amount of the disallowance
19 would have to be determined at the time of the Decision because interest would
20 continue to accrue until the effective date of the Decision.
- 21 4. APS should be allowed to recover the remaining balance in the Paragraph 19(d)
22 Balancing Account through a surcharge. The surcharge rate would be about
23 \$0.001029 per kWh, assuming that the amount to be recovered would be amortized
24 over one year. However, the final surcharge rate will depend on how much
25 interest has accrued by the time of the Decision in this case and on updated
26 forecasts of kWh sales.

1 **Q. Does this conclude your rate design testimony?**

2 **A. Yes, it does.**

BEFORE THE ARIZONA CORPORATION COMMISSION

JEFF HATCH-MILLER
Chairman
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DIRECT
TESTIMONY
OF
ERINN A. ANDREASEN
PUBLIC UTILITIES ANALYST
UTILITIES DIVISION
ARIZONA CORPORATION COMMISSION

SEPTEMBER 1, 2006

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

Ms. Andreasen's testimony recommends the following:

1. Staff recommends higher than average increases for rate schedules E-34 and E-35 based on the fact that these categories are under performing relative to the rest of the general service class and the system-average rate of return.
2. Staff recommends that the cost-of-service category E-32 (1,000 or greater kW) receive a greater increase than E-32 cost-of-service categories (0-20 kW), (21-100 kW), (101-400 kW), and (401-999 kW).
3. Staff recommends that rate schedule E-20 receive a much smaller than average increase due to the fact that its return is much greater than the system average and exceeds the returns for the other rate categories in the cost-of-service study.
4. Staff recommends that APS provide a 12-month interim period for customer transition so that residential customers on E-10 and EC-1 will have additional time to fully evaluate their alternative rate options. Staff also recommends that APS continue customer outreach efforts to educate consumers about their rate options during the 12-month interim period.
5. Staff recommends that E-10 and EC-1 not be cancelled until the end of the 12-month interim period, which should provide customers with adequate time to consider alternative rate options.
6. Staff recommends that APS provide customers on E-21, E-22, E-23, and E-24 a six-month interim period for customer transition so that customers would be provided adequate time to consider other rate options and allow APS time to switch out meters where required. Staff also recommends that APS propose an interim rate increase to apply during the interim period for rates E-21, E-22, E-23, and E-24 that is greater than the average increase for the general service class.
7. Staff recommends that E-21, E-22, E-23, and E-24 not be cancelled until the end of the six-month interim period, which should provide customers with time to consider alternative rate options.
8. Staff recommends that rate designs for residential rates ET-2 and ECT-2 remain revenue neutral when compared to rates adopted for ET-1 and ECT-2 respectively.
9. Staff recommends that the proposed demand rates for E-32 not be raised significantly over levels proposed by APS.

10. Staff recommends that in the next rate case filed with the Commission, APS propose to replace general service rate schedule E-32 with alternate general service schedules that divide E-32 usage into small, medium, and large categories or other appropriate division.
11. Staff recommends that the System Benefit Charge for all applicable APS rate schedules be set at \$.001850 per kWh.
12. Staff recommends that the after-hours charge on Schedule 1 for other services remain at \$75.00 per trip.
13. Staff recommends that APS include a definition for Multi-Unit Residential High-Rise Developments on Schedule 1.
14. Staff recommends that APS should add clarifying language to Schedule 3 to specify that the "construction cost" refers to the "backbone infrastructure cost."
15. Staff recommends that under sections titled Master Planned Community Developments and Residential Multi-Family Developments of Schedule 3, APS clarify that allowances will be credited to the applicant.
16. Staff recommends that APS amend its definition for "Residential Homebuilder Subdivision" on Schedule 3 to be consistent with R14-2-201(34). Staff also recommends that APS alphabetize the definitions included on Schedule 3.
17. Staff recommends that APS add language to each section of Schedule 3 clarifying the applicable timeframes for field audits and refundable advances.
18. Staff recommends that APS should file a revised Schedule 3 including Staff's recommendations above in its rebuttal testimony. In its rebuttal testimony, APS should provide a copy of its proposed Schedule 3 redlined against the current version attached to my testimony as Exhibit B
19. Staff recommends that the Commission open a generic docket where parties can provide feedback and the Commission can evaluate the adoption of hook-up fees for the energy industry.
20. Staff recommends that APS establish a forum to explore issues associated with demand-response and load-management opportunities for its service territory.
21. Staff recommends that APS conduct a study that identifies which types of demand-response and load-management programs would be most beneficial to APS' system. In the study, APS should demonstrate why certain programs are more beneficial than others and identify which customer segments would be most likely to respond to such programs. The study should rely on a cost-benefit analysis based on the Societal Cost Test and be filed with the Commission within eight months of approval of a decision in this matter. In addition, APS should be required to file for Commission approval of one or more cost-

effective demand-response or load-management programs that APS believes would be most beneficial to its system and its ratepayers, and to file it concurrently with the filing the study referred to above.

1 **INTRODUCTION**

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

3 A. My name is Erinn Andreasen. I am a Public Utilities Analyst employed by the Arizona
4 Corporation Commission ("ACC" or "Commission") in the Utilities Division ("Staff").
5 My business address is 1200 West Washington Street, Phoenix, Arizona 85007.
6

7 **Q. Please describe your educational background and professional experience.**

8 A. In 1999, I graduated summa cum laude from Arizona State University, receiving a
9 Bachelor of Science degree in Agribusiness with a specialization in international business.
10 In 2003, I received a Masters Degree in Business Administration from the University of
11 Phoenix with a specialization in global business. I have worked at the Commission for
12 over six years as an Economist and a Public Utilities Analyst. My current duties include
13 the evaluation of electric utility special contracts, demand-side management programs,
14 utility tariff filings, rate design, and applications for competitive electric Certificates of
15 Convenience and Necessity.
16

17 **Q. As part of your employment responsibility were you assigned to review matters
18 contained in Docket No. E-01345A-05-0816?**

19 A. Yes.
20

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

22 A. My testimony will address Staff's proposed revenue allocations and rate design, APS'
23 proposed customer transition plan, APS' proposed changes to Schedule 1 and Schedule 3,
24 general issues related to the establishment of hook-up fees, and demand-response and load-
25 management programs.
26

1 **REVENUE SPREAD**

2 **Q. Please identify the overall increase that Staff has proposed.**

3 A. As discussed in the testimony of Staff witness Mr. Jim Dittmer, Staff is recommending an
4 overall increase of \$203,993 million in revenue from rates. Staff's recommended increase
5 would result in approximately a 9.57 percent increase to revenues from rates.
6

7 **Q. Did you rely on the result of the cost-of-service study referred to by Staff witness Mr.
8 Mike Brosch as a guide in developing Staff's recommended revenue spread?**

9 A. Yes. Mr. Brosch provided the results of his cost-of-service review to Staff. The-cost-of
10 service study demonstrates the degree to which a particular customer class rate of return
11 deviates from the system average. The closer a class rate of return is to the system average
12 the more accurately the class is recovering its embedded cost plus a return. Staff utilized
13 the cost-of-service study results as a guide in determining the amount of the increase that
14 should be assigned to each rate class.
15

16 **Q. Please identify the customer classes that APS currently utilizes in its cost-of-service
17 model.**

18 A. APS' cost-of-service model breaks down its various customer classifications into five main
19 customer classes. They are residential, general service, water pumping, street lighting, and
20 dusk to dawn. Within the residential class, there are categories for residential rate
21 schedules¹ E-10, E-12, EC-1, ET-1 and ECT-1. Within the general service class, there are
22 categories for E-20, E-30 and E-32 (0-20 kilowatts ("kW")), E-32 (21-100 kilowatt-hours
23 ("kWh")), E-32 (101-400 kW), E-32 (401-999 kW), E-32 (1,000 and greater kW), E-34,
24 and E-35. Some rate schedules are not represented as a separate category and are instead
25 grouped together with other similar tariffs. For instance, the outdoor lighting category

¹ Residential time-of-use rates ET-2 and ECT-2 were approved by the Commission on April 12, 2006, and became effective July 1, 2006. These schedules were not in effect during the test year.

1 contains rate schedules E-58, E-59, and E-67. In addition, the various E-32 categories
2 include rate schedules E-21, E-22, E-23, E-24, E-32 TOU, and E-66.

3
4 **Q. Please provide a general summary of the results for the major categories in the cost-**
5 **of-service study.**

6 A. The results of the cost-of-service study indicate that the residential and street lighting
7 customer classes are earning a return less than the system average; the general service,
8 water pumping, and dusk to dawn classes are earning greater than the system average rate
9 of return. A summary of the rates of return and rate of return index is provided below.

10
11 **Cost-of-Service Summary**

12

Cost-of-Service Category	Rate of Return	Rate of Return Index (1.00 = system average rate of return for ACC jurisdiction)
Residential	4.25%	0.81
General Service	6.51%	1.25
Water Pumping	8.30%	1.59
Street Lighting	2.18%	0.42
Dusk to Dawn	5.98%	1.15
System Average	5.23%	1.00

13
14 A complete summary of the cost-of-service results including the interclass returns under
15 the 4-Coincident Peak ("CP") and 4-CP and Average cost-of-service allocation
16 methodologies is provided as Schedule EAA-1.

17

1 **Q. Please comment about the interclass returns for the residential cost-of-service**
2 **category.**

3 A. The residential class overall is earning less than the average rate of return. Within the
4 residential class, rates EC-1, ET-1, and ECT-1 are the weakest performers while rate E-12
5 is earning slightly more than the system average rate of return. This indicates that EC-1,
6 ET-1, and ECT-1 rate schedules are underperforming relative to the rest of the residential
7 class as well as the system average rate of return and should be given higher than average
8 increases.

9

10 **Q. Please provide comment about the interclass returns for the general service cost-of-**
11 **service category.**

12 A. Although the class as a whole is earning a better than average rate of return, the results of
13 the cost-of-service study indicate that returns for the customer groups with the largest
14 customers such as E-32 (1,000 kW or greater), E-34, and E-35 are significantly lower than
15 the rest of the general service class. This general result holds true under both the 4-CP and
16 4-CP and Average cost-of-service allocation methodologies that were discussed in the
17 testimony of Mr. Brosch. This indicates that these particular customer groups are
18 underperforming relative to the rest of the general service class as well as the system
19 average rate of return and should be given higher than average increases.

20

21 **Q. Please provide Staff's recommended revenue spread for the major cost-of-service-**
22 **categories. How did Staff arrive at its overall recommended revenue spread**
23 **proposals for APS' major cost-of-service classes?**

24 A. Staff's proposed revenue spread is provided below.

25

1 interclass residential rate spread scenario where E-10 and EC-1 would not be cancelled in
2 this proceeding. The latter scenario is being provided for informational purposes only.

3
4 **Interclass Residential Rate Spread**

5

Residential Rate	Customer Transition		No Customer Transition	
	Scenario #1 Staff Recommended Increase %	Rate of Return Index 1.00 = system average rate of return for ACC jurisdiction)	Scenario 2 Increase %	Scenario #2 Rate of Return Index 1.00 = system average rate of return for ACC jurisdiction)
E-10 (Frozen)	16.42%	1.09	10.36%	.87
E-12	7.21%	1.00	8.91%	1.06
EC-1(Frozen)	17.24%	0.98	10.29%	0.74
ET-1	9.99%	0.78	9.98%	0.78
ECT-1	10.15%	0.67	10.45%	0.68
Total Residential Increase	9.69%	0.86	9.69%	0.86

6
7 Under Staff's recommended Scenario #1, Staff has proposed the elimination of E-10 and
8 EC-1. Because APS has proposed that E-12 and ECT-1 would be default rates in the proof
9 of revenue for E-10 and EC-1 respectively, consideration was given to the fact that the E-
10 12 and ECT-1 revenue allocations would be based upon the rate design for E-10 and EC-1.
11 The second scenario is provided to illustrate a scenario where rates E-10 and EC-1 are not
12 eliminated in this proceeding.

13
14 In both scenarios, Staff based this rate spread on the results of the cost-of-service study, the
15 impact of the overall increase to ratepayers, and a desire to raise the rates for frozen rate
16 schedules E-10 and EC-1 above the system average increase of 9.56 percent.

17

1 **Q. What is Staff recommending for the interclass returns for the general service**
2 **category?**

3 A. Staff's recommended interclass spread for the general service class is provided below.
4

5 **Staff Recommended Interclass General Service Rate Spread**

6

Cost-of-Service Category	Rate Increase %	Rate of Return Index (1.00 = system average rate of return)
E-20	1.25%	1.25
E-30 and all E-32	9.44%	1.27
E-34	10.26%	0.75
E-35	10.26%	0.50
Total General Service Increase	9.52%	1.19

7
8 While Staff is recommending a total increase of 9.52 percent for the general service class
9 as a whole, Staff recommends higher than average increases for rate schedules E-34 and E-
10 35 based on the fact that these categories are under performing relative to the rest of the
11 general service class and the system-average rate of return.

12
13 As previously discussed, the cost-of-service category E-32 (1,000 or greater kW) is also
14 underperforming relative to the rest of the general service class and the system-average rate
15 of return. While Staff did not provide proposed rate spreads for the various cost-of-service
16 categories within the E-32 category, Staff recommends that the cost-of-service category E-
17 32 (1,000 or greater kW) receive a greater increase than E-32 cost-of-service categories (0-
18 20 kW), (21-100 kW), (101-400 kW), and (401-999 kW).
19

1 Staff also recommends that rate schedule E-20 receive a much smaller than average
2 increase due to the fact that its return is much greater than the system average and exceeds
3 the returns for the other rate categories in the cost-of-service study.
4

5 **APS PROPOSED CUSTOMER TRANSITION PLAN**

6 **Q. What did the decision in APS' last rate case indicate about the elimination of certain**
7 **rate schedules in APS next rate case proceeding?**

8 A. Commission Decision No. 67744 indicates that APS shall provide notice to customers that
9 frozen rate schedules E-10, EC-1, E-21, E-22, E-23, E-24, E-38, and E-38T will be
10 eliminated in APS' next rate proceeding. The notice was to be provided to customers at
11 the conclusion of the then pending rate case and at the time APS files its next rate case
12 (this currently pending case).²
13

14 **Q. Has APS provided customers notice consistent with the Commission Decision No**
15 **67744?**

16 A. Yes. Correspondence from APS indicates that notice was provided to customers on April
17 2005 and April 2006 customer bills.
18

19 **Q. What was the rationale behind requesting the cancellation of frozen rate schedules**
20 **E-10, EC-1, E-21, E-22, E-23, E-24, E-38, and E-38T?**

21 A. Some rate structures such as E-10 and E-12 are duplicative in nature. For instance the rate
22 structure on E-10 is identical to the rate structure on E-12. However, E-10 is priced below
23 E-12. In addition, irrigation rates E-38 and E-38T are very similar to irrigation rates E-
24 221 and E-221-8T. The other rationale to support phasing out these frozen rates is that

² Settlement paragraphs 114, 122, and 123.

1 some of these rates may have a substandard return meaning other rate payers may be
2 subsidizing the costs to serve customers on these rate schedules.

3
4 **Q. Please provide a brief description of APS' customer transition plan for residential**
5 **customers.**

6 A. APS' proposed plan is attached as Exhibit A. Residential customers on E-10 and EC-1
7 would be placed on interim rates at the conclusion of the rate case and given up to six
8 months to review alternate residential rate schedules and to choose a new rate schedule. If
9 E-10 and EC-1 customers have not affirmatively chosen an alternate rate schedule after six
10 months, they would be placed on default rates. A chart showing the proposed residential
11 default rates is provided below.

12
13 **APS Proposed Residential Default Rates**

14

Residential Rate to be Eliminated	Monthly Usage (annual average)	Default Rate
E-10 and EC-1	Less than 1,000 kWh	E-12 Residential Service Standard Rate
E-10	Greater than 1,000 kWh	ET-1 Residential Service Time of Use Time Advantage (9 p.m. to 9 a.m.)
EC-1	Greater than 1,000 kWh	ECT-1 Residential Service Time of Use with Demand Charge

15
16 During the interim period, APS has indicated that it would provide information to affected
17 residential customers about the transition in bill messages, direct mail letters, email
18 messages, and recorded messages provided through outbound direct-dialed phone calls. In
19 addition, APS would provide on-line rate analysis tools that would utilize a customer's
20 actual usage history or general usage assumption in order to compare alternative rate

1 options. During the test year, APS had approximately 99,100 customers on E-10 and EC-1
2 combined, representing 11 percent of its residential customer base.
3

4 **Q. Does Staff have any concerns about APS' proposed interim period of six months for**
5 **residential customers?**

6 A. Yes. Given the magnitude of the increase, Staff is concerned that customers may require a
7 longer period of time in which to fully evaluate their alternative rate options, including
8 time-of-use. Therefore, Staff recommends that APS provide a 12-month interim period for
9 customer transition so that residential customers on E-10 and EC-1 will have additional
10 time to fully evaluate their alternative rate options. Staff also recommends that APS
11 continue customer outreach efforts to educate consumers about their rate options during the
12 12-month interim period.
13

14 **Q. What does Staff recommend regarding the cancellation of rates E-10 and EC-1?**

15 A. Staff recommends that E-10 and EC-1 not be cancelled until the end of the 12-month
16 interim period, which should provide customers with adequate time to consider alternative
17 rate options. During the interim period, an interim rate increase for E-10 and EC-1 would
18 apply. Staff has proposed an interim rate increase and interim rates for E-10 and EC-1
19 which is discussed later in this testimony.
20

21 **Q. Please provide a brief proposal of APS' customer transition plan for non-residential**
22 **customers.**

23 A. Non-residential customers on experimental time-of-use rates E-21, E-22, E-23, and E-24
24 would be placed on E-32 TOU at the conclusion of the rate case. APS would then provide
25 each customer with a comparison of their bill on E-32 and E-32 TOU via an outbound call
26 to each affected customer. If customers were to find that E-32 was a more advantageous

1 rate than E-32 TOU, the customer could switch to E-32 as soon as a meter change could be
2 provided by APS. APS would also communicate information about the transition to E-21,
3 E-22, E-23, and E-24 customers in bill messages and direct mail letters. During the test
4 year, APS had approximately 230 customers on these rates combined.

5
6 Water pumping customers on E-38 and E-38T would be transferred to E-221 Water
7 Pumping Service at the conclusion of the rate case. APS would communicate information
8 about the transition to non-residential customers in bill messages. During the test year APS
9 had 44 customers on this rate.

10
11 **Q. Does Staff have any recommendations about APS' customer transition plan for**
12 **general service customers?**

13 A. Yes. Although E-21, E-22, E-23, and E-24 are time-of-use rates, due to differing customer
14 usage characteristics, some customers on these rate schedules may have a lower bill on E-
15 32 as opposed to E-32 TOU. Staff does not believe it is appropriate to automatically
16 switch customers to E-32 TOU until they have had an opportunity to consider other rate
17 options. For residential customers, Staff has recommended an interim period of 12 months.
18 Staff believes an interim period should also be adopted for E-21, E-22, E-23, and E-24.
19 Therefore, Staff recommends that APS provide customers on E-21, E-22, E-23, and E-24 a
20 six-month interim period for customer transition so that customers would be provided
21 adequate time to consider other rate options and allow APS time to switch out meters
22 where required. Staff also recommends that APS propose an interim rate increase to apply
23 during the interim period for rates E-21, E-22, E-23, and E-24 that is greater than the
24 average increase for the general service class.

1 **Q. What does Staff recommend regarding the cancellation of rates E-21, E-22, E-23, and**
2 **E-24?**

3 A. Staff recommends that E-21, E-22, E-23, and E-24 not be cancelled until the end of the six-
4 month interim period, which should provide customers with time to consider alternative
5 rate options.

6
7 **Q. Does Staff object to APS' proposal to transition E-38 and E-38-T customers directly**
8 **to E-221 and E-221-8T?**

9 A. No. E-221 and E-221-8T are the most applicable rate options for these irrigation
10 customers.

11
12 **Q. When transitioning customers to alternate rates, is there a potential for unintended**
13 **rate impacts to certain customers?**

14 A. Yes. When redesigning a rate or when cancelling rates and transitioning customers to
15 alternate rate structures, there may be some customers who will experience unintended rate
16 impacts. APS' proposal to transition residential E-10 and EC-1 customers (greater than
17 1,000 kWh) to time-of-use default rates appears to mitigate certain adverse rate impacts
18 that would have occurred otherwise. However, some customers who are not accustomed to
19 time-of-use rates may not be willing or able to shift their load which can cause adverse rate
20 impacts. Similar impacts could occur for general service customers. For instance, APS'
21 proposal would automatically transfer customers to rate E-32 TOU. While these customers
22 may be accustomed to shifting load, there could also be unintended rate impacts based on
23 individual load factors and differences in rate structures.

24

1 **RATE DESIGN**

2 **Q. Is Staff proposing rate designs for a full set of APS rates?**

3 A. No. Staff is providing bundled rate design proposals for residential rate schedules E10, E-
4 12, EC-1, ET-1, ET-2, ECT-1, and ECT-2 under Staff's proposed residential rate spread
5 and optional scenario discussed above. Staff is also identifying certain recommendations
6 that should be followed when setting APS rates and revenue spread. The rates to ultimately
7 be adopted by the Commission will be influenced by changes to revenue requirements and
8 other decisions made by the Commission.

9
10 **Q. Please summarize APS' approach to designing its proposed residential rates.**

11 A. APS has proposed maintaining the current basic service charge, increasing the
12 differentials between on- and off-peak periods, as well as the differentials between
13 summer and winter periods. APS has applied the proposed increase to both demand and
14 energy components of its rates. The majority of APS' proposed increase has been applied
15 to residential unbundled generation rates. For some rates, smaller increases have also
16 been applied to APS' unbundled delivery or distribution rates.

17
18 **Q. Do Staff's proposed residential rates generally follow the same approach utilized by
19 APS?**

20 A. Yes. Staff's rates also maintain the current basic service charge, increase the differentials
21 between on- and off-peak periods, and the differentials between the summer and winter
22 periods. However, Staff's proposed rates reflect differences associated with the revenue
23 requirement recommended by Staff and Staff's proposed revenue spread. A summary of
24 Staff's recommended residential rates is provided as schedule EAA-2. For informational
25 purposes, Staff has also provided a set of residential rates under the informational rate

1 spread scenario #2 where E-10 and EC-1 would not be cancelled in this proceeding. These
2 rates are provided on schedule EAA-3.

3
4 **Q. Please describe Staff's proposed rate design for residential rate E-12.**

5 A. E-12 is a seasonal rate with three kWh blocks (first 400 kWh, next 400 kWh, and all
6 additional kWh) applying to the summer period and a flat per kWh rate during the winter
7 period. Under Staff's proposed rate design for the E-12 summer rate, the rate for the first
8 block has been increased by 8.00 percent, the second block has been increased by 9.48
9 percent, and the third block has been increased by 10.05 percent. This proposed rate design
10 (resulting in the second block 41 percent greater than the first, the third block 17% greater
11 than the second block, and the third block 65% greater than the first block) increases the
12 pricing differentials between APS' rate blocks when compared to current rates. This type
13 of rate design also sends price signals consistent with energy conservation goals.

14
15 **Q. Commission Decision No. 67744 ordered APS to investigate the impact of lowering the**
16 **first block to 350 kWh and the second block to the next 350 kWh while reducing the**
17 **rate in the first block and increasing the rate for the third block. Is Staff opposed to**
18 **such a proposal?**

19 A. No. Staff is not opposed. While Staff did not propose changing the current rate blocks,
20 Staff does not find this proposal to be detrimental to APS' customers.

21
22 **Q. Please identify the total Staff proposed rate increase for an E-12 customer including**
23 **applicable surcharges and adjustor rates for the peak summer month during the test**
24 **year.**

25 A. Based on average use (981 kWh) during the peak summer month of July 2005, an E-12
26 customer would have an increase of \$8.88 or 7.69 percent, and based on the median use

1 (818 kWh) for that same period, an E-12 customer would have an increase of \$6.86 or 7.36
2 percent. A breakdown of a customer bill for the peak summer month is provided on
3 schedule EAA-4.

4
5 **Q. Has Staff considered ways of mitigating the impact of the rate increase on low income**
6 **customers?**

7 A. Yes. Staff believes that the Commission may want to consider increasing the discount on
8 E-3 and E-4 for customers with usage between 801-1,200 kWh. This usage block on E-3
9 and E-4 would include the majority of average use customers. Currently, the discount is 14
10 percent. Staff has considered the option of increasing the discount. If the discount is
11 increased, this will affect the amount to be collected through the system benefits charge.

12
13 **Q. Has Staff proposed an interim rate increase for rates E-10 and EC-1 that would be in**
14 **effect during the interim period discussed previously?**

15 A. Yes. Staff has proposed a set of rates that would be in effect during the interim period.
16 Staff's rates are designed to gradually step customers' rates up toward the default rates that
17 they may transition to at the end of the interim period. Staff's recommended E-10 and EC-
18 1 rates are identical to the rates provided in Staff's informational rate spread scenario
19 where E-10 and EC-1 would not be cancelled in this proceeding. The E-10 rate class
20 would receive a revenue increase of about 10.36 percent and the EC-1 class would receive
21 a revenue increase of about 10.29 percent.

22
23 **Q. Has Staff completed a typical bill analysis for its recommended residential rates and**
24 **informational rate spread scenario?**

25 A. Yes. Staff has provided rate impacts for certain recommended rates with Customers
26 transitioning to alternate rates and an informational rate spread scenario where customers

1 would not transition to new rates as a result of cancelling E-10 and EC-1. A Typical Bill
2 analysis for Staff's recommended rates is provided as EAA-5. A typical bill analysis for
3 rate schedules under Staff's informational rate spread scenario #2 is provided as EAA-6.
4

5 **Q. Experimental time-of-use rates ET-2 and ECT-2 became effective on July 1, 2006.**
6 **Does Staff have any recommendations regarding these rates?**

7 A. Yes. Staff proposed increases to these rates so that ET-2 and ECT-2 remain revenue
8 neutral with ET-1 and ECT-2 respectively. In addition, the rates have been designed to
9 achieve close to the current peak to off-peak kWh ratios in the summer and winter periods.
10 Staff recommends that rate designs for residential rates ET-2 and ECT-2 remain revenue
11 neutral when compared to rates adopted for ET-1 and ECT-2 respectively.
12

13 **Q. Please summarize APS' proposed rate design for general service rate E-32.**

14 A. APS has assigned an increase of approximately 21 percent to rate schedule E-32 which
15 represents the APS proposed system average increase. In addition, APS has maintained the
16 current rate structure and applied the majority of the increase to unbundled generation
17 components while applying a much smaller increase to the delivery or distribution
18 component. In its proposed rate design, APS has proposed increases to both energy and
19 demand rate elements. However, the majority of the increase has been allocated to energy
20 rate elements.
21

22 **Q. Does Staff have any concerns about the rate design for general service rate E-32?**

23 A. Yes. In the last rate case rate E-32 was completely redesigned. In that redesign the
24 demand charge for customers under 20 kW was removed; however, the demand rate for
25 customers above 20 kW was significantly increased. While that increase was made to
26 move generation distribution capacity rates close to their cost, there were some lower load

1 factor customers who received rate increases significantly greater than the average increase
2 due to the adoption of a much higher demand rate. Therefore, in this case, Staff would be
3 concerned about raising demand rates significantly especially given that the rates adopted
4 in the last rate case have only been in effect for a just over 16 months. Staff believes that
5 the Commission should be cautious in raising demand rates significantly. Therefore, Staff
6 recommends that the proposed demand rates for E-32 not be raised significantly over levels
7 proposed by APS.

8
9 **Q. Does Staff have any concerns about the structure of general service rate schedule E-**
10 **32 generally?**

11 A. Yes. General service rate schedule E-32 applies to general service customers with
12 demands below 3,000 kW. About 96 percent of APS' general service customer base takes
13 service on E-32. Currently this rate structure provides one set of rates for customers below
14 20 kW and a second set of rates for all other customers based in part on voltage levels.
15 Therefore, in the rate design process for E-32, it can be difficult to tailor rate structures to
16 different size customers with like usage characteristics. It is very common for utilities to
17 develop general service rates for general service customers in differing size categories as
18 opposed to one rate structure to cover the majority of general service customers. Staff
19 believes that replacing E-32 with three separate tariffs for small general service, medium
20 general service, and large general service categories could be beneficial for both APS and
21 its ratepayers. Therefore, Staff recommends that in the next rate case filed with the
22 Commission, APS propose to replace general service rate schedule E-32 with alternate
23 general service schedules that divide E-32 usage into small, medium, and large categories
24 or other appropriate division.

25

1 **Q. Did Staff make any adjustments to the total dollar amount to be recovered through**
2 **the System Benefits Charge?**

3 A. Yes. Staff witness Mr. Jerry Anderson has testified that the total system benefit dollars to
4 be recovered through rates is \$49,191,690. Therefore, Staff recommends that the System
5 Benefit Charge for all applicable APS rate schedules be set at \$.001850 per kWh.³
6

7 **SERVICE SCHEDULES**

8 **Schedule 1 - Terms and Conditions for Standard Offer and Direct Access Service**

9 **Q. What is Schedule 1?**

10 A. Schedule 1 is a rate schedule that sets forth APS terms and conditions of service.
11

12 **Q. Please briefly identify the nature of APS' proposed changes to Schedule 1.**

13 A. APS has proposed making certain clarifying changes as well as changing the way the after-
14 hours charge for other services is collected from customers.
15

16 **Q. Did APS revise its proposed Schedule 1 filing originally provided in its application?**

17 A. Yes. In response to Staff discovery, APS revised its originally filed proposal. A redlined
18 copy and clean copy of APS' revisions to its original proposal is attached as Exhibit A.
19

20 **Q. What types of changes did APS make in its revised proposal?**

21 A. APS made clarifying changes including but not limited to: clarifying what types of services
22 do not meet the definition of R14-2-203(D)(3), clarifying the manner in which specialized
23 meter charges would be collected, correcting an outdated web address reference, and the
24 addition of language related to master metering to comply with Commission rules.
25

³ If the Commission chooses to increase the low income discounts on E-3 and E-4 as previously discussed, this rate may need to be adjusted.

1 **Q. Please describe APS' proposal regarding the after-hours charge for other services.**

2 A. The after-hours charge for other services is for work that is more specialized and beyond
3 the scope of installing a meter, reading a meter, or turning the service on. Currently, the
4 fee for this charge is \$75.00 per trip. APS' proposal would change the way in which the
5 charge is assessed to customers and result in a charge of \$75.00 per crew person per hour.

6
7 **Q. Please discuss your recommendation regarding the after-hours charge for other
8 services.**

9 A. Under APS' proposal to collect the charge on a per crew person per hour basis, customers
10 would not be able to know ahead of time what they will be charged. In addition, it would
11 be very difficult for customers to know whether the appropriate number of crew persons
12 performed the work or whether the crew persons performed the work in a reasonable
13 amount of time. Staff believes APS' proposal has the potential to create customer
14 confusion. Therefore, Staff recommends that the after-hours charge on Schedule 1 for
15 other services remain at \$75.00 per trip.

16
17 **Q. Please discuss your recommendation regarding the definitions section of the schedule.**

18 A. APS should be required to include a definition for Multi-Unit Residential High-Rise
19 Developments because there could be confusion about what constitutes a High-Rise
20 Development. Therefore, Staff recommends that APS include a definition for Multi-Unit
21 Residential High-Rise Developments on Schedule 1.

22
23 **Q. Are APS' other proposed changes acceptable to Staff?**

24 A. Yes. Staff has concluded that APS proposed changes to Schedule 1 are reasonable, subject
25 to the modifications above.

26

1 **Schedule 3 – Conditions Governing Extensions of Electric Distribution Lines and Services**

2 **Q. What is Schedule 3?**

3 A. Schedule 3 is a service schedule that sets forth APS' line extension policy.
4

5 **Q. Please briefly identify the nature of APS' proposed changes to Schedule 3.**

6 A. APS has made changes to its line extension policy including: organizing the tariff by
7 specific type of end-use development, changing the residential line extension allowance
8 from a footage-based to a dollar-based allowance, removing the \$25,000 economic
9 feasibility study threshold for residential customers, and making certain changes regarding
10 master metering provisions.
11

12 **Q. Did APS revise its proposed Schedule 3 filing originally provided in its application?**

13 A. Yes. In response to Staff discovery, APS revised its originally filed proposal. A clean
14 copy of Schedule 3, outlining the changes from the current schedule with APS' revision to
15 its original proposal, is attached as Exhibit B.
16

17 **Q. What types of changes did APS make in its revised proposal?**

18 A. APS made clarifying changes including but not limited to: the addition of a definitions
19 section, the addition of new examples and narrative detailing how and when credits for
20 allowances will be applied and calculated, and the addition of language related to master
21 metering to comply with Commission rules.
22

23 **Q. What type of costs are collected from ratepayers by Schedule 3?**

24 A. Schedule 3 allows APS to collect the costs of installing distribution related facilities to the
25 development of new homes and businesses within APS' service territory.
26

1 **Q. Please discuss APS' proposal to move from a free footage-based allowance to a dollar-**
2 **based allowance for Residential Single Family Homes.**

3 A. Under the current schedule, a customer is given a free footage allowance of up to 1,000
4 feet. If the customer requires an extension for additional feet up to 2,000 feet or if the
5 construction costs exceed \$25,000, the customer provides an advance that is refundable for
6 a period of five years as additional customers are served from the extension. For
7 extensions that exceed 2,000 feet and are less than \$25,000 APS would provide an
8 extension based on a revenue test. For extensions that exceed 2,000 feet and are greater
9 than \$25,000, APS would provide an extension based upon an economic feasibility basis.

10
11 Under APS' proposal, the footage-based allowance would be eliminated and replaced with
12 a dollar-based allowance of \$5,000. If construction costs exceed the \$5,000 allowance,
13 customers would be required to provide an advance for the difference between the
14 allowance and actual construction cost. The advance would continue to be refundable for a
15 period of five years as additional customers are served from the line extension. In response
16 to Staff discovery,⁴ APS witness Mr. David Rumolo indicates that the proposed \$5,000
17 allowance equates to a typical 500-foot overhead extension or a 600-700-foot underground
18 extension.

19
20 **Q. Does APS' proposal improve its ability to recover its distribution costs associated with**
21 **new customer growth?**

22 A. Yes. APS witness Mr. Rumolo (p. 36, lines 20-21) indicates that the construction cost for a
23 1000-foot line extension (overhead) currently provided to customers as a free allowance is
24 in excess of \$10,000. Therefore, APS' proposed policy would result in APS recovering

⁴ APS response to EAA-17-6.

1 approximately \$5,000 more per residential single family home than under their current
2 free-footage allowance for a 1000-foot extension.

3
4 **Q. Are there other benefits in terms of cost recovery to APS in moving from a footage-**
5 **based allowance to a dollar-based allowance?**

6 A. Yes. Footage-based allowances do not account for increases in construction costs that may
7 occur through time. In addition, footage-based allowances do not reflect the increase in
8 costs associated with construction in more difficult terrains.

9
10 **Q. APS has reorganized Schedule 3 by specific type of end-use development. Please**
11 **identify APS' proposed allowances for other types of residential developments.**

12
13 • Residential Homebuilder Subdivisions – A \$5,000 per lot allowance would be
14 credited against the total construction cost which may include backbone system
15 costs minus streetlight and system improvement costs⁵ for a period up to 5 years.
16 Construction costs in excess of the allowance would be paid by the applicant as a
17 non-refundable contribution in aid of construction.

18
19 • Residential Custom Home “Lot Sale” Developments – A \$5,000 per completed
20 home allowance would be credited against the construction costs minus street light
21 and system improvement costs. Any additional construction costs would be paid by
22 the applicant as a non-refundable contribution in aid of construction.

23
24 • Master Planned Community Developments – A \$1,000 per lot allowance may be
25 credited against backbone infrastructure costs minus streetlight and system

⁵ System Improvement Costs means the costs of system additions over and above what is required to serve the customer, where such additions provide additional capacity for other customers.

1 improvement costs, and a \$4,000 allowance will be credited against subdivision
2 costs minus streetlight and system improvement costs. Any additional costs will be
3 paid by the applicant as a non-refundable contribution in aid of construction.
4

- 5 • Residential Multi-Family Developments such as apartments, condominiums and
6 townhouses – A \$500 per completed unit allowance may be credited against the
7 total construction cost including backbone infrastructure cost minus streetlight and
8 system improvement costs. Any additional costs will be paid by the applicant as a
9 non-refundable contribution in aid of construction.
10

11 **Q. Please identify the proposed allowance for Residential High-Rise and Mixed Use**
12 **Residential Developments.**

13 A. The allowance is based on economic feasibility. APS determines the economic feasibility
14 by calculating the estimated annual revenue based on APS' then currently effective rate for
15 distribution service (excluding taxes, regulatory assessment, and other adjustments) less the
16 cost of service. If the difference provides an adequate rate of return on the investment
17 made by APS to serve the customers and the development, then the extension is deemed
18 economically feasible. In response to Staff discovery,⁶ APS has indicated that "an
19 adequate rate of return" refers to the class rate of return approved in the most recent rate
20 case.
21

22 **Q. Please describe the proposed policy for non-residential developments.**

23 A. The proposed criteria for non-residential developments has not changed. APS' proposed
24 policy includes a provision for non-residential extensions based upon revenue-based
25 criteria and an economic feasibility basis. Under the revenue based criteria, the extension

⁶ APS response to EAA 17-1.

1 would be free where the estimated annual revenue based on APS' then currently effective
2 rate for distribution service (excluding taxes, regulatory assessment, and other adjustments)
3 multiplied by six is equal to or greater than the total construction costs less nonrefundable
4 customer contributions. The economic feasibility policy for non-residential developments
5 is the same as the economic feasibility policy for Residential High-Rise and Mixed Use
6 Residential Developments described above.

7
8 **Q. Do you have any comments or recommendations about the section titled Residential**
9 **Custom "Lot Sale" Developments?**

10 A. Yes. Under this policy, the applicant would be required to pay a refundable advance for
11 backbone infrastructure. When completed, and if approved by APS, the \$5,000 allowance
12 would be credited against the construction cost minus street lighting and system
13 improvements. Staff believes that the "construction cost" refers to the "backbone
14 infrastructure cost." Staff recommends that APS should add clarifying language to
15 Schedule 3 to specify that the "construction cost" refers to the "backbone infrastructure
16 cost."

17
18 **Q. Do you have any comments or recommendations about the section titled Master**
19 **Planned Community Developments and Residential Multi-Family Developments?**

20 A. Yes. As currently worded, the applicable per lot and per unit allowance "may" be credited
21 against the construction costs. In order to assure that credits will be issued to the applicant,
22 Staff recommends that under sections titled Master Planned Community Developments and
23 Residential Multi-Family Developments of Schedule 3, APS clarify that allowances will be
24 credited to the applicant.

25

1 **Q. Do you have any recommendations about the definition section of Schedule 3?**

2 A. Yes. According to APS, the current definition for "Residential Homebuilder Subdivision"
3 was derived from the definition for "Subdivision" in A.R.S. § 32-2101(55)(a) of Arizona
4 Real Estate law which refers to a "Subdivision" as consisting of six or more lots, parcels, or
5 fractional interest. However, under Commission rule R14-2-201(34), a "Residential
6 Subdivision Development" refers to a tract of land which has been divided into four or
7 more contiguous lots. Therefore, Staff recommends that APS amend its definition for
8 "Residential Homebuilder Subdivision" on Schedule 3 to be consistent with R14-2-
9 201(34). Staff also recommends that APS alphabetize the definitions included on Schedule
10 3.

11
12 **Q. Do you have any recommendations about the timing for field audits and the five-year
13 timeframe in which refundable advances can be refunded to applicants?**

14 A. Yes. As the schedule is currently worded, it is not clear that the 18-month timeframe for
15 field audits, and the five-year timeframe in which refundable advances can be refunded to
16 applicants, applies to each individual development type. Therefore, Staff recommends that
17 APS add language to each section of Schedule 3 clarifying the applicable timeframes for
18 field audits and refundable advances.

19
20 **Q. What else does Staff recommend in regard to Schedule 3?**

21 A. Staff recommends that APS should file a revised Schedule 3 including Staff's
22 recommendations above in its rebuttal testimony. In its rebuttal testimony, APS should
23 provide a copy of its proposed Schedule 3 redlined against the current version attached to
24 my testimony as Exhibit B.

25

1 **HOOK-UP FEES**

2 **Q. Please explain why Staff is addressing the issue of hook-up fees.**

3 A. On March 28, 2006, Commissioner Mundell issued a letter in this docket requesting that
4 the parties in this proceeding provide an analysis of the efficacy of using hook-up fees to
5 help fund APS' capital expenditures so that existing customers are not continually subject
6 to rate increases.

7
8 **Q. Is Staff recommending the adoption of hook-up fees for APS at this time?**

9 A. No. My testimony raises certain issues that should be addressed prior to the adoption of
10 hook-up fees for APS.

11
12 **Q. Could you please briefly describe the purpose of a hook-up fee?**

13 A. Yes. Hook-up fees have been generally adopted by the Commission in the water and
14 wastewater industries as a way of providing accelerated recovery to a utility for the
15 installation of infrastructure necessary to serve new customers. An additional benefit of
16 adopting hook-up fees is that existing customers are less likely to subsidize the capital costs
17 required to serve new growth. Since funds collected from hook-up fees are treated as
18 contributions for ratemaking purposes, these funds directly offset rate base which can also
19 reduce the need for a utility to file for future rate relief.

20
21 **Q. Has Staff researched the adoption of hook-up fees for utilities in other jurisdictions?**

22 A. Yes. Staff surveyed Commissions in other States and found that where they existed, hook-
23 up fees were more commonly adopted for water and wastewater utilities. However, at least
24 one jurisdiction responding to Staff's survey (Maine) adopted a policy where all new
25 customers pay 100 percent of the distribution and transmission costs that the electric utility
26 incurs to serve that specific customer.

1 **Q. Do any of Arizona's electric utilities currently have hook-up fees in place?**

2 A. Yes. Staff is aware of two electric utilities in Arizona that utilize hook-up fees. Dixie
3 Escalante Rural Electric Association which serves a small portion of the northeastern part
4 of Arizona has a Commission-approved impact fee that imposes a \$750 per residential
5 hook-up for installed capacity of over 20 kW plus a \$20 connect fee and \$60 per kW based
6 on the maximum installed capacity for Commercial, Irrigation, and General service plus a
7 \$20 connect fee.⁷

8

9 In addition, Wellton-Mohawk Irrigation and Drainage District⁸ ("Wellton"), which
10 provides electric service to a small portion of the southwestern part of Arizona, recently
11 adopted a \$750 hook-up fee for new residential facilities plus a \$29 connect fee. Wellton
12 has indicated that hook-up fees for non-residential facilities are considered on a case-by-
13 case basis.

14

15 **Q. What types of costs could be included in an electric hook-up fee?**

16 A. Capital expenditures associated with incremental distribution, transmission, and generation
17 capacity could be attributed to new growth and included in a hook-up fee.

18

19 **Q. Please comment on possible options for the design of a hook-up fee.**

20 A. Hook-up fees should be designed with a goal of equitably apportioning the cost of
21 constructing new facilities required to meet customer growth and can be designed in a
22 variety of ways.

23

24 One method commonly used in the water industry takes the full cost of additional plant or
25 facilities and divides the cost by the total number of estimated new and existing service

⁷ Connect fees generally cover the administrative costs attributable to the establishment of a new customer.

⁸ Wellton is not a Commission jurisdictional utility.

1 connections that will be served by that plant. However, this method fails to account for the
2 fact that new customers will commence paying usage rates that also recover the costs
3 incurred to serve an average customer, potentially creating a double payment burden on
4 new customers.

5
6 A second method that could be adopted would involve marginal cost studies to isolate the
7 difference between the full incremental costs associated with adding additional generation
8 capacity, transmission, distribution facilities, and related expenses to serve a typical new
9 customer within each rate class. Once the incremental costs are determined, the average
10 imbedded costs already included in base rates should be subtracted from the incremental
11 cost; the results should then be divided by the total number of estimated new connections.
12 This method takes into account the fact that new customers would be paying a hook-up fee
13 but also would commence paying for similar costs already embedded in base rates. This
14 approach puts current and new customers on an equal ground and further reduces any
15 subsidization between existing and new customers.

16
17 **Q. Please provide some of the questions Staff believes are appropriate to explore prior to**
18 **designing a hook-up fee.**

19 A. Some of the questions that should be considered in the design of a hook-up fee are
20 provided below.

- 21
22 • Should generation capacity be included in a hook-up fee given the complexities
23 associated with determining and designing a rate to recover the cost associated with
24 generation capacity?
25 • What type of generation unit or related index should be utilized as a proxy for
26 calculating marginal cost for generation capacity?

- 1 • Should a study of marginal costs be required as a means of calculating a unit of
- 2 demand, energy, and distribution including customer-related cost?
- 3 • Should operation and maintenance expenses be included as well as capital
- 4 expenditures?
- 5 • What is the appropriate customer growth or customer decline assumption?
- 6 • Over what timeframe should costs be accrued for purposes of setting a rate?
- 7 • How often should the rate be updated so that the rate accurately reflects current
- 8 marginal cost and customer growth rates?
- 9 • How should the cost be allocated to different customer classes and collected from
- 10 individual customers?
- 11 • What is the impact on direct access customers, where a customer chooses to receive
- 12 generation supply from a competitive electric service provider?
- 13 • What are the economic impacts of adopting hook-up fees within APS' service
- 14 territory?
- 15 • If hook-up fees are adopted for APS, would there be any impacts for natural gas
- 16 suppliers within APS service territory?

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18
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24
25

Q. Please provide an example of a hook-up fee based on actual distribution and transmission investment in 2005.

A. In response to Staff discovery,⁹ APS has provided actual costs associated with historical transmission and distribution capital expenditures from 1997-2005. To provide a very general estimate of a system wide hook-up fee, if the Commission were to adopt an approach of setting a rate for a transmission and distribution hook-up fee, where the total transmission and distribution costs were divided by the total number of new meter sets, the calculation would result in a hook-up fee of approximately \$5,900. It should be noted,

⁹ APS response to EAA 4-12 (APS 10390).

1 however, that APS has indicated that a small percentage of capital expenditures such as
2 replacements and upgrades not directly attributable to growth are included in the capital
3 expenditure figures provided to Staff.¹⁰ This will have the effect of inflating the calculated
4 charge slightly.

5
6 If the Commission were to adopt a method of setting a hook-up fee for transmission and
7 distribution based on the difference between average imbedded transmission and
8 distribution cost in rate base and actual incremental cost associated with transmission and
9 distribution divided by the number of new meter sets in 2005, the calculation would result
10 in a hook-up fee of about \$3,100.

11
12 **Q. Would it be possible to implement both a hook-up fee and a line extension policy?**

13 A. Yes. A line extension policy would cover costs in excess of the hook-up fee and cover
14 costs associated with more specialized capital-intensive distribution construction
15 requirements. However, the structure of APS' line extension policy (Schedule 3) would
16 have to be changed because it would be inconsistent to adopt a hook-up fee which includes
17 a cost for new distribution investment if a utility's line extension policy includes a free
18 allowance. If hook-up fees are adopted for APS, the proposed \$5,000 allowance for Single
19 Family Homes, Residential Homebuilder Subdivisions, and other residential allowances on
20 Schedule 3 should be removed and changes should be made to account for specialized
21 distribution-related costs in excess of that included in the hook-up fee.

22
23 One approach the Commission may consider to improve cost recovery associated with
24 distribution cost in future APS rate cases, would be to remove provisions for free
25 allowances on Schedule 3 altogether. This approach could be the first step in the direction

¹⁰ APS indicates currently it does not break down its transmission and distribution capital expenditures by new growth or by rate class.

1 of assigning new distribution costs to those customers that make it necessary to build new
2 distribution facilities and could then be followed by the implementation of hook-up fees
3 which could also collect the costs associated with transmission and/or generation.
4

5 **Q. Is Staff recommending the adoption of hook-up fees for APS at this time?**

6 A. No. As previously discussed, Staff has numerous unanswered questions which should be
7 addressed if the Commission chooses to pursue adopting hook-up fees for APS. In
8 addition, Staff has not had the benefit of reviewing a specific proposal. Recently
9 Commissioner Mayes requested that hook-up fees also be evaluated in the context of the
10 pending UNS Gas rate case.¹¹ Staff agrees with the Residential Utility Consumer Office
11 (“RUCO”) witness Ms. Marylee Diaz Cortez in her belief that that if the Commission
12 chooses to pursue hook-up fees for electric and gas utilities, Staff and the Commission
13 would benefit from input from all interested and affected parties regarding the pros and
14 cons of adopting hook-up fees as well as the design of those fees. Therefore, if the
15 Commission chooses to pursue hook-up fees for electric and gas utilities, Staff
16 recommends that the Commission open a generic docket where parties can provide
17 feedback and the Commission can evaluate the adoption of hook-up fees for the energy
18 industry.
19

20 **DEMAND RESPONSE AND LOAD MANAGEMENT**

21 **Q. Staff’s draft Demand-side Management (“DSM”) Rules include definitions for**
22 **demand response and load management. Please describe the difference**
23 **between demand response and load management.**

24 A. Demand-response programs are programs and pricing mechanisms designed to provide
25 incentives for customers to reduce their load in response to prices, market conditions, or

¹¹ Docket No. G-04204A-06-0463

1 threats to system reliability. Demand response programs may include dynamic
2 pricing/tariffs, price responsive demand bidding, contractually obligated or voluntary
3 curtailment, and direct load control or cycling by the customer. Time-based demand
4 response such as time-of-use, critical-peak pricing, and real-time pricing are also demand-
5 response programs.

6
7 Load management refers to deliberate actions initiated by a utility to reduce peak demands
8 or to improve system-operating efficiency. Examples of load management include: direct
9 control of demands through utility-initiated interruption or cycling, thermal storage, and
10 education to encourage customers to shift loads.

11
12 The main difference between demand response and load management is that demand
13 response refers to deliberate actions taken by the customer to reduce their load where load
14 management refers to utility-initiated activities.

15
16 **Q. Please discuss the benefits of adopting demand-response or load-management**
17 **programs.**

18 A. Demand response can result in savings of variable supply costs during times when
19 wholesale prices and demand are high, displacing the need to build additional capacity
20 related infrastructure such as generation, transmission, and distribution, and improving
21 system reliability by reducing demand when facilities such as a generator or transmission
22 line fail. In load pockets such as the Phoenix metropolitan area, demand-response and
23 load-management programs can be particularly beneficial especially during periods of high
24 demand or when facilities fail.

25

1 **Q. What type of demand-response programs are currently offered by other Arizona**
2 **utilities?**

3 A. It is not uncommon for utilities in the state to offer time-of-use rates and interruptible rates.
4 For instance, Tucson Electric Power and Trico Electric Cooperative are just two utilities
5 that offer various time-of use rates, and interruptible rates. In addition, Salt River Project
6 (“SRP”) currently offers time-of-use rates, interruptible riders, and a critical-peak pricing
7 rate for its general service class. Currently, there are no customers participating in SRP’s
8 critical-peak pricing pilot. SRP believes that this is due to the fact that the program did not
9 provide enough economic incentive given the fact that all of SRP’s general service
10 customers are currently on time-of-use rates and some also have interruptible contracts.
11 Therefore, SRP believes the benefits of load shifting may already be realized for SRP’s
12 general service class. However, SRP is currently considering the merits of offering
13 critical-peak pricing for other customer classes.¹²
14

15 **Q. What type of demand-response programs are currently being provided by APS?**

16 A. APS currently offers several time-of-use rates for its residential customers, one time-of-use
17 rate for its general-service class, and time-of-use and time-of-week options for its water
18 pumping customers. In addition, APS provides an “APS Power Partners” program, in
19 which participating business customers voluntarily reduce their load when temperatures
20 exceed 110 degrees in the Phoenix area. While Staff believes that these programs are
21 valuable in reducing peak demand or shifting load, Staff believes it is important to adopt a
22 more extensive and more diverse portfolio of demand-response or load-management
23 programs. Given the fact that Phoenix is located within a load pocket, and according to
24 APS estimates¹³ customer growth is not expected to decline significantly for the next

¹² Salt River Project Agricultural Improvement and Power District, Management Report for Time-Based Metering and Communications: Section 111(D)(14) of the Public Utility Regulatory Policies Act (PURPA), August 11, 2006, 16.

¹³ APS Response to EAA-4-16 (APS09172).

1 several years, demand-response and load-management programs may be beneficial for APS
2 and its ratepayers.

3

4 **Q. Commission Decision No. 67744 directed APS to study rate designs that promote**
5 **energy efficiency, conservation, and reduce peak demand. Did APS provide an**
6 **analysis of demand-response programs as a way of reducing peak demand?**

7 A. Yes. At page 37 of DJR_9, APS witness Mr. Rumolo provides an analysis of critical-peak
8 pricing, real-time pricing, and demand-bidding programs. Mr. Rumolo's analysis identifies
9 advantages and disadvantages of each and provides results of demand-response programs
10 in other jurisdictions. Mr. Rumolo's analysis results in a conclusion that due to unknown
11 participation levels and implementation issues associated with cost, APS will continue to
12 monitor critical-peak pricing and demand bidding programs to assess designs, program best
13 practices, customer participation, and load impacts. Mr. Rumolo also concludes that APS
14 will further assess program implementation costs, especially communication infrastructure,
15 data handling, and billing systems to better assess costs and benefits.

16

17 **Q. Would APS incur additional costs associated with the implementation of demand-**
18 **response or load-management programs?**

19 A. Yes. However, the magnitude of the cost depends on the size of the deployment and the
20 design of the program. Some of the technologies required would include meters that
21 measure and store interval load data, and provide communications links between the
22 customer and the utility. In addition, equipment that provides direct load control initiated
23 by either the customer or the utility may be required. In addition to metering and
24 communication upgrades, upgrades to the billing system and metering information system
25 may also be required.

26

1 It should be noted, however, that where advanced metering technologies are adopted, they
2 can provide benefits to the utility beyond the implementation of demand-response or load-
3 management programs. For instance, advanced metering systems can help the utility to
4 reduce operational costs associated with meter reading, managing power outages, and
5 detecting energy diversion. In addition, the utility benefits from improved load data that it
6 can use for its load-forecasting and research efforts and is often able to provide enhanced
7 customer service.

8
9 **Q. Did Commission Decision No. 67744 address the potential for cost recovery for**
10 **demand-side response programs?**

11 A. Yes. Paragraph 49 in the settlement agreement quoted below indicates that APS may
12 request Commission approval for demand-side response program costs that exceed the
13 initial \$48 million in DSM expenditures over the three-year period.

14
15 APS may request Commission approval for DSM program costs and
16 performance incentives that exceed the \$16 million (\$48 million over three
17 years) level referenced in paragraph 40. Such additional DSM programs
18 may include demand-side response and additional energy efficiency
19 programs.

20
21 **Q. Please comment on Mr. Rumolo's conclusions.**

22 A. While Staff agrees that there may be several unknowns about overall program
23 performance, the benefits of a properly designed demand-response and/or load-
24 management program may outweigh the costs. In order to effectively evaluate the impact
25 of demand-response and load-management programs for APS, cost benefit analyses should
26 be completed.

27

1 **Q. Do the draft DSM rules address cost effectiveness for demand-response and load-**
2 **management programs?**

3 A. Yes. Under the draft DSM rules, cost-effectiveness for DSM programs, including demand
4 response and load management, shall be determined by the Societal Cost Test.

5
6 **Q. Does Staff agree with the RUCO witness Ms. Diaz Cortez's recommendation to**
7 **establish a demand-response task force?**

8 A. Staff believes establishing a forum to explore issues associated with demand response
9 opportunities may be beneficial. Specifically, issues such as which programs will be the
10 most beneficial for APS' system and its ratepayers, which customer segments will be able
11 to respond to demand response and/or load management programs, what kinds of system
12 enhancements or upgrades would be required, and how to measure costs and benefits of a
13 particular program within the construct of the Societal Cost test are all topics that could be
14 addressed. Therefore, Staff recommends that APS establish a forum to explore issues
15 associated with demand-response and load-management opportunities for its service
16 territory.

17
18 **Q. What does Staff recommend regarding demand-response and load-management**
19 **programs?**

20 A. Staff recommends that APS conduct a study that identifies which types of demand-
21 response and load-management programs would be most beneficial to APS' system. In the
22 study, APS should demonstrate why certain programs are more beneficial than others and
23 identify which customer segments would be most likely to respond to such programs. The
24 study should rely on a cost-benefit analysis based on the Societal Cost Test and be filed
25 with the Commission within eight months of approval of a decision in this matter. In
26 addition, APS should be required to file for Commission approval of one or more cost-

1 effective demand-response or load-management programs that APS believes would be
2 most beneficial to its system and its ratepayers, and to file it concurrently with the filing the
3 study referred to above.

4
5 **SUMMARY OF STAFF RECOMMENDATIONS**

6 **Q. Please provide a summary of your recommendations.**

- 7 A. 1. Staff recommends higher than average increases for rate schedules E-34 and E-35
8 based on the fact that these categories are under performing relative to the rest of the
9 general service class and the system-average rate of return.
- 10 2. Staff recommends that the cost-of-service category E-32 (1,000 or greater kW) receive
11 a greater increase than E-32 cost-of-service categories (0-20 kW), (21-100 kW), (101-
12 400 kW), and (401-999 kW).
- 13 3. Staff recommends that rate schedule E-20 receive a much smaller than average increase
14 due to the fact that its return is much greater than the system average and exceeds the
15 returns for the other rate categories in the cost-of-service study.
- 16 4. Staff recommends that APS provide a 12-month interim period for customer transition
17 so that residential customers on E-10 and EC-1 will have additional time to fully
18 evaluate their alternative rate options. Staff also recommends that APS continue
19 customer outreach efforts to educate consumers about their rate options during the 12-
20 month interim period.
- 21 5. Staff recommends that E-10 and EC-1 not be cancelled until the end of the 12-month
22 interim period, which should provide customers with adequate time to consider
23 alternative rate options.
- 24 6. Staff recommends that APS provide customers on E-21, E-22, E-23, and E-24 a six-
25 month interim period for customer transition so that customers would be provided
26 adequate time to consider other rate options and allow APS time to switch out meters

- 1 where required. Staff also recommends that APS propose an interim rate increase to
2 apply during the interim period for rates E-21, E-22, E-23, and E-24 that is greater than
3 the average increase for the general service class.
- 4 7. Staff recommends that E-21, E-22, E-23, and E-24 not be cancelled until the end of the
5 six-month interim period, which should provide customers with time to consider
6 alternative rate options.
- 7 8. Staff recommends that rate designs for residential rates ET-2 and ECT-2 remain
8 revenue neutral when compared to rates adopted for ET-1 and ECT-2 respectively.
- 9 9. Staff recommends that the proposed demand rates for E-32 not be raised significantly
10 over levels proposed by APS.
- 11 10. Staff recommends that in the next rate case filed with the Commission, APS propose to
12 replace general service rate schedule E-32 with alternate general service schedules that
13 divide E-32 usage into small, medium, and large categories or other appropriate
14 division.
- 15 11. Staff recommends that the System Benefit Charge for all applicable APS rate schedules
16 be set at \$.001850 per kWh.
- 17 12. Staff recommends that the after-hours charge on Schedule 1 for other services remain at
18 \$75.00 per trip.
- 19 13. Staff recommends that APS include a definition for Multi-Unit Residential High-Rise
20 Developments on Schedule 1.
- 21 14. Staff recommends that APS should add clarifying language to Schedule 3 to specify
22 that the “construction cost” refers to the “backbone infrastructure cost.”
- 23 15. Staff recommends that under sections titled Master Planned Community Developments
24 and Residential Multi-Family Developments of Schedule 3, APS clarify that
25 allowances will be credited to the applicant.

- 1 16. Staff recommends that APS amend its definition for “Residential Homebuilder
2 Subdivision” on Schedule 3 to be consistent with R14-2-201(34). Staff also
3 recommends that APS alphabetize the definitions included on Schedule 3.
- 4 17. Staff recommends that APS add language to each section of Schedule 3 clarifying the
5 applicable timeframes for field audits and refundable advances.
- 6 18. Staff recommends that APS should file a revised Schedule 3 including Staff’s
7 recommendations above in its rebuttal testimony. In its rebuttal testimony, APS should
8 provide a copy of its proposed Schedule 3 redlined against the current version attached
9 to my testimony as Exhibit B
- 10 19. Staff recommends that the Commission open a generic docket where parties can
11 provide feedback and the Commission can evaluate the adoption of hook-up fees for
12 the energy industry.
- 13 20. Staff recommends that APS establish a forum to explore issues associated with
14 demand-response and load-management opportunities for its service territory.
- 15 21. Staff recommends that APS conduct a study that identifies which types of demand-
16 response and load-management programs would be most beneficial to APS’ system. In
17 the study, APS should demonstrate why certain programs are more beneficial than
18 others and identify which customer segments would be most likely to respond to such
19 programs. The study should rely on a cost-benefit analysis based on the Societal Cost
20 Test and be filed with the Commission within eight months of approval of a decision in
21 this matter. In addition, APS should be required to file for Commission approval of
22 one or more cost-effective demand-response or load-management programs that APS
23 believes would be most beneficial to its system and its ratepayers, and to file it
24 concurrently with the filing the study referred to above.
- 25

1 **Q. Does this conclude your direct testimony?**

2 A. Yes, it does.

EAA-1

Summary of Cost of Service Results with
Interclass Returns

Summary of Staff Cost of Service Results
4-CP and Average and 4-CP Allocation for Production Demand
Arizona Public Service
E-01345A-05-0816

EAA-1

	4-CP and Average		4-CP	
	Rate of Return	Rate of Return Index	Rate of Return	Rate of Return Index
<u>Residential</u>				
E-10 (frozen)	4.04%	0.77	4.12%	0.79
E-12	5.94%	1.14	5.70%	1.09
EC-1 (frozen)	3.05%	0.58	3.12%	0.6
ET-1	3.58%	0.69	3.20%	0.61
ECT-1	<u>2.62%</u>	<u>0.5</u>	<u>2.52%</u>	<u>0.48</u>
Total Residential	4.25%	0.81	3.99%	0.76
<u>General Service</u>				
E-20	9.82%	1.88	10.59%	2.03
E-30, E-32 (0-20 kW)	7.00%	1.34	5.56%	1.06
E-32 (21-100 kW)	7.76%	1.49	7.19%	1.38
E-32 (101-400 kW)	8.65%	1.66	9.21%	1.76
E-32 (401-999 kW)	7.76%	1.48	9.56%	1.83
E-32 (1,000 + kW)	2.30%	0.44	3.12%	0.60
E-34	2.52%	0.48	3.79%	0.73
E-35	-0.22%	-0.04	<u>2.54%</u>	<u>0.49</u>
Total General Service	6.51%	1.25	6.79%	1.3
E-38, E-221 (Water Pumping)	8.30%	1.59	13.58%	2.6
Street Lighting	2.18%	0.42	3.32%	0.64
Dusk to Dawn	5.98%	1.15	6.69%	1.28
Total Retail	5.23%	1.00	5.23%	1.00

EAA-2

Summary of Staff Proposed Residential Rates With Customer Transition

Summary of Staff Proposed Residential Rates
 Includes Customer Transition
 Arizona Public Service
 E-01345A-05-0816

EAA-2

Rate Schedule	Season	Block	Present Rate	Proposed Rate	Difference \$	Difference %
E-10						
Interim Rate	Summer	Basic Service Charge	\$0.253	\$0.253	\$0.000	0.00%
		First 400 kWh	\$0.06929	\$0.07988	\$0.01059	15.28%
		Next 400 kWh	\$0.09490	\$0.10678	\$0.01188	12.52%
		All additional kWh	\$0.09760	\$0.11354	\$0.01594	16.33%
Interim Rate	Winter	Basic Service Charge	\$0.253	\$0.253	\$0.000	0.00%
		All kWh	\$0.07601	\$0.08246	\$0.00645	8.48%
E-12						
Interim Rate	Summer	Basic Service Charge	\$0.253	\$0.253	\$0.000	0.00%
		First 400 kWh	\$0.07570	\$0.08177	\$0.00607	8.01%
		Next 400 kWh	\$0.10556	\$0.11557	\$0.01001	9.48%
		All additional kWh	\$0.12314	\$0.13552	\$0.01238	10.05%
Interim Rate	Winter	Basic Service Charge	\$0.253	\$0.253	\$0.000	0.00%
		All kWh	\$0.07361	\$0.08001	\$0.00640	8.69%
EC-1						
Interim Rate	Summer	Basic Service Charge	\$0.329	\$0.329	\$0.000	0.00%
		All kW	\$10.00	\$11.02	\$1.02	10.23%
		All kWh	\$0.03943	\$0.04538	\$0.00595	15.08%
Interim Rate	Winter	Basic Service Charge	\$0.329	\$0.329	\$0.000	0.00%
		All kW	\$7.10	\$8.13	\$1.03	14.54%
		All kWh	\$0.02978	\$0.03124	\$0.00146	4.90%

Summary of Staff Proposed Residential Rates
 Includes Customer Transition
 Arizona Public Service
 E-01345A-05-0816

EAA-2

<u>Rate Schedule</u>	<u>Season</u>	<u>Block</u>	<u>Present Rate</u>	<u>Proposed Rate</u>	<u>Difference \$</u>	<u>Difference %</u>	
ET-1	Summer	Basic Service Charge	\$0.493	\$0.493	\$0.000	0.00%	
		All On-Peak kWh	\$0.13310	\$0.15008	\$0.01698	12.76%	
		All Off-Peak kWh	\$0.04299	\$0.04794	\$0.00495	11.51%	
	Winter	Basic Service Charge	\$0.493	\$0.493	\$0.000	0.00%	
		All On-Peak kWh	\$0.10918	\$0.12201	\$0.01283	11.75%	
		All Off-Peak kWh	\$0.04167	\$0.04638	\$0.00471	11.30%	
	ECT-1R	Summer	Basic Service Charge	\$0.493	\$0.493	\$0.000	0.00%
			All On-Peak kW	\$11.81	\$12.14	\$0.33	2.79%
			All On-Peak kWh	\$0.04765	\$0.05836	\$0.01071	22.47%
Winter		All Off-Peak kWh	\$0.02672	\$0.03227	\$0.00555	20.77%	
		Basic Service Charge	\$0.493	\$0.493	\$0.000	0.00%	
		All On-Peak kW	\$8.11	\$8.31	\$0.20	2.47%	
ET-2		Summer	All On-Peak kWh	\$0.03641	\$0.04445	\$0.00804	22.08%
			All Off-Peak kWh	\$0.02570	\$0.03103	\$0.00533	20.74%
			Basic Service Charge	\$0.493	\$0.493	\$0.000	0.00%
ET-2	Summer	All On-Peak kWh	\$0.18200	\$0.20522	\$0.02322	12.76%	
		All Off-Peak kWh	\$0.04519	\$0.05039	\$0.00520	11.51%	
		Basic Service Charge	\$0.493	\$0.493	\$0.000	0.00%	
	Winter	All On-Peak kWh	\$0.08703	\$0.09726	\$0.01023	11.75%	
		All Off-Peak kWh	\$0.05783	\$0.06437	\$0.00654	11.31%	
		Basic Service Charge	\$0.493	\$0.493	\$0.000	0.00%	

Summary of Staff Proposed Residential Rates
 Includes Customer Transition
 Arizona Public Service
 E-01345A-05-0816

EAA-2

<u>Rate Schedule</u>	<u>Season</u>	<u>Block</u>	<u>Present Rate</u>	<u>Proposed Rate</u>	<u>Difference \$</u>	<u>Difference %</u>
ECT-2	Summer	Basic Service Charge	\$0.493	\$0.493	\$0.000	0.00%
		All On-Peak kW	\$11.81	\$12.14	\$0.33	2.79%
		All On-Peak kWh	\$0.05690	\$0.06969	\$0.01279	22.48%
		All Off-Peak kWh	\$0.02792	\$0.03372	\$0.00580	20.77%
	Winter	Basic Service Charge	\$0.493	\$0.493	\$0.000	0.00%
		All On-Peak kW	\$8.11	\$8.31	\$0.20	2.47%
		All On-Peak kWh	\$0.03730	\$0.04554	\$0.00824	22.09%
		All Off-Peak kWh	\$0.02733	\$0.03300	\$0.00567	20.75%

EAA-3

Summary of Residential Rates for Informational Scenario #2 No Customer Transition

Summary of Residential Rates
 No Customer Transition
 Arizona Public Service
 E-01345A-05-0816

EAA-3

<u>Rate Schedule</u>	<u>Season</u>	<u>Block</u>	<u>Present Rate</u>	<u>Proposed Rate</u>	<u>Difference \$</u>	<u>Difference %</u>
E-10	Summer	Basic Service Charge	\$0.253	\$0.253	\$0.00	0.00%
		First 400 kWh	\$0.06929	\$0.07988	\$0.01059	15.28%
		Next 400 kWh	\$0.09490	\$0.10678	\$0.01188	12.52%
		All additional kWh	\$0.09760	\$0.11354	\$0.01594	16.33%
Winter	Basic Service Charge	\$0.253	\$0.253	\$0.00	0.00%	
	All kWh	\$0.07601	\$0.08246	\$0.00645	8.48%	
E-12	Summer	Basic Service Charge	\$0.253	\$0.253	\$0.000	0.00%
		First 400 kWh	\$0.07570	\$0.08326	\$0.00756	9.99%
		Next 400 kWh	\$0.10556	\$0.11795	\$0.01239	11.74%
		All additional kWh	\$0.12314	\$0.13932	\$0.01618	13.14%
Winter	Basic Service Charge	\$0.253	\$0.253	\$0.000	0.00%	
	All kWh	\$0.07361	\$0.08063	\$0.00702	9.54%	
EC-1	Summer	Basic Service Charge	\$0.329	\$0.329	\$0.000	0.00%
		All kW	\$10.00	\$11.02	\$1.02	10.23%
		All kWh	\$0.03943	\$0.04538	\$0.00595	15.08%
		Basic Service Charge	\$0.329	\$0.329	\$0.00	0.00%
Winter	All kW	\$7.10	\$8.13	\$1.03	14.54%	
	All kWh	\$0.02978	\$0.03124	\$0.00146	4.90%	

Summary of Residential Rates
 No Customer Transition
 Arizona Public Service
 E-01345A-05-0816

Rate Schedule	Season	Block	Present		Proposed		Difference	
			Rate	Rate	Rate	Rate	\$	%
ET-1	Summer	Basic Service Charge	\$0.493	\$0.493	\$0.493	\$0.000	0.00%	
		All On-Peak kWh	\$0.13310	\$0.15007	\$0.01697	12.75%		
		All Off-Peak kWh	\$0.04299	\$0.04793	\$0.00494	11.49%		
	Winter	Basic Service Charge	\$0.493	\$0.493	\$0.000	0.00%		
		All On-Peak kWh	\$0.10918	\$0.12200	\$0.01282	11.74%		
		All Off-Peak kWh	\$0.04167	\$0.04637	\$0.00470	11.28%		
	ECT-1R	Summer	Basic Service Charge	\$0.493	\$0.493	\$0.000	0.00%	
			All On-Peak kW	\$11.81	\$12.15	\$0.34	2.86%	
			All On-Peak kWh	\$0.04765	\$0.05877	\$0.01112	23.33%	
All Off-Peak kWh		\$0.02672	\$0.03223	\$0.00551	20.62%			
Winter		Basic Service Charge	\$0.493	\$0.493	\$0.000	0.00%		
		All On-Peak kW	\$8.11	\$8.32	\$0.21	2.58%		
	All On-Peak kWh	\$0.03641	\$0.04539	\$0.00898	24.66%			
All Off-Peak kWh	\$0.02570	\$0.03103	\$0.00533	20.74%				
ET-2	Summer	Basic Service Charge	\$0.493	\$0.493	\$0.000	0.00%		
		All On-Peak kWh	\$0.18200	\$0.20520	\$0.02320	12.75%		
		All Off-Peak kWh	\$0.04519	\$0.05038	\$0.00519	11.48%		
	Winter	Basic Service Charge	\$0.493	\$0.493	\$0.000	0.00%		
		All On-Peak kWh	\$0.08703	\$0.09725	\$0.01022	11.74%		
		All Off-Peak kWh	\$0.05783	\$0.06435	\$0.00652	11.28%		

Summary of Residential Rates
 No Customer Transition
 Arizona Public Service
 E-01345A-05-0816

EAA-3

Rate Schedule	Season	Block	Present Rate	Proposed Rate	Difference \$	Difference %
ECT-2	Summer	Basic Service Charge	\$0.493	\$0.493	\$0.000	0.00%
		All On-Peak kW	\$11.81	\$12.15	\$0.34	2.86%
		All On-Peak kWh	\$0.05690	\$0.07017	\$0.01327	23.32%
		All Off-Peak kWh	\$0.02792	\$0.03368	\$0.00576	20.63%
	Winter	Basic Service Charge	\$0.493	\$0.493	\$0.000	0.00%
		All On-Peak kW	\$8.11	\$8.32	\$0.21	2.58%
		All On-Peak kWh	\$0.03730	\$0.04650	\$0.00920	24.66%
		All Off-Peak kWh	\$0.02733	\$0.03300	\$0.00567	20.75%

EAA-4

E-12 Customer Bill Components
Peak Summer Month 2005

Staff Proposed E-12
Includes Customer Transition
Summary of Customer Bill Components
Arizona Public Service
E-01345A-05-0816

EAA-4

Peak Summer Month July 2005

Average Use	981
Median Use	818

Average Use July 2005

		<u>Present</u> <u>Base Rate</u>	<u>Proposed</u> <u>Base Rate</u>	<u>Increase</u> <u>\$</u>	<u>Increase</u> <u>%</u>
Present Base Rate		\$102.38	\$111.05	\$8.67	
Environmental Portfolio Surcharge Adjustor ¹	0.001392	\$0.35	\$0.56	\$0.21	
Competition Rules Compliance Charge	0.000338	\$0.33	\$0.33	\$0.00	
Power Supply Adjustor	0.004000	\$3.92	\$3.92	\$0.00	
Interim Adjustor Rate	0.007000	\$6.87	\$6.87	\$0.00	
Surcharge 1	0.000554	\$0.54	\$0.54	\$0.00	
Surcharge 2 ²	0.001029	\$1.01	\$1.01	\$0.00	
DSM Adjustor ³	0.000000	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	
Total Bill		\$115.41	\$124.29	\$8.88	7.69%

Median Use July 2005

		<u>Present</u> <u>Base Rate</u>	<u>Proposed</u> <u>Base Rate</u>	<u>Increase</u> <u>\$</u>	<u>Increase</u> <u>%</u>
Present Base Rate		\$82.31	\$88.96	\$6.65	
Environmental Portfolio Surcharge Adjustor	0.001392	\$0.35	\$0.56	\$0.21	
Competition Rules Compliance Charge	0.000338	\$0.28	\$0.28	\$0.00	
Power Supply Adjustor	0.004000	\$3.27	\$3.27	\$0.00	
Interim Adjustor Rate	0.007000	\$5.73	\$5.73	\$0.00	
Surcharge 1	0.000554	\$0.45	\$0.45	\$0.00	
Surcharge 2	0.001029	\$0.84	\$0.84	\$0.00	
DSM Adjustor	0.000000	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	
Total Bill		\$93.23	\$100.09	\$6.86	7.36%

1) Proposed rate per the testimony of Staff witness Barbara Keene.

2) Proposed rate per the testimony of Staff witness Barbara Keene.

3) DSM Adjustor will not go into effect until APS spends more than \$10 million in DSM in a calendar year.

EAA-5

Typical Bill Analysis Staff Recommended Rates
With Customer Transition

Arizona Public Service Company

**Typical Residential Bill Analysis
E-10 to E-10 Interim Rate Based on No Transition Rate Summer (May - October)**

EAA-5

Customer Bills at Varying Consumption Levels

Consumption	<u>Monthly kWh</u>	<u>Present Rates Base Rate</u>	<u>Proposed Rates Base Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
Average	942	87.13	98.38	11.25	12.91%
Median	727	66.34	74.46	8.12	12.24%
Consumption	<u>Monthly kWh</u>	<u>Present Rates Base Rate</u>	<u>Proposed Rates Base Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
	200	21.45	23.57	2.12	9.88%
	250	24.91	27.56	2.65	10.64%
	300	28.38	31.55	3.17	11.17%
	350	31.84	35.55	3.71	11.65%
	400	35.31	39.54	4.23	11.98%
	450	40.05	44.88	4.83	12.06%
	500	44.80	50.22	5.42	12.10%
	550	49.54	55.56	6.02	12.15%
	600	54.29	60.90	6.61	12.18%
	650	59.03	66.24	7.21	12.21%
	700	63.78	71.58	7.80	12.23%
	750	68.52	76.92	8.40	12.26%
	800	73.27	82.26	8.99	12.27%
	850	78.15	87.93	9.78	12.51%
	900	83.03	93.61	10.58	12.74%
	950	87.91	99.29	11.38	12.95%
	1,000	92.79	104.96	12.17	13.12%
	1,100	102.55	116.32	13.77	13.43%
	1,200	112.31	127.67	15.36	13.68%
	1,300	122.07	139.03	16.96	13.89%
	1,400	131.83	150.38	18.55	14.07%
	1,500	141.59	161.73	20.14	14.22%
	1,600	151.35	173.09	21.74	14.36%
	1,700	161.11	184.44	23.33	14.48%
	1,800	170.87	195.80	24.93	14.59%
	1,900	180.63	207.15	26.52	14.68%
	2,000	190.39	218.50	28.11	14.76%
	2,200	209.91	241.21	31.30	14.91%
	2,400	229.43	263.92	34.49	15.03%
	2,600	248.95	286.63	37.68	15.14%
	2,800	268.47	309.34	40.87	15.22%
	3,000	287.99	332.04	44.05	15.30%

NOTES TO SCHEDULE:

- 1) Bills do not include PSA, EPS, CRCC, Surcharges, Regulatory Assessment, or Tax charges.
- 2) Present Rates are rates effective 4/1/2005.
- 3) Average and median consumption is based on the seasonal average.

Arizona Public Service Company

Typical Residential Bill Analysis

EAA-5

E-10 to E-10 Interim Rate Based on No Transition Rate Winter (November-April)

Customer Bills at Varying Consumption Levels

Consumption	Monthly kWh	Present Rates Base Rate	Proposed Rates Base Rate	Dollar Increase	Percent Increase
Average	705	61.18	65.72	4.54	7.42%
Median	574	51.22	54.92	3.70	7.22%

Consumption	Monthly kWh	Present Rates Base Rate	Proposed Rates Base Rate	Dollar Increase	Percent Increase
	200	22.79	24.08	1.29	5.66%
	250	26.59	28.20	1.61	6.05%
	300	30.39	32.33	1.94	6.38%
	350	34.19	36.45	2.26	6.61%
	400	37.99	40.57	2.58	6.79%
	450	41.79	44.70	2.91	6.96%
	500	45.60	48.82	3.22	7.06%
	550	49.40	52.94	3.54	7.17%
	600	53.20	57.06	3.86	7.26%
	650	57.00	61.19	4.19	7.35%
	700	60.80	65.31	4.51	7.42%
	750	64.60	69.43	4.83	7.48%
	800	68.40	73.55	5.15	7.53%
	850	72.20	77.68	5.48	7.59%
	900	76.00	81.80	5.80	7.63%
	950	79.80	85.92	6.12	7.67%
	1,000	83.60	90.05	6.45	7.72%
	1,100	91.20	98.29	7.09	7.77%
	1,200	98.80	106.54	7.74	7.83%
	1,300	106.40	114.78	8.38	7.88%
	1,400	114.00	123.03	9.03	7.92%
	1,500	121.61	131.27	9.66	7.94%
	1,600	129.21	139.52	10.31	7.98%
	1,700	136.81	147.77	10.96	8.01%
	1,800	144.41	156.01	11.60	8.03%
	1,900	152.01	164.26	12.25	8.06%
	2,000	159.61	172.50	12.89	8.08%
	2,200	174.81	188.99	14.18	8.11%
	2,400	190.01	205.48	15.47	8.14%
	2,600	205.22	221.98	16.76	8.17%
	2,800	220.42	238.47	18.05	8.19%
	3,000	235.62	254.96	19.34	8.21%

NOTES TO SCHEDULE:

- 1) Bills do not include PSA, EPS, CRCC, Surcharges, Regulatory Assessment, or Tax charges.
- 2) Present Rates are rates effective 4/1/2005.
- 3) Average and median consumption is based on the seasonal average.

Arizona Public Service Company

Typical Residential Bill Analysis
E-12 to E-12 with Transition Summer (May - October)

EAA-5

Customer Bills at Varying Consumption Levels

Consumption	<u>Monthly</u> <u>kWh</u>	<u>Present Rates</u> <u>Base Rate</u>	<u>Proposed Rates</u> <u>Base Rate</u>	<u>Dollar</u> <u>Increase</u>	<u>Percent</u> <u>Increase</u>
Average	774	77.35	83.52	6.17	8.0%
Median	617	60.78	65.37	4.59	7.6%

Consumption	<u>Monthly</u> <u>kWh</u>	<u>Present Rates</u> <u>Base Rate</u>	<u>Proposed Rates</u> <u>Base Rate</u>	<u>Dollar</u> <u>Increase</u>	<u>Percent</u> <u>Increase</u>
	200	22.73	23.94	1.21	5.3%
	250	26.52	28.03	1.51	5.7%
	300	30.30	32.12	1.82	6.0%
	350	34.09	36.21	2.12	6.2%
	400	37.87	40.30	2.43	6.4%
	450	43.15	46.07	2.92	6.8%
	500	48.43	51.85	3.42	7.1%
	550	53.70	57.63	3.93	7.3%
	600	58.98	63.41	4.43	7.5%
	650	64.26	69.19	4.93	7.7%
	700	69.54	74.97	5.43	7.8%
	750	74.82	80.75	5.93	7.9%
	800	80.09	86.52	6.43	8.0%
	850	86.25	93.30	7.05	8.2%
	900	92.41	100.08	7.67	8.3%
	950	98.57	106.85	8.28	8.4%
	1,000	104.72	113.63	8.91	8.5%
	1,100	117.04	127.18	10.14	8.7%
	1,200	129.35	140.73	11.38	8.8%
	1,300	141.66	154.28	12.62	8.9%
	1,400	153.98	167.84	13.86	9.0%
	1,500	166.29	181.39	15.10	9.1%
	1,600	178.61	194.94	16.33	9.1%
	1,700	190.92	208.49	17.57	9.2%
	1,800	203.23	222.04	18.81	9.3%
	1,900	215.55	235.60	20.05	9.3%
	2,000	227.86	249.15	21.29	9.3%
	2,200	252.49	276.25	23.76	9.4%
	2,400	277.12	303.35	26.23	9.5%
	2,600	301.75	330.46	28.71	9.5%
	2,800	326.37	357.56	31.19	9.6%
	3,000	351.00	384.67	33.67	9.6%

NOTES TO SCHEDULE:

- 1) Bills do not include PSA, EPS, CRCC, Surcharges, Regulatory Assessment, or Tax charges.
- 2) Present Rates are rates effective 4/1/2005.
- 3) Average and median consumption is based on the seasonal average.

Arizona Public Service Company

Typical Residential Bill Analysis
E-12 to E-12 with Transition Winter (November-April)

EAA-5

Customer Bills at Varying Consumption Levels

Consumption	<u>Monthly</u> <u>kWh</u>	<u>Present Rates</u> <u>Base Rate</u>	<u>Proposed Rates</u> <u>Base Rate</u>	<u>Dollar</u> <u>Increase</u>	<u>Percent</u> <u>Increase</u>
Average	582	50.43	54.16	3.73	7.40%
Median	476	42.63	45.67	3.04	7.13%

Consumption	<u>Monthly</u> <u>kWh</u>	<u>Present Rates</u> <u>Base Rate</u>	<u>Proposed Rates</u> <u>Base Rate</u>	<u>Dollar</u> <u>Increase</u>	<u>Percent</u> <u>Increase</u>
	200	22.31	23.59	1.28	5.74%
	250	25.99	27.59	1.60	6.16%
	300	29.67	31.59	1.92	6.47%
	350	33.35	35.59	2.24	6.72%
	400	37.03	39.59	2.56	6.91%
	450	40.71	43.59	2.88	7.07%
	500	44.40	47.60	3.20	7.21%
	550	48.08	51.60	3.52	7.32%
	600	51.76	55.60	3.84	7.42%
	650	55.44	59.60	4.16	7.50%
	700	59.12	63.60	4.48	7.58%
	750	62.80	67.60	4.80	7.64%
	800	66.48	71.60	5.12	7.70%
	850	70.16	75.60	5.44	7.75%
	900	73.84	79.60	5.76	7.80%
	950	77.52	83.60	6.08	7.84%
	1,000	81.20	87.60	6.40	7.88%
	1,100	88.56	95.60	7.04	7.95%
	1,200	95.92	103.60	7.68	8.01%
	1,300	103.28	111.60	8.32	8.06%
	1,400	110.64	119.60	8.96	8.10%
	1,500	118.01	127.61	9.60	8.13%
	1,600	125.37	135.61	10.24	8.17%
	1,700	132.73	143.61	10.88	8.20%
	1,800	140.09	151.61	11.52	8.22%
	1,900	147.45	159.61	12.16	8.25%
	2,000	154.81	167.61	12.80	8.27%
	2,200	169.53	183.61	14.08	8.31%
	2,400	184.25	199.61	15.36	8.34%
	2,600	198.98	215.62	16.64	8.36%
	2,800	213.70	231.62	17.92	8.39%
	3,000	228.42	247.62	19.20	8.41%

NOTES TO SCHEDULE:

- 1) Bills do not include PSA, EPS, CRCC, Surcharges, Regulatory Assessment, or Tax charges.
- 2) Present Rates are rates effective 4/1/2005.
- 3) Average and median consumption is based on the seasonal average.

Arizona Public Service Company

**Typical Residential Bill Analysis
EC-1 to EC-1 Interim Based on No Transition Rate Summer (May-October)**

EAA-5

Customer Bills at Varying Consumption Levels

Consumption	<u>Monthly kW</u>	<u>Load Factor</u>	<u>Monthly kWh</u>	<u>Present Rates Base Rate</u>	<u>Proposed Rates Base Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
Average	9	34%	2255	188.78	211.40	22.62	11.98%
Median	8	35%	2030	169.91	190.17	20.26	11.92%
Consumption	<u>Monthly kW</u>	<u>Load Factor</u>	<u>Monthly kWh</u>	<u>Present Rates Base Rate</u>	<u>Proposed Rates Base Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
	3	20%	438	57.14	62.81	5.67	9.92%
	3	30%	657	65.78	72.75	6.97	10.60%
	3	40%	876	74.41	82.69	8.28	11.13%
	3	50%	1,095	83.05	92.62	9.57	11.52%
	3	75%	1,643	104.65	117.49	12.84	12.27%
	5	20%	730	88.65	98.11	9.46	10.67%
	5	30%	1,095	103.05	114.67	11.62	11.28%
	5	40%	1,460	117.44	131.23	13.79	11.74%
	5	50%	1,825	131.83	147.79	15.96	12.11%
	5	75%	2,738	167.83	189.22	21.39	12.75%
	8	20%	1,168	135.92	151.05	15.13	11.13%
	8	30%	1,752	158.95	177.55	18.60	11.70%
	8	40%	2,336	181.98	204.05	22.07	12.13%
	8	50%	2,920	205.01	230.55	25.54	12.46%
	8	75%	4,380	262.57	296.80	34.23	13.04%
	10	20%	1,460	167.44	186.35	18.91	11.29%
	10	30%	2,190	196.22	219.47	23.25	11.85%
	10	40%	2,920	225.01	252.60	27.59	12.26%
	10	50%	3,650	253.79	285.72	31.93	12.58%
	10	75%	5,475	325.75	368.53	42.78	13.13%
	12	20%	1,752	198.95	221.64	22.69	11.40%
	12	30%	2,628	233.49	261.39	27.90	11.95%
	12	40%	3,504	268.03	301.14	33.11	12.35%
	12	50%	4,380	302.57	340.89	38.32	12.66%
	12	75%	6,570	388.93	440.26	51.33	13.20%
	15	20%	2,190	246.22	274.59	28.37	11.52%
	15	30%	3,285	289.40	324.27	34.87	12.05%
	15	40%	4,380	332.57	373.96	41.39	12.45%
	15	50%	5,475	375.75	423.64	47.89	12.75%
	15	75%	8,213	483.71	547.88	64.17	13.27%

NOTES TO SCHEDULE:

- 1) Bills do not include PSA, EPS, CRCC, Surcharges, Regulatory Assessment, or Tax charges.
- 2) Present Rates are rates effective 4/1/2005.
- 3) Average and median consumption is based on the seasonal average.

Arizona Public Service Company

Typical Residential Bill Analysis
EC-1 to EC-1 Interim Based on No Transition Rate Summer (May-October)

EAA-5

Customer Bills at Varying Consumption Levels

Consumption	Monthly kW	Load Factor	Monthly kWh	Present Rates Base Rate	Proposed Rates Base Rate	Dollar Increase	Percent Increase
Average	9	34%	2255	188.78	211.40	22.62	11.98%
Median	8	35%	2030	169.91	190.17	20.26	11.92%
Consumption	Monthly kW	Load Factor	Monthly kWh	Present Rates Base Rate	Proposed Rates Base Rate	Dollar Increase	Percent Increase
	3	20%	438	57.14	62.81	5.67	9.92%
	3	30%	657	65.78	72.75	6.97	10.60%
	3	40%	876	74.41	82.69	8.28	11.13%
	3	50%	1,095	83.05	92.62	9.57	11.52%
	3	75%	1,643	104.65	117.49	12.84	12.27%
	5	20%	730	88.65	98.11	9.46	10.67%
	5	30%	1,095	103.05	114.67	11.62	11.28%
	5	40%	1,460	117.44	131.23	13.79	11.74%
	5	50%	1,825	131.83	147.79	15.96	12.11%
	5	75%	2,738	167.83	189.22	21.39	12.75%
	8	20%	1,168	135.92	151.05	15.13	11.13%
	8	30%	1,752	158.95	177.55	18.60	11.70%
	8	40%	2,336	181.98	204.05	22.07	12.13%
	8	50%	2,920	205.01	230.55	25.54	12.46%
	8	75%	4,380	262.57	296.80	34.23	13.04%
	10	20%	1,460	167.44	186.35	18.91	11.29%
	10	30%	2,190	196.22	219.47	23.25	11.85%
	10	40%	2,920	225.01	252.60	27.59	12.26%
	10	50%	3,650	253.79	285.72	31.93	12.58%
	10	75%	5,475	325.75	368.53	42.78	13.13%
	12	20%	1,752	198.95	221.64	22.69	11.40%
	12	30%	2,628	233.49	261.39	27.90	11.95%
	12	40%	3,504	268.03	301.14	33.11	12.35%
	12	50%	4,380	302.57	340.89	38.32	12.66%
	12	75%	6,570	388.93	440.26	51.33	13.20%
	15	20%	2,190	246.22	274.59	28.37	11.52%
	15	30%	3,285	289.40	324.27	34.87	12.05%
	15	40%	4,380	332.57	373.96	41.39	12.45%
	15	50%	5,475	375.75	423.64	47.89	12.75%
	15	75%	8,213	483.71	547.88	64.17	13.27%

NOTES TO SCHEDULE:

- 1) Bills do not include PSA, EPS, CRCC, Surcharges, Regulatory Assessment, or Tax charges.
- 2) Present Rates are rates effective 4/1/2005.
- 3) Average and median consumption is based on the seasonal average.

Arizona Public Service Company

**Typical Residential Bill Analysis
ET-1 to ET-1 with Transition Summer (May - October)**

EAA-5

Customer Bills at Varying Consumption Levels

Consumption	<u>Monthly kWh</u>	<u>Present Rates Base Rate</u>	<u>Proposed Rates Base Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
Average	1,801	158.75	176.55	17.80	11.21%
Median	1,634	145.40	161.55	16.15	11.11%

Consumption	<u>Monthly kWh</u>	<u>Present Rates Base Rate</u>	<u>Proposed Rates Base Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
Consumption	200	30.78	32.75	1.97	6.40%
	250	34.77	37.24	2.47	7.10%
	300	38.77	41.74	2.97	7.66%
	350	42.77	46.23	3.46	8.09%
	400	46.76	50.72	3.96	8.47%
	450	50.76	55.21	4.45	8.77%
	500	54.76	59.70	4.94	9.02%
	550	58.75	64.19	5.44	9.26%
	600	62.75	68.68	5.93	9.45%
	650	66.75	73.17	6.42	9.62%
	700	70.74	77.66	6.92	9.78%
	750	74.74	82.15	7.41	9.91%
	800	78.74	86.64	7.90	10.03%
	850	82.73	91.14	8.41	10.17%
	900	86.73	95.63	8.90	10.26%
	950	90.73	100.12	9.39	10.35%
	1,000	94.73	104.61	9.88	10.43%
	1,100	102.72	113.59	10.87	10.58%
	1,200	110.71	122.57	11.86	10.71%
	1,300	118.71	131.55	12.84	10.82%
	1,400	126.70	140.54	13.84	10.92%
	1,500	134.69	149.52	14.83	11.01%
	1,600	142.69	158.50	15.81	11.08%
	1,700	150.68	167.48	16.80	11.15%
	1,800	158.67	176.46	17.79	11.21%
	1,900	166.67	185.45	18.78	11.27%
	2,000	174.66	194.43	19.77	11.32%
	2,200	190.65	212.39	21.74	11.40%
	2,400	206.63	230.35	23.72	11.48%
	2,600	222.62	248.32	25.70	11.54%
	2,800	238.61	266.28	27.67	11.60%
	3,000	254.60	284.25	29.65	11.65%

ET-1 Summer Average Energy On-Peak: 41%

NOTES TO SCHEDULE:

- 1) Bills do not include PSA, EPS, CRCC, Surcharges, Regulatory Assessment, or Tax charges.
- 2) Present Rates are rates effective 4/1/2005.
- 3) Average and median consumption is based on the seasonal average.

Arizona Public Service Company

Typical Residential Bill Analysis
ET-1 to ET-1 with Transition Winter (November-April)

EAA-5

Customer Bills at Varying Consumption Levels

Consumption	<u>Monthly</u> <u>kWh</u>	<u>Present Rates</u> <u>Base Rate</u>	<u>Proposed Rates</u> <u>Base Rate</u>	<u>Dollar</u> <u>Increase</u>	<u>Percent</u> <u>Increase</u>
Average	1063	82.77	90.62	7.85	9.48%
Median	929	74.20	81.06	6.86	9.25%

Consumption	<u>Monthly</u> <u>kWh</u>	<u>Present Rates</u> <u>Base Rate</u>	<u>Proposed Rates</u> <u>Base Rate</u>	<u>Dollar</u> <u>Increase</u>	<u>Percent</u> <u>Increase</u>
	250	30.78	32.62	1.84	5.98%
	300	33.97	36.19	2.22	6.54%
	350	37.17	39.76	2.59	6.97%
	400	40.37	43.33	2.96	7.33%
	450	43.57	46.89	3.32	7.62%
	500	46.76	50.46	3.70	7.91%
	550	49.96	54.03	4.07	8.15%
	600	53.16	57.59	4.43	8.33%
	650	56.36	61.16	4.80	8.52%
	700	59.55	64.73	5.18	8.70%
	750	62.75	68.29	5.54	8.83%
	800	65.95	71.86	5.91	8.96%
	850	69.15	75.43	6.28	9.08%
	900	72.34	78.99	6.65	9.19%
	950	75.54	82.56	7.02	9.29%
	1,000	78.74	86.13	7.39	9.39%
	1,100	85.13	93.26	8.13	9.55%
	1,200	91.53	100.40	8.87	9.69%
	1,300	97.92	107.53	9.61	9.81%
	1,400	104.32	114.66	10.34	9.91%
	1,500	110.71	121.80	11.09	10.02%
	1,600	117.11	128.93	11.82	10.09%
	1,700	123.50	136.06	12.56	10.17%
	1,800	129.90	143.20	13.30	10.24%
	1,900	136.29	150.33	14.04	10.30%
	2,000	142.69	157.47	14.78	10.36%
	2,200	155.48	171.73	16.25	10.45%
	2,400	168.27	186.00	17.73	10.54%
	2,600	181.06	200.27	19.21	10.61%
	2,800	193.85	214.54	20.69	10.67%
	3,000	206.63	228.80	22.17	10.73%

ET-1 Winter Average Energy On-Peak: 33%

NOTES TO SCHEDULE:

- 1) Bills do not include PSA, EPS, CRCC, Surcharges, Regulatory Assessment, or Tax charges.
- 2) Present Rates are rates effective 4/1/2005.
- 3) Average and median consumption is based on the seasonal average.

Arizona Public Service Company

Typical Residential Bill Analysis
ECT-1R to ECT-1R with Transition Summer (May-October)

EAA-5

Customer Bills at Varying Consumption Levels

Consumption	<u>Monthly kW</u>	<u>Load Factor</u>	<u>Monthly kWh</u>	<u>Present Rates Base Rate</u>	<u>Proposed Rates Base Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
Average	10	41%	2959	236.73	262.56	25.83	10.91%
Median	8.9	41%	2662	213.31	236.52	23.21	10.88%

Consumption	<u>Monthly kW</u>	<u>Load Factor</u>	<u>Monthly kWh</u>	<u>Present Rates Base Rate</u>	<u>Proposed Rates Base Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
	3	20%	438	65.59	69.91	4.32	6.59%
	3	30%	657	73.28	79.27	5.99	8.17%
	3	40%	876	80.96	88.62	7.66	9.46%
	3	50%	1,095	88.65	97.97	9.32	10.51%
	3	75%	1,643	107.88	121.37	13.49	12.50%
	5	20%	730	99.46	106.66	7.20	7.24%
	5	30%	1,095	112.27	122.25	9.98	8.89%
	5	40%	1,460	125.07	137.84	12.77	10.21%
	5	50%	1,825	137.88	153.43	15.55	11.28%
	5	75%	2,738	169.92	192.42	22.50	13.24%
	8	20%	1,168	150.26	161.79	11.53	7.67%
	8	30%	1,752	170.75	186.73	15.98	9.36%
	8	40%	2,336	191.24	211.67	20.43	10.68%
	8	50%	2,920	211.74	236.61	24.87	11.75%
	8	75%	4,380	262.97	298.96	35.99	13.69%
	10	20%	1,460	184.12	198.54	14.42	7.83%
	10	30%	2,190	209.74	229.71	19.97	9.52%
	10	40%	2,920	235.36	260.89	25.53	10.85%
	10	50%	3,650	260.98	292.06	31.08	11.91%
	10	75%	5,475	325.02	370.00	44.98	13.84%
	12	20%	1,752	217.99	235.29	17.30	7.94%
	12	30%	2,628	248.73	272.70	23.97	9.64%
	12	40%	3,504	279.47	310.11	30.64	10.96%
	12	50%	4,380	310.21	347.52	37.31	12.03%
	12	75%	6,570	387.06	441.04	53.98	13.95%
	15	20%	2,190	268.79	290.41	21.62	8.04%
	15	30%	3,285	307.22	337.18	29.96	9.75%
	15	40%	4,380	345.64	383.94	38.30	11.08%
	15	50%	5,475	384.07	430.70	46.63	12.14%
	15	75%	8,213	480.15	547.63	67.48	14.05%

ECT-1R Summer Average Energy On-Peak: 40%

NOTES TO SCHEDULE:

- 1) Bills do not include PSA, EPS, CRCC, Surcharges, Regulatory Assessment, or Tax charges.
- 2) Present Rates are rates effective 4/1/2005.
- 3) Average and median consumption is based on the seasonal average.

Arizona Public Service Company

Typical Residential Bill Analysis
ECT-1R to ECT-1R with Transition Winter (November-April)

EAA-5

Customer Bills at Varying Consumption Levels

Consumption	<u>Monthly</u> kW	<u>Load</u> Factor	<u>Monthly</u> kWh	<u>Present Rates</u> Base Rate	<u>Proposed Rates</u> Base Rate	<u>Dollar</u> Increase	<u>Percent</u> Increase
Average	7	36%	1833	124.95	137.71	12.76	10.21%
Median	6.4	34%	1603	113.38	124.60	11.22	9.90%
Consumption	<u>Monthly</u> kW	<u>Load</u> Factor	<u>Monthly</u> kWh	<u>Present Rates</u> Base Rate	<u>Proposed Rates</u> Base Rate	<u>Dollar</u> Increase	<u>Percent</u> Increase
	3	20%	438	51.88	55.19	3.31	6.38%
	3	30%	657	58.26	62.93	4.67	8.02%
	3	40%	876	64.64	70.66	6.02	9.31%
	3	50%	1,095	71.01	78.40	7.39	10.41%
	3	75%	1,643	86.98	97.76	10.78	12.39%
	5	20%	730	76.60	82.13	5.53	7.22%
	5	30%	1,095	87.23	95.02	7.79	8.93%
	5	40%	1,460	97.87	107.91	10.04	10.26%
	5	50%	1,825	108.50	120.81	12.31	11.35%
	5	75%	2,738	135.09	153.06	17.97	13.30%
	8	20%	1,168	113.69	122.53	8.84	7.78%
	8	30%	1,752	130.70	143.16	12.46	9.53%
	8	40%	2,336	147.71	163.79	16.08	10.89%
	8	50%	2,920	164.72	184.42	19.70	11.96%
	8	75%	4,380	207.25	235.99	28.74	13.87%
	10	20%	1,460	138.42	149.46	11.04	7.98%
	10	30%	2,190	159.68	175.25	15.57	9.75%
	10	40%	2,920	180.94	201.04	20.10	11.11%
	10	50%	3,650	202.20	226.82	24.62	12.18%
	10	75%	5,475	255.36	291.29	35.93	14.07%
	12	20%	1,752	163.14	176.40	13.26	8.13%
	12	30%	2,628	188.66	207.34	18.68	9.90%
	12	40%	3,504	214.17	238.29	24.12	11.26%
	12	50%	4,380	239.69	269.23	29.54	12.32%
	12	75%	6,570	303.48	346.59	43.11	14.21%
	15	20%	2,190	200.23	216.80	16.57	8.28%
	15	30%	3,285	232.12	255.48	23.36	10.06%
	15	40%	4,380	264.02	294.16	30.14	11.42%
	15	50%	5,475	295.91	332.84	36.93	12.48%
	15	75%	8,213	375.66	429.56	53.90	14.35%

ECT-1R Winter Average Energy On-Peak: 32%

NOTES TO SCHEDULE:

- 1) Bills do not include PSA, EPS, CRCC, Surcharges, Regulatory Assessment, or Tax charges.
- 2) Present Rates are rates effective 4/1/2005.
- 3) Average and median consumption is based on the seasonal average.

EAA-6

Typical Bill Analysis Informational Scenario #2
No Customer Transition

Arizona Public Service Company

**Typical Residential Bill Analysis
E-10 to E-10 No Transition Summer (May - October)**

EAA-6

Customer Bills at Varying Consumption Levels

Consumption	<u>Monthly kWh</u>	<u>Present Rates Base Rate</u>	<u>Proposed Rates Base Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
Average	942	87.13	98.38	11.25	12.91%
Median	727	66.34	74.46	8.12	12.24%
Consumption	<u>Monthly kWh</u>	<u>Present Rates Base Rate</u>	<u>Proposed Rates Base Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
	200	21.45	23.57	2.12	9.88%
	250	24.91	27.56	2.65	10.64%
	300	28.38	31.55	3.17	11.17%
	350	31.84	35.55	3.71	11.65%
	400	35.31	39.54	4.23	11.98%
	450	40.05	44.88	4.83	12.06%
	500	44.80	50.22	5.42	12.10%
	550	49.54	55.56	6.02	12.15%
	600	54.29	60.90	6.61	12.18%
	650	59.03	66.24	7.21	12.21%
	700	63.78	71.58	7.80	12.23%
	750	68.52	76.92	8.40	12.26%
	800	73.27	82.26	8.99	12.27%
	850	78.15	87.93	9.78	12.51%
	900	83.03	93.61	10.58	12.74%
	950	87.91	99.29	11.38	12.95%
	1,000	92.79	104.96	12.17	13.12%
	1,100	102.55	116.32	13.77	13.43%
	1,200	112.31	127.67	15.36	13.68%
	1,300	122.07	139.03	16.96	13.89%
	1,400	131.83	150.38	18.55	14.07%
	1,500	141.59	161.73	20.14	14.22%
	1,600	151.35	173.09	21.74	14.36%
	1,700	161.11	184.44	23.33	14.48%
	1,800	170.87	195.80	24.93	14.59%
	1,900	180.63	207.15	26.52	14.68%
	2,000	190.39	218.50	28.11	14.76%
	2,200	209.91	241.21	31.30	14.91%
	2,400	229.43	263.92	34.49	15.03%
	2,600	248.95	286.63	37.68	15.14%
	2,800	268.47	309.34	40.87	15.22%
	3,000	287.99	332.04	44.05	15.30%

NOTES TO SCHEDULE:

- 1) Bills do not include PSA, EPS, CRCC, Surcharges, Regulatory Assessment, or Tax charges.
- 2) Present Rates are rates effective 4/1/2005.
- 3) Average and median consumption is based on the seasonal average.

Arizona Public Service Company

Typical Residential Bill Analysis
E-10 to E-10 No Transition Winter (November-April)

EAA-6

Customer Bills at Varying Consumption Levels

Consumption	Monthly kWh	Present Rates Base Rate	Proposed Rates Base Rate	Dollar Increase	Percent Increase
Average	705	61.18	65.72	4.54	7.42%
Median	574	51.22	54.92	3.70	7.22%

Consumption	Monthly kWh	Present Rates Base Rate	Proposed Rates Base Rate	Dollar Increase	Percent Increase
	200	22.79	24.08	1.29	5.66%
	250	26.59	28.20	1.61	6.05%
	300	30.39	32.33	1.94	6.38%
	350	34.19	36.45	2.26	6.61%
	400	37.99	40.57	2.58	6.79%
	450	41.79	44.70	2.91	6.96%
	500	45.60	48.82	3.22	7.06%
	550	49.40	52.94	3.54	7.17%
	600	53.20	57.06	3.86	7.26%
	650	57.00	61.19	4.19	7.35%
	700	60.80	65.31	4.51	7.42%
	750	64.60	69.43	4.83	7.48%
	800	68.40	73.55	5.15	7.53%
	850	72.20	77.68	5.48	7.59%
	900	76.00	81.80	5.80	7.63%
	950	79.80	85.92	6.12	7.67%
	1,000	83.60	90.05	6.45	7.72%
	1,100	91.20	98.29	7.09	7.77%
	1,200	98.80	106.54	7.74	7.83%
	1,300	106.40	114.78	8.38	7.88%
	1,400	114.00	123.03	9.03	7.92%
	1,500	121.61	131.27	9.66	7.94%
	1,600	129.21	139.52	10.31	7.98%
	1,700	136.81	147.77	10.96	8.01%
	1,800	144.41	156.01	11.60	8.03%
	1,900	152.01	164.26	12.25	8.06%
	2,000	159.61	172.50	12.89	8.08%
	2,200	174.81	188.99	14.18	8.11%
	2,400	190.01	205.48	15.47	8.14%
	2,600	205.22	221.98	16.76	8.17%
	2,800	220.42	238.47	18.05	8.19%
	3,000	235.62	254.96	19.34	8.21%

NOTES TO SCHEDULE:

- 1) Bills do not include PSA, EPS, CRCC, Surcharges, Regulatory Assessment, or Tax charges.
- 2) Present Rates are rates effective 4/1/2005.
- 3) Average and median consumption is based on the seasonal average.

Arizona Public Service Company

Typical Residential Bill Analysis
E-12 to E-12 No Transition Summer (May - October)

EAA-6

Customer Bills at Varying Consumption Levels

Consumption	<u>Monthly kWh</u>	<u>Present Rates Base Rate</u>	<u>Proposed Rates Base Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
Average	774	77.35	85.01	7.66	9.9%
Median	617	60.78	66.49	5.71	9.4%

Consumption	<u>Monthly kWh</u>	<u>Present Rates Base Rate</u>	<u>Proposed Rates Base Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
	200	22.73	24.24	1.51	6.6%
	250	26.52	28.41	1.89	7.1%
	300	30.30	32.57	2.27	7.5%
	350	34.09	36.73	2.64	7.7%
	400	37.87	40.89	3.02	8.0%
	450	43.15	46.79	3.64	8.4%
	500	48.43	52.69	4.26	8.8%
	550	53.70	58.59	4.89	9.1%
	600	58.98	64.48	5.50	9.3%
	650	64.26	70.38	6.12	9.5%
	700	69.54	76.28	6.74	9.7%
	750	74.82	82.18	7.36	9.8%
	800	80.09	88.07	7.98	10.0%
	850	86.25	95.04	8.79	10.2%
	900	92.41	102.01	9.60	10.4%
	950	98.57	108.97	10.40	10.6%
	1,000	104.72	115.94	11.22	10.7%
	1,100	117.04	129.87	12.83	11.0%
	1,200	129.35	143.80	14.45	11.2%
	1,300	141.66	157.73	16.07	11.3%
	1,400	153.98	171.67	17.69	11.5%
	1,500	166.29	185.60	19.31	11.6%
	1,600	178.61	199.53	20.92	11.7%
	1,700	190.92	213.46	22.54	11.8%
	1,800	203.23	227.39	24.16	11.9%
	1,900	215.55	241.33	25.78	12.0%
	2,000	227.86	255.26	27.40	12.0%
	2,200	252.49	283.12	30.63	12.1%
	2,400	277.12	310.99	33.87	12.2%
	2,600	301.75	338.85	37.10	12.3%
	2,800	326.37	366.71	40.34	12.4%
	3,000	351.00	394.58	43.58	12.4%

NOTES TO SCHEDULE:

- 1) Bills do not include PSA, EPS, CRCC, Surcharges, Regulatory Assessment, or Tax charges.
- 2) Present Rates are rates effective 4/1/2005.
- 3) Average and median consumption is based on the seasonal average.

Arizona Public Service Company

Typical Residential Bill Analysis
E-12 to E-12 No Transition Winter (November-April)

EAA-6

Customer Bills at Varying Consumption Levels

Consumption	<u>Monthly kWh</u>	<u>Present Rates Base Rate</u>	<u>Proposed Rates Base Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
Average	582	50.43	54.52	4.09	8.11%
Median	476	42.63	45.97	3.34	7.83%

Consumption	<u>Monthly kWh</u>	<u>Present Rates Base Rate</u>	<u>Proposed Rates Base Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
	200	22.31	23.72	1.41	6.32%
	250	25.99	27.75	1.76	6.77%
	300	29.67	31.78	2.11	7.11%
	350	33.35	35.81	2.46	7.38%
	400	37.03	39.84	2.81	7.59%
	450	40.71	43.88	3.17	7.79%
	500	44.40	47.91	3.51	7.91%
	550	48.08	51.94	3.86	8.03%
	600	51.76	55.97	4.21	8.13%
	650	55.44	60.00	4.56	8.23%
	700	59.12	64.03	4.91	8.31%
	750	62.80	68.07	5.27	8.39%
	800	66.48	72.10	5.62	8.45%
	850	70.16	76.13	5.97	8.51%
	900	73.84	80.16	6.32	8.56%
	950	77.52	84.19	6.67	8.60%
	1,000	81.20	88.22	7.02	8.65%
	1,100	88.56	96.29	7.73	8.73%
	1,200	95.92	104.35	8.43	8.79%
	1,300	103.28	112.41	9.13	8.84%
	1,400	110.64	120.48	9.84	8.89%
	1,500	118.01	128.54	10.53	8.92%
	1,600	125.37	136.61	11.24	8.97%
	1,700	132.73	144.67	11.94	9.00%
	1,800	140.09	152.73	12.64	9.02%
	1,900	147.45	160.80	13.35	9.05%
	2,000	154.81	168.86	14.05	9.08%
	2,200	169.53	184.99	15.46	9.12%
	2,400	184.25	201.11	16.86	9.15%
	2,600	198.98	217.24	18.26	9.18%
	2,800	213.70	233.37	19.67	9.20%
	3,000	228.42	249.49	21.07	9.22%

NOTES TO SCHEDULE:

- 1) Bills do not include PSA, EPS, CRCC, Surcharges, Regulatory Assessment, or Tax charges.
- 2) Present Rates are rates effective 4/1/2005.
- 3) Average and median consumption is based on the seasonal average.

Arizona Public Service Company

Typical Residential Bill Analysis
EC-1 to EC-1 No Transition Summer (May-October)

EAA-6

Customer Bills at Varying Consumption Levels

Consumption	Monthly kW	Load Factor	Monthly kWh	Present Rates Base Rate	Proposed Rates Base Rate	Dollar Increase	Percent Increase
Average	9	34%	2255	188.78	211.40	22.62	11.98%
Median	8	35%	2030	169.91	190.17	20.26	11.92%
Consumption	Monthly kW	Load Factor	Monthly kWh	Present Rates Base Rate	Proposed Rates Base Rate	Dollar Increase	Percent Increase
	3	20%	438	57.14	62.81	5.67	9.92%
	3	30%	657	65.78	72.75	6.97	10.60%
	3	40%	876	74.41	82.69	8.28	11.13%
	3	50%	1,095	83.05	92.62	9.57	11.52%
	3	75%	1,643	104.65	117.49	12.84	12.27%
	5	20%	730	88.65	98.11	9.46	10.67%
	5	30%	1,095	103.05	114.67	11.62	11.28%
	5	40%	1,460	117.44	131.23	13.79	11.74%
	5	50%	1,825	131.83	147.79	15.96	12.11%
	5	75%	2,738	167.83	189.22	21.39	12.75%
	8	20%	1,168	135.92	151.05	15.13	11.13%
	8	30%	1,752	158.95	177.55	18.60	11.70%
	8	40%	2,336	181.98	204.05	22.07	12.13%
	8	50%	2,920	205.01	230.55	25.54	12.46%
	8	75%	4,380	262.57	296.80	34.23	13.04%
	10	20%	1,460	167.44	186.35	18.91	11.29%
	10	30%	2,190	196.22	219.47	23.25	11.85%
	10	40%	2,920	225.01	252.60	27.59	12.26%
	10	50%	3,650	253.79	285.72	31.93	12.58%
	10	75%	5,475	325.75	368.53	42.78	13.13%
	12	20%	1,752	198.95	221.64	22.69	11.40%
	12	30%	2,628	233.49	261.39	27.90	11.95%
	12	40%	3,504	268.03	301.14	33.11	12.35%
	12	50%	4,380	302.57	340.89	38.32	12.66%
	12	75%	6,570	388.93	440.26	51.33	13.20%
	15	20%	2,190	246.22	274.59	28.37	11.52%
	15	30%	3,285	289.40	324.27	34.87	12.05%
	15	40%	4,380	332.57	373.96	41.39	12.45%
	15	50%	5,475	375.75	423.64	47.89	12.75%
	15	75%	8,213	483.71	547.88	64.17	13.27%

NOTES TO SCHEDULE:

- 1) Bills do not include PSA, EPS, CRCC, Surcharges, Regulatory Assessment, or Tax charges.
- 2) Present Rates are rates effective 4/1/2005.
- 3) Average and median consumption is based on the seasonal average.

Arizona Public Service Company

Typical Residential Bill Analysis
EC-1 to EC-1 No Transition Winter (November-April)

EAA-6

Customer Bills at Varying Consumption Levels

Consumption	Monthly kW	Load Factor	Monthly kWh	Present Rates Base Rate	Proposed Rates Base Rate	Dollar Increase	Percent Increase
Average	7	29%	1489	103.91	113.31	9.40	9.05%
Median	7	26%	1319	98.85	108.00	9.15	9.26%
Consumption	Monthly kW	Load Factor	Monthly kWh	Present Rates Base Rate	Proposed Rates Base Rate	Dollar Increase	Percent Increase
	3	20%	438	44.21	47.95	3.74	8.46%
	3	30%	657	50.74	54.79	4.05	7.98%
	3	40%	876	57.26	61.63	4.37	7.63%
	3	50%	1,095	63.78	68.47	4.69	7.35%
	3	75%	1,643	80.10	85.59	5.49	6.85%
	5	20%	730	67.11	73.34	6.23	9.28%
	5	30%	1,095	77.98	84.74	6.76	8.67%
	5	40%	1,460	88.85	96.14	7.29	8.20%
	5	50%	1,825	99.72	107.54	7.82	7.84%
	5	75%	2,738	126.91	136.07	9.16	7.22%
	8	20%	1,168	101.45	111.41	9.96	9.82%
	8	30%	1,752	118.84	129.66	10.82	9.10%
	8	40%	2,336	136.24	147.90	11.66	8.56%
	8	50%	2,920	153.63	166.15	12.52	8.15%
	8	75%	4,380	197.11	211.76	14.65	7.43%
	10	20%	1,460	124.35	136.80	12.45	10.01%
	10	30%	2,190	146.09	159.61	13.52	9.25%
	10	40%	2,920	167.83	182.41	14.58	8.69%
	10	50%	3,650	189.57	205.22	15.65	8.26%
	10	75%	5,475	243.92	262.23	18.31	7.51%
	12	20%	1,752	147.24	162.19	14.95	10.15%
	12	30%	2,628	173.33	189.55	16.22	9.36%
	12	40%	3,504	199.42	216.92	17.50	8.78%
	12	50%	4,380	225.51	244.29	18.78	8.33%
	12	75%	6,570	290.72	312.70	21.98	7.56%
	15	20%	2,190	181.59	200.27	18.68	10.29%
	15	30%	3,285	214.20	234.47	20.27	9.46%
	15	40%	4,380	246.81	268.68	21.87	8.86%
	15	50%	5,475	279.42	302.89	23.47	8.40%
	15	75%	8,213	360.95	388.42	27.47	7.61%

NOTES TO SCHEDULE:

- 1) Bills do not include PSA, EPS, CRCC, Surcharges, Regulatory Assessment, or Tax charges.
- 2) Present Rates are rates effective 4/1/2005.
- 3) Average and median consumption is based on the seasonal average.

Arizona Public Service Company

Typical Residential Bill Analysis
ET-1 to ET-1 No Transition Summer (May - October)

EAA-6

Customer Bills at Varying Consumption Levels

Consumption	Monthly kWh	Present Rates Base Rate	Proposed Rates Base Rate	Dollar Increase	Percent Increase
Average	1,801	158.75	176.53	17.78	11.20%
Median	1,634	145.40	161.54	16.14	11.10%

Consumption	Monthly kWh	Present Rates Base Rate	Proposed Rates Base Rate	Dollar Increase	Percent Increase
Consumption	200	30.78	32.75	1.97	6.40%
	250	34.77	37.24	2.47	7.10%
	300	38.77	41.73	2.96	7.63%
	350	42.77	46.22	3.45	8.07%
	400	46.76	50.71	3.95	8.45%
	450	50.76	55.20	4.44	8.75%
	500	54.76	59.69	4.93	9.00%
	550	58.75	64.18	5.43	9.24%
	600	62.75	68.67	5.92	9.43%
	650	66.75	73.16	6.41	9.60%
	700	70.74	77.66	6.92	9.78%
	750	74.74	82.15	7.41	9.91%
	800	78.74	86.64	7.90	10.03%
	850	82.73	91.13	8.40	10.15%
	900	86.73	95.62	8.89	10.25%
	950	90.73	100.11	9.38	10.34%
	1,000	94.73	104.60	9.87	10.42%
	1,100	102.72	113.58	10.86	10.57%
	1,200	110.71	122.56	11.85	10.70%
	1,300	118.71	131.54	12.83	10.81%
	1,400	126.70	140.52	13.82	10.91%
	1,500	134.69	149.50	14.81	11.00%
	1,600	142.69	158.48	15.79	11.07%
	1,700	150.68	167.46	16.78	11.14%
	1,800	158.67	176.44	17.77	11.20%
	1,900	166.67	185.42	18.75	11.25%
	2,000	174.66	194.40	19.74	11.30%
	2,200	190.65	212.37	21.72	11.39%
	2,400	206.63	230.33	23.70	11.47%
	2,600	222.62	248.29	25.67	11.53%
	2,800	238.61	266.25	27.64	11.58%
	3,000	254.60	284.21	29.61	11.63%

ET-1 Summer Average Energy On-Peak: 41%

NOTES TO SCHEDULE:

- 1) Bills do not include PSA, EPS, CRCC, Surcharges, Regulatory Assessment, or Tax charges.
- 2) Present Rates are rates effective 4/1/2005.
- 3) Average and median consumption is based on the seasonal average.

Arizona Public Service Company

**Typical Residential Bill Analysis
ET-1 to ET-1 No Transition Winter (November-April)**

EAA-6

Customer Bills at Varying Consumption Levels

Consumption	<u>Monthly kWh</u>	<u>Present Rates Base Rate</u>	<u>Proposed Rates Base Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
Average	1063	82.77	90.61	7.84	9.47%
Median	929	74.20	81.05	6.85	9.23%

Consumption	<u>Monthly kWh</u>	<u>Present Rates Base Rate</u>	<u>Proposed Rates Base Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
	250	30.78	32.62	1.84	5.98%
	300	33.97	36.19	2.22	6.54%
	350	37.17	39.75	2.58	6.94%
	400	40.37	43.32	2.95	7.31%
	450	43.57	46.89	3.32	7.62%
	500	46.76	50.45	3.69	7.89%
	550	49.96	54.02	4.06	8.13%
	600	53.16	57.59	4.43	8.33%
	650	56.36	61.15	4.79	8.50%
	700	59.55	64.72	5.17	8.68%
	750	62.75	68.29	5.54	8.83%
	800	65.95	71.85	5.90	8.95%
	850	69.15	75.42	6.27	9.07%
	900	72.34	78.99	6.65	9.19%
	950	75.54	82.55	7.01	9.28%
	1,000	78.74	86.12	7.38	9.37%
	1,100	85.13	93.25	8.12	9.54%
	1,200	91.53	100.38	8.85	9.67%
	1,300	97.92	107.52	9.60	9.80%
	1,400	104.32	114.65	10.33	9.90%
	1,500	110.71	121.78	11.07	10.00%
	1,600	117.11	128.91	11.80	10.08%
	1,700	123.50	136.05	12.55	10.16%
	1,800	129.90	143.18	13.28	10.22%
	1,900	136.29	150.31	14.02	10.29%
	2,000	142.69	157.45	14.76	10.34%
	2,200	155.48	171.71	16.23	10.44%
	2,400	168.27	185.98	17.71	10.52%
	2,600	181.06	200.24	19.18	10.59%
	2,800	193.85	214.51	20.66	10.66%
	3,000	206.63	228.77	22.14	10.71%

ET-1 Winter Average Energy On-Peak: 33%

NOTES TO SCHEDULE:

- 1) Bills do not include PSA, EPS, CRCC, Surcharges, Regulatory Assessment, or Tax charges.
- 2) Present Rates are rates effective 4/1/2005.
- 3) Average and median consumption is based on the seasonal average.

Arizona Public Service Company

Typical Residential Bill Analysis
ECT-1R to ECT-1R No Transition Summer (May-October)

EAA-6

Customer Bills at Varying Consumption Levels

Consumption	<u>Monthly kW</u>	<u>Load Factor</u>	<u>Monthly kWh</u>	<u>Present Rates Base Rate</u>	<u>Proposed Rates Base Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
Average	10	41%	2959	236.73	263.04	26.31	11.11%
Median	8.9	41%	2662	213.31	236.96	23.65	11.09%

Consumption	<u>Monthly kW</u>	<u>Load Factor</u>	<u>Monthly kWh</u>	<u>Present Rates Base Rate</u>	<u>Proposed Rates Base Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
	3	20%	438	65.59	70.00	4.41	6.72%
	3	30%	657	73.28	79.38	6.10	8.32%
	3	40%	876	80.96	88.76	7.80	9.63%
	3	50%	1,095	88.65	98.15	9.50	10.72%
	3	75%	1,643	107.88	121.63	13.75	12.75%
	5	20%	730	99.46	106.81	7.35	7.39%
	5	30%	1,095	112.27	122.44	10.17	9.06%
	5	40%	1,460	125.07	138.08	13.01	10.40%
	5	50%	1,825	137.88	153.72	15.84	11.49%
	5	75%	2,738	169.92	192.84	22.92	13.49%
	8	20%	1,168	150.26	162.01	11.75	7.82%
	8	30%	1,752	170.75	187.04	16.29	9.54%
	8	40%	2,336	191.24	212.06	20.82	10.89%
	8	50%	2,920	211.74	237.08	25.34	11.97%
	8	75%	4,380	262.97	299.63	36.66	13.94%
	10	20%	1,460	184.12	198.82	14.70	7.98%
	10	30%	2,190	209.74	230.10	20.36	9.71%
	10	40%	2,920	235.36	261.37	26.01	11.05%
	10	50%	3,650	260.98	292.65	31.67	12.14%
	10	75%	5,475	325.02	370.84	45.82	14.10%
	12	20%	1,752	217.99	235.63	17.64	8.09%
	12	30%	2,628	248.73	273.16	24.43	9.82%
	12	40%	3,504	279.47	310.69	31.22	11.17%
	12	50%	4,380	310.21	348.22	38.01	12.25%
	12	75%	6,570	387.06	442.05	54.99	14.21%
	15	20%	2,190	268.79	290.84	22.05	8.20%
	15	30%	3,285	307.22	337.75	30.53	9.94%
	15	40%	4,380	345.64	384.66	39.02	11.29%
	15	50%	5,475	384.07	431.58	47.51	12.37%
	15	75%	8,213	480.15	548.89	68.74	14.32%

ECT-1R Summer Average Energy On-Peak: 40%

NOTES TO SCHEDULE:

- 1) Bills do not include PSA, EPS, CRCC, Surcharges, Regulatory Assessment, or Tax charges.
- 2) Present Rates are rates effective 4/1/2005.
- 3) Average and median consumption is based on the seasonal average.

Arizona Public Service Company

**Typical Residential Bill Analysis
ECT-1R to ECT-1R No Transition Winter (November-April)**

EAA-6

Customer Bills at Varying Consumption Levels

Consumption	<u>Monthly kW</u>	<u>Load Factor</u>	<u>Monthly kWh</u>	<u>Present Rates Base Rate</u>	<u>Proposed Rates Base Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
Average	7	36%	1833	124.95	138.33	13.38	10.71%
Median	6.4	34%	1603	113.38	125.14	11.76	10.37%

Consumption	<u>Monthly kW</u>	<u>Load Factor</u>	<u>Monthly kWh</u>	<u>Present Rates Base Rate</u>	<u>Proposed Rates Base Rate</u>	<u>Dollar Increase</u>	<u>Percent Increase</u>
	3	20%	438	51.88	55.35	3.47	6.69%
	3	30%	657	58.26	63.15	4.89	8.39%
	3	40%	876	64.64	70.96	6.32	9.78%
	3	50%	1,095	71.01	78.76	7.75	10.91%
	3	75%	1,643	86.98	98.28	11.30	12.99%
	5	20%	730	76.60	82.39	5.79	7.56%
	5	30%	1,095	87.23	95.40	8.17	9.37%
	5	40%	1,460	97.87	108.40	10.53	10.76%
	5	50%	1,825	108.50	121.40	12.90	11.89%
	5	75%	2,738	135.09	153.93	18.84	13.95%
	8	20%	1,168	113.69	122.96	9.27	8.15%
	8	30%	1,752	130.70	143.76	13.06	9.99%
	8	40%	2,336	147.71	164.57	16.86	11.41%
	8	50%	2,920	164.72	185.37	20.65	12.54%
	8	75%	4,380	207.25	237.38	30.13	14.54%
	10	20%	1,460	138.42	150.00	11.58	8.37%
	10	30%	2,190	159.68	176.00	16.32	10.22%
	10	40%	2,920	180.94	202.01	21.07	11.64%
	10	50%	3,650	202.20	228.02	25.82	12.77%
	10	75%	5,475	255.36	293.03	37.67	14.75%
	12	20%	1,752	163.14	177.04	13.90	8.52%
	12	30%	2,628	188.66	208.25	19.59	10.38%
	12	40%	3,504	214.17	239.45	25.28	11.80%
	12	50%	4,380	239.69	270.66	30.97	12.92%
	12	75%	6,570	303.48	348.68	45.20	14.89%
	15	20%	2,190	200.23	217.60	17.37	8.68%
	15	30%	3,285	232.12	256.61	24.49	10.55%
	15	40%	4,380	264.02	295.62	31.60	11.97%
	15	50%	5,475	295.91	334.63	38.72	13.09%
	15	75%	8,213	375.66	432.17	56.51	15.04%

ECT-1R Winter Average Energy On-Peak: 32%

NOTES TO SCHEDULE:

- 1) Bills do not include PSA, EPS, CRCC, Surcharges, Regulatory Assessment, or Tax charges.
- 2) Present Rates are rates effective 4/1/2005.
- 3) Average and median consumption is based on the seasonal average.

Exhibit A

APS Customer Transition Plan

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Customer Transition Plan

EAA 15-1 Please provide APS' customer transition plan that explains how all customers on EC-1, E-10, E-21, E-22, E-23, E-24, and E-38 will be educated about appropriate alternative rate schedules. At a minimum, please provide the following information in the customer transition plan:

- a) Please identify the default rates and explain why they are an appropriate rate substitute.
- b) Please identify all customer notification and education strategies and associated timeframes.
- c) Please identify the timeframe in which customers will be placed on the default rate if the customer takes no action.
- d) Please explain in detail the type of rate analysis will be made available to each customer in an effort to choose an appropriate alternative rate. What tools will be utilized by the customer and or the customer service representative.
- e) Please provide a copy of proposed bill messages and written communications that will be provided to customers.
- f) Please provide a copy of proposed script(s) used for outbound recorded messages or customer service personnel who are responding to customer inquiries.
- g) Please provide a description of the training efforts that will occur to ensure that all customer service personnel will be prepared to provide accurate information about the customer transition process and rate analysis.

Response:

- a) Commercial customers on the general service time-of-use rates E-21, E-22, E-23 or E-24 will be initially placed on general service time-of-use rate E-32 TOU because it is the alternate general service time-of-use rate for this customer group and would not require a meter change. The Company will perform a rate comparison for each customer to determine the customer's projected energy bill on E-32 and E-32 TOU. The results of the rate comparison will be communicated to each customer who will

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be able to choose their best rate option. If the customer chooses E-32, a meter change will be required. The time required for a meter change will vary based on meter equipment availability and scheduling.

Commercial customers on the agricultural irrigation service rates E-38 or E-38-8T will be transferred to rate schedule E-221, which is the alternate option for water pumping service.

Residential customers, on the E-10 and EC-1 rates, will be placed on an interim rate E-10 and EC-1 respectively that will bring their energy costs in line with their cost-of-service. This will allow a transition period for customers to choose a new rate schedule. The interim rate E-10 will have the same structure as the current rate E-10. The interim rate EC-1 will have the same structure as the current rate EC-1. Customers on these interim rates will be provided six months to review the remaining five rate schedules and make their selection. At the end of the six month period, customers who have not made a selection will be transferred to a default rate. Based on an analysis of the most appropriate rate replacement for our customers on the E-10 and EC-1 frozen rates, APS proposes the following default rates:

- For E-10 customers consuming more than 1,000 kWh/month (annual average), the default rate will be ET-1 rate plan (the Time Advantage 9 p.m. - 9 a.m. Plan).
- For EC-1 customers consuming more than 1,000 kWh/month (annual average), the default rate will be ECT-1R rate plan.
- For EC-1 and E-10 customers consuming less than 1,000 kWh/month (annual average), the default rate will be E-12 rate plan.

The Company believes that these residential default rates are the best options for the majority of customers in each rate and usage category, based on comparisons of expected monthly bills for various rate options.

b) Below are the proposed customer notification and education strategies with the associated timeframes.

Strategy	Tactics
<p><u>Residential Customers</u></p> <p>1) Utilize aps.com as a communication and</p>	<p>a) Provide customers an overview and description of each of the available rate plans on aps.com (<i>within 2 days following the approval of the rate case</i>).</p>

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<p>education channel for frozen rate customers.</p> <p>2) Communicate directly with residential customers multiple times to encourage them to select a new rate plan.</p>	<p>b) Provide customers on-line rate analysis tools to assist customers in selecting the most appropriate rate (<i>within 2 days following the approval of the rate case</i>).</p> <p>c) Add a "promo button" to the homepage of aps.com to provide quick navigation to the on-line rate comparison (<i>within 2 days following the approval of the rate case</i>).</p> <p>a) Run monthly bill messages to encourage residential frozen rate customers to complete a rate comparison on aps.com and select a new rate (<i>begin with the first bill cycle that runs following the approval of the rate case</i>).</p>
	<p>b) Provide a shortcut to the on-line rate comparison tool for customers that receive an e-bill (<i>begin with the first bill cycle that runs following the approval of the rate case</i>).</p> <p>c) Send an email to registered aps.com customers informing customers of the elimination of the rate. In the email, provide a link to the on-line rate comparison (<i>within 1 week following the approval of the rate case</i>).</p> <p>d) Mail residential customers a direct mail letter that educates customers on the elimination of their rate and the available rate options. In the letter, encourage customers to complete a rate comparison either on aps.com or by calling to speak with an APS associate who can educate customers on the default rates. The mailing will include a postage-paid business reply card (BRC) to encourage customers to select their new rate (<i>within 1 month following the approval of the rate case</i>).</p> <p>e) Contact residential customers with a frozen rate, utilizing the predictive dialer to remind customers to select a new rate plan. The message will mention they have until (insert date) to do so or they will automatically be transferred to the appropriate default rate (<i>1st message will run within 6 weeks following the approval of the rate case; 2nd message will run 1 month before the transfer to the appropriate default rate occurs</i>).</p>

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<p>3) Educate customers on how to use their new plan successfully.</p>	<p>a) Provide ways to maximize savings for the current rate plans on aps.com (<i>within 2 days following the approval of the rate case</i>).</p> <p>b) Provide ways to maximize savings for the current rate plans in the direct mail letter (<i>within 1 month following the approval of the rate case</i>).</p> <p>c) If a meter exchange is required, place a door hanger on the customer's door to notify the customers that their new rate is active and reiterate how to maximizing savings on the selected new rate plan (<i>at time of meter exchange, if meter exchange is required</i>).</p>
<p><u>Non-Residential Customers</u></p> <p>4) Communicate directly with non-residential customers that their rate has been discontinued and they have been transferred to a new rate.</p>	<p>a) Run a bill message for non-residential customers to notify them that their rate has been eliminated and they are being transferred to a new rate (<i>begin with the first bill cycle that runs following the approval of the rate case</i>).</p> <p>b) Mail customers on E-21, E-22, E-23 and E-24 a direct mail letter that communicates the results of the rate comparison comparing E-32 and E-32 TOU (<i>within 1 month following the approval of the rate case</i>).</p> <p>c) Conduct a staffed outbound call campaign to inform non-residential TOU rate customers they have been defaulted to the E-32 TOU plan. Convey the results of the rate comparison and discuss the features of each rate (<i>during a 6 month period following the approval of the rate case; 3 attempts to reach the customer will be made</i>).</p>
<p><u>In House Training</u></p> <p>5) Educate customer service representatives and field service personnel on the frozen rate elimination.</p>	<p>a) Conduct in-house training sessions with customer service representatives and office personnel to bring them up to speed on the frozen rate transfer plans and inform them of how requests to switch to the new rates should be handled (<i>training will be completed prior to</i></p>

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	<p><i>the approval of the rate case).</i></p> <p>b) Send out a HotNews email to call center and office customer service representatives on the elimination of the frozen rates. HotNews emails are sent out to inform critical 'need to know' information to customer service representatives. Representatives are advised to immediately read a HotNews email once it is received (<i>day rate case is approved</i>).</p> <p>c) Update RepDirect customer service information database to include information on the frozen rate transition plan. The database provides the customer service personnel with the ability to search by a keyword. The database will provide the customer service representative information related to the keyword (<i>within 1 day following the approval of the rate case</i>).</p>
	<p>d) Distribute a handout to call center and office customer service representatives that provides the details of the direct mail letter. The handout will include an overview of the direct mail, key messages communicated in the letter, when the direct mail will begin and other pertinent details the customer service representatives need to know (<i>3 weeks following the approval of the rate case; 1 week prior to direct mail letter drop</i>).</p> <p>e) Provide talking points for Call Center Associates (<i>day the rate case is approved</i>).</p> <p>f) Provide a pocket card that contains the call center phone number to field service and field collections personnel. The card will be given to customers that request information pertaining to frozen rates in the field (<i>day the rate case is approved</i>).</p> <p>g) Distribute a handout to call center and office customer service representatives on the bill messages. The handout will include the key messages of the bill message and when the bill message will run (<i>within 3 days following the approval of the rate case</i>).</p>

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6) Educate APS employees on the frozen rate elimination.	<p>h) Continue to provide updates as the program evolves utilizing the on-line customer service manual, aps.com, handouts, Hot News emails and talking points (<i>ongoing following the approval of the rate case</i>).</p> <p>a) Announce rate plan elimination on APS Newslines. Newslines is an internal electronic news bulletin that is sent to APS employees (<i>within 1 week following approval of the rate case</i>).</p>
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- c) Residential customers placed on the E-10 and EC-1 interim rates will be provided six months to review the five rate schedules and make their new rate selection. At the end of the six month period, residential customers who have not made a selection will be transferred to the appropriate default rate.

Commercial customers on E-21, E-22, E-23 and E-24 will initially be placed on E-32 TOU. The Company will perform a rate comparison for each customer to determine the customer's projected energy bill on E-32 and E-32 TOU. The results of the rate comparison will be communicated to each customer who will be able to choose their best rate option at that time. If the customer chooses E-32, a meter change will be required. The time required for a meter change will vary based on meter equipment availability and scheduling.

At the time the frozen rates are eliminated, commercial customers on the agricultural irrigation service rates E-38 or E-38-8T will be transferred to rate schedule E-221, which is the alternate option for water pumping service.

- d) The type of rate analysis available to both the customer and customer service representative will vary depending on whether the customer is a residential or non-residential customer.

Residential Customers

In order to assist residential customers in selecting the most appropriate alternative rate, rate analysis tools will be available to both the customers and the customer service representatives. Residential customers will be

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provided rate analysis tools on-line at aps.com. The first tool that will be available to residential customers on aps.com is a quick comparison. The quick comparison will suggest the most appropriate rate plan(s) based on what part of the state the customer lives in, the size of the customer's home in square footage, the customer's monthly kWh usage and the type of energy utilized in the customer's home. The customer will be able to click on each of the suggested rate plans and view a detailed description of the selected plan as well a description of who may benefit on the selected rate. The quick comparison will not take into consideration the customer's actual usage history. The quick comparison will be available to all residential customers.

In addition to the quick comparison, residential customers will also be able to view a side-by-side comparison of the service plan attributes. The comparison of service plan attributes will be provided in a table format. The table will show the customer the service charge per day for each of the available residential rates as well as the square footage parameters for each of the rates. The table will illustrate whether or not the rate is demand based and/or time based. For those rates that are time based, the detailed comparison will provide the off-peak hours, the cost per kWh on-peak and cost per kWh off-peak. For the rates that have a demand component, the cost per kW will be provided. The comparison of service plan attributes will be available to all residential customers.

Also, an on-line rate comparison tool will be available to registered aps.com residential customers. Registered aps.com users have the ability to view their bill and account history on-line. The rate comparison tool will utilize the customer's previous 12 months actual usage history. A bar chart will be utilized to show a visual comparison of what the customer would have paid on each of the available residential rate plans. Each of the bar charts will be labeled to show which plan the bar chart is representing. A "promo button" will be added to the homepage of aps.com to provide quick navigation to the on-line rate comparison.

Residential customers that do not have Internet access or prefer to speak with a customer service representative will have the option to call the APS Customer Care in order to receive assistance in selecting the most appropriate rate. Customer service representatives will utilize a service plan comparison tool in order to aid customers in selecting the most appropriate service plan. The Service Plan Comparison will be available via APS' Customer Information System (CIS). The Service Plan Comparison will allow the customer service representative the ability to explain to the customer what the customer would have paid on each of the

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alternative rate options based on the customer's previous 12 months usage history. When comparing a non-TOU rate to a TOU rate, the % On Peak will default to 40% for the 9 p.m. – 9 a.m. plans and 25% for the 7 p.m. – Noon plans. The customer service representative will have the ability to adjust the % On Peak based on information provided by the customer.

Non-Residential Customers

Commercial customers on E-21, E-22, E-23 and E-24 will initially be placed on E-32 TOU. The Company will perform a rate comparison for each customer to determine the customer's projected energy bill on E-32 and E-32 TOU. The results of the rate comparison will be communicated to each customer who will be able to choose their best rate option at that time. If the customer chooses E-32, a meter change will be required. The time required for a meter change will vary based on meter equipment availability and scheduling.

Customer service representatives will conduct an outbound call to each customer on E-21, E-22, E-23 and E-24. The customer service representative will convey the results of the rate comparison and discuss the features of E-32 and E-32 TOU.

There is only one default rate option for E-38 and E-38-8T customers. E-38 and E-38-8T will automatically be transferred to E-221 upon the elimination of E-38 and E-38-8T.

Information on E-32, E-32 TOU and E-221 will be provided to non-residential customers on aps.com.

- e) The copy for the bill messages and written communication that will be provided to customers has not yet been developed.

The monthly residential bill messages will include the following key points:

- On (insert date) APS received approval to increase rates for residential customers by (insert amount). This increase will go into effect on (insert date).
- In addition, APS received authorization to eliminate the service plan you are currently served under.
- APS has five current residential rate plans to meet your needs.
- Please visit aps.com to do a rate comparison to identify which of these rate plans best fit your lifestyle or call 602-371-7171 or 1-800-253-9405 for more information about your available rate options.
- You have until (insert date) to select a new service plan.
- If you have not made a selection by (insert date), you will be automatically transferred to a default service plan.

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The commercial bill message will include the following key points:

- On (insert date), APS received approval to increase rates for general service customers by (insert amount). This increase will go into effect on (insert date).
- In addition, APS received authorization to eliminate the service plan you are currently served under.
- E-21, E-22, E-23 and E-24: Effective (insert date) you will be transferred to the General Service TOU (Time of Use) Service Plan, E-32 TOU.
- E-38 and E-38-8T: Effective (insert date) you will be transferred to Water Pumping Service Plan, E-221.
- For information about this service plan, go to aps.com or call 602-371-6766 or 1-800-253-9407.

Residential customers with a frozen rate will be sent a direct mail letter that educates them on the elimination of their rate and the available rate options. The letter will provide a summary overview of the five residential service plans, educate customers on the default rates, encourage customers to complete an on-line rate comparison and provide a phone number for customers to call with questions. The mailing will include a postage-paid business reply card (BRC) to encourage customers to select their new rate.

Customers on E-21, E-22, E-23 and E-24 will be sent a direct mail letter. The direct mail letter will communicate the results of the rate comparison comparing E-32 and E-32 TOU, explain if the customer chooses E-32 a meter change will be required and provide a phone number for customers to call with questions or to request a meter change.

- f) The script for the outbound recorded message and the script for customer service personnel who are responding to customer inquiries have not yet been developed. Two outbound recorded message campaigns will be completed. The first campaign will be conducted within six weeks following the approval of the rate case. The first outbound recorded message will inform the customer that the call is an important message from APS, reference the direct mail letter that was sent to residential customers, communicate that if the customer does not select a new rate plan by a certain date they will automatically be transferred to the appropriate default rate and inform the customer if they have questions to call us at 602-371-7171 in the Metro Phoenix area, or 1-800-253-9405 outside Metro Phoenix.

Residential customers will receive a second recorded message one month before residential customers are automatically transferred to the

Exhibit B

APS Revised Schedule 1

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EAA 10-4 Referring to your response to EAA 4-10(a), please explain how the proposal to prohibit all master metering for new construction and apartment complexes is not in conflict with the current provision in Commission rule R14-2-205(B)(1) which allows master metering if the building is served by a centralized heating, ventilation or air conditioning system and the contractor can provide to the utility an analysis demonstrating that the central unit will result in a favorable cost/benefit relationship.

SUPPLEMENTAL RESPONSE:

Attached is the revised Service Schedule 1 both clean, APS10671, and redlined, APS10672.

Witness: Greg DeLizio



**SERVICE SCHEDULE 1
TERMS AND CONDITIONS FOR
STANDARD OFFER AND DIRECT ACCESS SERVICES**

The following TERMS AND CONDITIONS and any changes authorized by law will apply to Standard Offer and Direct Access services made available by Arizona Public Service Company (Company), under the established rate or rates authorized by law and currently applicable at time of sale.

1. General

- 1.1 Services will be supplied in accordance with these Terms and Conditions and any changes required by law, and such applicable rate or rates as may from time to time be authorized by law. However, in the case of the customer whose service requirements are of unusual size or characteristics, additional or special contract arrangements may be required.
- 1.2 These Terms and Conditions shall be considered a part of all rate schedules, except where specifically changed by a written agreement.
- 1.3 In case of a conflict between any provision of a rate schedule and these Terms and Conditions, the provisions of the rate schedule shall apply.

2. Establishment of Service

- 2.1 Application for Service - Customers requesting service may be required to appear at Company's place of business to produce proof of identity and/or sign Company's standard form of application for service or a contract before service is supplied by Company.
 - 2.1.1 In the absence of a signed application or contract for service, the supplying of Standard Offer and/or Direct Access services by Company and acceptance thereof by the customer shall be deemed to constitute a service agreement by and between Company and the customer for delivery of, acceptance of, and payment for service, subject to Company's applicable rates and rules and regulations.
 - 2.1.2 Where service is requested by two or more individuals, Company shall have the right to collect the full amount owed Company from any one of the applicants.
- 2.2 Service Establishment and Customer Request for Special Service Charge - A service establishment charge of \$25.00 for residential and \$35.00 non-residential plus any applicable tax adjustment will be assessed each time Company is requested to establish, reconnect or re-establish electric service to the customer's delivery point, or to make a special read without a disconnect and calculate a bill for a partial month.
 - 2.2.1 The customer will additionally be required to pay a trip charge of \$16.00 when an authorized Company representative travels to the customer's site and is unable to complete the customer's requested services due to lack of access to the point of delivery.
 - 2.2.2 The customer will additionally be required to pay an after-hours charge of \$75.00 if the customer requests service, as defined in A.A.C. R14-2-203.D.3, be established, reconnected, or re-established after 5:00 p.m. on a day other than the day of request.
 - 2.2.3 The customer will additionally be required to pay a same day connect charge of \$75.00 if the customer requests service, as defined in A.A.C. R14-2-203.D.3, be established, reconnected, or re-established on the same day the request is being made, and Company agrees to work the request on the same day of the request. This will be charged



**SERVICE SCHEDULE 1
TERMS AND CONDITIONS FOR
STANDARD OFFER AND DIRECT ACCESS SERVICES**

regardless of the time the order may be worked by Company on that day. Company may, where no additional costs are incurred by Company, waive the same day fee.

- 2.2.4 The customer will additionally be required to pay \$75.00 per crew person per hour when customer requests services that do not meet the definition of service establishment as defined in A.A.C. R14-2-203.D.3. Customers will be charged for work such as metering equipment installations, including instrument transformers (excluding meters), maintenance or planned outages requested by the Customer, etc. that require the availability of Company employees after hours, on a weekend day, or on a Company holiday. The number of employees utilized by Company in fulfilling such requests shall be at the sole discretion of Company.

Company holidays are New Year's Day, Martin Luther King, Jr. Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, The Day After Thanksgiving, and Christmas Day.

- 2.2.5 Company may waive the service establishment charge where:

2.2.5.1 No field trip is required because applicant accepts responsibility for energy billed and not yet paid and the change is effective with the last meter read and meter read date billed.

2.2.5.2 Applicant has an active Landlord Automatic Transfer of Service Agreement on file with Company. This service agreement is for property owners that have established credit with Company and provides for continuous service to the landlord between tenants.

2.2.5.3 Where multiple connects are performed during the same site visit, in the same applicant name, at the same address, for the same class of service, Company will assess the Service Establishment Charge once for every two delivery points.

- 2.3 Direct Access Service Request (DASR) - A Direct Access Service Request charge of \$10.00 plus any applicable tax adjustment will be assessed to the Electric Service Provider (ESP) submitting the DASR each time Company processes a Request (RQ) type DASR as specified in Company's Schedule 10, Terms and Conditions for Direct Access.

- 2.4 Grounds for Refusal of Service - Company may refuse to connect or reconnect Standard Offer or Direct Access service if any of the following conditions exist:

2.4.1 The applicant has an outstanding amount due with Company for the same class of service and is unwilling to make payment arrangements that are acceptable to Company.

2.4.2 A condition exists which in Company's judgment is unsafe or hazardous.

2.4.3 The applicant has failed to meet the security deposit requirements set forth by Company as specified under Section 2.5 or 2.6 hereof.

2.4.4 The applicant is known to be in violation of Company's tariff.

2.4.5 The applicant fails to furnish such funds, service, equipment, and/or rights-of-way or easements required to serve the applicant and which have been specified by Company as a condition for providing service.



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TERMS AND CONDITIONS FOR
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- 2.4.6 The applicant falsifies his or her identity for the purpose of obtaining service.
- 2.4.7 Service is already being provided at the address for which the applicant is requesting service.
- 2.4.8 Service is requested by an applicant and a prior customer living with the applicant owes a delinquent bill from the same or a prior service address.
- 2.4.9 The applicant is acting as an agent for a prior customer who is deriving benefits of the service and who owes a delinquent bill from the same or a prior service address.
- 2.4.10 The applicant has failed to obtain all required permits and/or inspections indicating that the applicant's facilities comply with local construction and safety codes.

2.5 Residential Establishment of Credit or Security Deposit

- 2.5.1 Establishment of Credit - Company shall not require a security deposit from a new applicant for service if the applicant is able to meet any of the following requirements:
 - 2.5.1.1 The applicant has had service of a comparable nature with Company within the past two (2) years and was not delinquent in payment more than twice during the last twelve (12) consecutive months or disconnected for nonpayment.
 - 2.5.1.2 Company receives an acceptable credit rating, as determined by Company, for the applicant from a credit rating agency.
 - 2.5.1.3 The applicant can produce a letter regarding credit or verification from an electric utility where service of a comparable nature was last received within six (6) months of the current date which states that the applicant had a timely payment history for the prior twelve (12) consecutive months at the time of service discontinuation
 - 2.5.1.4 In lieu of a security deposit, Company receives deposit guarantee notification from a social or governmental agency acceptable to Company or a surety bond as security for Company in a sum equal to the required deposit.
- 2.5.2 Residential Establishment of Credit or Security Deposit - When credit cannot be established as provided for in Section 2.5.1 hereof or when it is determined that the applicant left an unpaid final bill owing to another utility company, the applicant will be required to:
 - 2.5.2.1 Place a cash deposit to secure payment of bills for service as prescribed herein, or
 - 2.5.2.2 Provide a surety bond acceptable to Company in an amount equal to the required security deposit.



SERVICE SCHEDULE 1
TERMS AND CONDITIONS FOR
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- 2.5.3 Nonresidential Establishment of Security Deposit – All non-residential applicants will be required to place a cash deposit to secure payment of bills for service as prescribed herein, unless:
- 2.5.3.1 The applicant has had service of a comparable nature with Company within the past two (2) years and was not delinquent in payment more than twice during the last twelve (12) consecutive months or disconnected for nonpayment.
- 2.5.3.2 The applicants provides a non-cash security deposit in the form of a Surety Bond, Irrevocable Letter of Credit, or Assignment of Monies in an amount equal to the required security deposit.
- 2.6 Establishment or Reestablishment of Security Deposit
- 2.6.1 Residential - Company may require a residential customer to establish or re-establish a security deposit if the customer becomes delinquent in the payment of two (2) or more bills within a twelve (12) consecutive month period or has been disconnected for non-payment during the last twelve (12) months.
- 2.6.2 Nonresidential - Company may require a nonresidential customer to establish or re-establish a security deposit if the customer becomes delinquent in the payment of two (2) or more bills within a twelve (12) consecutive month period or if the customer has been disconnected for non-payment during the last twelve (12) months, or when the customer's financial condition may jeopardize the payment of their bill, as determined by Company based on the results of using a credit scoring worksheet. Company will inform all customers of the Arizona Corporation Commission's complaint process should the customer dispute the deposit based on the financial data.
- 2.7 Security Deposits – Once it is determined that a security deposit is required, the following will apply:
- 2.7.1 Security deposits may be required for each service location.
- 2.7.2 Company reserves the right to increase or decrease security deposit amounts applicable to the services being provided by Company in accordance with this section:
- 2.7.2.1 If the customer chooses to change from Standard Offer to Direct Access services, the deposit may be decreased by an amount which reflects that portion of the customer's service being provided by a Load Serving ESP. However if the Load Serving ESP is providing ESP Consolidated Billing pursuant to Company's Schedule 10 Section 7, the entire deposit will be credited to the customer's account; or,
- 2.7.2.2 If the customer chooses to change from Direct Access to Standard Offer service, the requested deposit amount may be increased by an amount pursuant to Section 2.5, which reflects that Company is providing bundled electric service.
- 2.7.2.3 If the customer's average consumption increases: by more than ten (10) percent for residential accounts or five (5) percent for nonresidential accounts within a twelve (12) consecutive month period and credit has not been established, an additional security deposit may, at Company's option, be required.



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- 2.7.3 Customer security deposits shall not preclude Company from terminating an agreement for service or suspending service for any failure in the performance of customer obligation under the agreement for service.
 - 2.7.4 Cash deposits held by Company six (6) months/183 days or longer shall earn interest at the established one year Treasury Constant Maturities rate, effective on the first business day of each year, as published on the Federal Reserve Website. Deposits on inactive accounts are applied to the final bill when all service options become inactive, and the balance, if any, is refunded to the customer of record within thirty (30) days. For refunds resulting from the customer changing from Standard Offer to Direct Access, the difference in the deposit amounts will be applied to the customer's account.
 - 2.7.5 If the customer terminates all service with Company, the security deposit may be credited to the customer's final bill.
 - 2.7.6 Residential security deposits shall not exceed two (2) times the customer's average monthly bill as estimated by Company for the services being provided by Company.
 - 2.7.6.1 Deposits or other instruments of credit will automatically expire or be returned or credited to the customers account after twelve (12) consecutive months of service, provided the customer has not been delinquent more than twice, unless customer has filed bankruptcy in the last 12 months.
 - 2.7.7 Nonresidential security deposits shall not exceed two and one-half (2-1/2) times the customer's maximum monthly billing as estimated by Company for the service being provided by Company.
 - 2.7.7.1 Deposits and non-cash deposits on file with Company will be reviewed after twenty-four (24) months of service and will be returned provided the customer has not been delinquent more than twice in the payment of bills or disconnected for non-payment during the previous twelve (12) consecutive months unless the customer's financial condition warrants extension of the security deposit.
 - 2.8 Line Extensions - Installations requiring Company to extend its facilities in order to establish service will be made in accordance with Company's Schedule #3, Conditions Governing Extensions of Electric Distribution Lines and Services filed with the Arizona Corporation Commission.
3. Rates
- 3.1 Rate Information - Company shall provide, in accordance with A.A.C. R14-2-204, a copy of any rate schedule applicable to that customer for the requested type of service. In addition, Company shall notify its customers of any changes in Company tariffs affecting those customers.
 - 3.2 Rate Selection - The customer's service characteristics and service requirements determine the selection of applicable rate schedule. If the customer is receiving bundled service, Company will use reasonable care in initially establishing service to the customer under the most advantageous rate schedule applicable to the customer. However, because of varying customer usage patterns



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and other reasons beyond its reasonable knowledge or control, Company cannot guarantee that the most economic applicable rate will be applied. Company will not make any refunds in any instances where it is determined that the customer would have paid less for service had the customer been billed on an alternate applicable rate or provision of that rate.

- 3.3 Optional Rates – Certain optional rate schedules applicable to certain classes of service allow the customer the option to select the rate schedule to be effective initially or after service has been established. Billing under the alternate rate will become effective from the next regularly scheduled meter reading, after the appropriate metering equipment is installed. No further rate schedule changes, however, may be made within the succeeding twelve-month period. Where the rate schedule or contract pursuant to which the customer is provided service specifies a term, the customer may not exercise its option to select an alternate rate schedule until expiration of that term.
- 3.4 Direct Access service will be effective upon the next meter read date if DASR is processed fifteen (15) calendar days prior to that read date and the appropriate metering equipment is in place. If a DASR is made less than fifteen (15) days prior to the next regular read date the effective date will be at the next meter read date thereafter. The above timeframes are applicable for customers changing their selection of Electric Service Providers or for customers returning to Standard Offer service.
- 3.5 Any customer that selects Direct Access service may return to Standard Offer service in accordance with the rules, regulations, and orders of the Commission. However, such customer will not be eligible for Direct Access service for the succeeding twelve (12) month period. If a customer returning to Standard Offer, in accordance with the rules, regulations and orders of the Commission, was not given the required notification in accordance with the rules and regulations of the Commission by their Load Serving ESP of its intent to cease providing competitive services then the above provision will only apply if the customer fails to select another ESP within sixty (60) days of returning to Standard Offer service.

4. Billing and Collection

- 4.1 Customer Service Installation and Billing - Service billing periods normally consist of approximately 30 days unless designated otherwise under rate schedules, through contractual agreement, or at Company option.
- 4.1.1 Company normally meters and bills each site separately; however, at customer's request, adjacent and contiguous sites not separated by private or public property or right of way and operated as one integral unit under the same name and as a part of the same business, will be considered a single site as specified in Company's Schedule 4, Totalized Metering of Multiple Service Entrance Sections at a Single Site for Standard Offer and Direct Access Service.
- 4.1.2 The customer's service installation will normally be arranged to accept only one type of service at one point of delivery to enable service measurement through one meter. If the customer requires more than one type of service, or total service cannot be measured through one meter according to Company's regular practice, separate meters will be used and separate billing rendered for the service measured by each meter.
- 4.2 Collection Policy - The following collection policy shall apply to all customer accounts:



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- 4.2.1 All bills rendered by Company are due and payable no later than fifteen (15) calendar days from the billing date. Any payment not received within this time frame will be considered delinquent. All delinquent bills for which payment has not been received shall be subject to the provisions of Company's termination procedure. Company reserves the right to suspend or terminate the customer's service for non-payment of any Arizona Corporation Commission approved charges. All delinquent charges will be subject to a late charge at the rate of eighteen percent (18%) per annum.
- 4.2.2 If the customer, as defined in A.A.C. R 14-2-201.9, has two or more services with Company and one or more of such services is terminated for any reason leaving an outstanding bill and the customer is unwilling to make payment arrangements that are acceptable to Company, Company shall be entitled to transfer the balance due on the terminated service to any other active account of the customer for the same class of service. The failure of the customer to pay the active account shall result in the suspension or termination of service thereunder.
- 4.2.3 Unpaid charges incurred prior to the customer selecting Direct Access will not delay the customer's request for Direct Access. These charges remain the responsibility of the customer to pay. Normal collection activity, including discontinuing service, may be followed for failure to pay.

4.3 Responsibility for Payment of Bills

- 4.3.1 The customer is responsible for the payment of bills until service is ordered discontinued and Company has had reasonable time to secure a final meter reading for those services involving energy usage, or if non-metered services are involved until Company has had reasonable time to process the disconnect request.
- 4.3.2 When an error is found to exist in the billing rendered to the customer, Company will correct such an error to recover or refund the difference between the original billing and the correct billing. Such adjusted billings will not be rendered for periods in excess of the applicable statute of limitations from the date the error is discovered.
- 4.3.2.1 Refunds to customers resulting from overbillings will be made promptly upon discovery by Company.
- 4.3.2.2 Corrected charges for underbillings shall be billed to the customer who shall be given an equal length of time such as number of months underbilled to pay the backbill without late payment penalties, unless there is evidence of meter tampering or energy diversion
- 4.3.2.3 Except as specified below, corrected charges for underbillings shall be limited to three (3) month for residential accounts and six (6) months for non-residential accounts.
- 4.3.2.3.1 Where the account is billed on a special contract or non-metered rate, corrected charges for underbillings shall be billed in accordance with the contract or rate schedule requirements and is not limited to three or six months as applicable.



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- 4.3.2.3.2 Where service has been established but no bills have been rendered, corrected charges for underbillings shall go back to the date service was established.
- 4.3.2.3.3 Where there is evidence of meter tampering or energy diversions, corrected charges for underbillings shall go back to the date meter tampering or energy diversions began, as determined by Company.
- 4.3.2.3.4 Where lack of access to the meter (caused by the customer) has resulted in estimated bills, corrected charges for underbillings shall go back to the billing month of the last actual Company obtained meter read date.
- 4.3.2.4 Company may forgo billing and collection of corrected charges for an underbilling if Company believes the cost of billing and collecting the underbilling would not justify pursuing the underbill.
- 4.4 Dishonored Payments - If Company is notified by the customer's financial institution that they will not honor a payment tendered by the customer for payment of any bill, Company may require the customer to make payment in cash, by money order, certified or cashier's check, or other means which guarantee the customer's payment to Company.
- 4.4.1 The customer will be charged a fee of \$15.00 for each instance where the customer tenders payment of a bill with a payment that is not honored by the customer's financial institution.
- 4.4.2 The tender of a dishonored payment shall in no way (i) relieve the customer of the obligation to render payment to Company under the original terms of the bill, or (ii) defer Company's right to terminate service for nonpayment of bills.
- 4.4.3 Where the customer has tendered two (2) or more dishonored payments in the past twelve (12) consecutive months, Company may require the customer to make payment in cash, money order or cashier's check for the next twelve (12) consecutive months.
- 4.5 Termination Process Charges
- 4.5.1 Company will require payment of a Field Call Charge of \$15.00 when an authorized Company representative travels to the customer's site to accept payment on a delinquent account, notify of service termination, make payment arrangements or terminate the service. This charge will only be applied for field calls resulting from the termination process.
- 4.5.2 If a termination is required at the pole, a reconnection charge of \$96.50 will be required; if the termination is in underground equipment, the reconnection charge will be \$115.00.
- 4.5.3 To avoid termination of service, the customer will make payment in full, including any necessary deposit in accordance with Section 2.5 hereof or make payment arrangements satisfactory to Company.
- 4.6 On-site Evaluation - Company will require payment of an On-site Evaluation Charge of \$82.00 when an authorized Company field investigator performs an on-site visit to evaluate how the customer may reduce their energy usage. This charge may be assessed regardless of whether the customer actually implements Company suggestions.



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5. Service Responsibilities of Company and Customer

5.1 Service Voltage—Company will deliver electric service to the designated point of delivery, as specified in Section 6.3 of this Schedule, at the standard voltages specified in the Electric Service Requirements Manual published by Company and as specified in A.A.C. R14-2-208.F. Company may deliver service for special applications at higher voltages, with prior approval from Company's Engineering Department and in accordance with Company's Schedule 3, Conditions Governing Extensions of Electric Distribution Lines and Services filed with the Arizona Corporation Commission.

5.2 Responsibility: Use of Service or Apparatus

5.2.1 The customer shall save Company harmless from and against all claims for injury or damage to persons or property occasioned by or in any way resulting from the services being provided by Company or the use thereof on the customer's side of the point of delivery. Company shall have the right to suspend or terminate service in the event Company should learn of service use by the customer under hazardous conditions.

5.2.2 The customer shall exercise all reasonable care to prevent loss or damage to Company property installed on the customer's site for the purpose of supplying service to the customer.

5.2.3 The customer shall be responsible for payment for loss or damage to Company property on the customer's site arising from neglect, carelessness or misuse and shall reimburse Company for the cost of necessary repairs or replacements.

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

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

5.3 Service Interruptions: Limitations on Liability of Company

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

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



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

5.5 Easements

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

5.5.2 When Company discovers that the customer or the customer's agent is performing work, has constructed facilities, or has allowed vegetation to grow adjacent to or within an easement or right-of-way or Company-owned equipment, and such work, construction, vegetation or facility poses a hazard or is in violation of federal, state, or local laws, ordinances, statutes, rules or regulations, or significantly interferes with Company's safe use, operation or maintenance of, or access to, equipment or facilities, Company shall notify the customer or the customer's agent and shall take whatever actions are necessary to eliminate the hazard, obstruction, interference or violation at the customer's expense. Company will notify the customer in writing of the violations.

5.6 Load Characteristics - The customer shall exercise reasonable care to ensure that the electrical characteristics of its load, such as deviation from sine wave form (a minimum standard is IEEE 519) or unusual short interval fluctuations in demand, shall not impair service to other customers or interfere with operation of telephone, television, or other communication facilities. Customer shall meet power factor requirements as specified on applicable rate schedules.

6. Metering and Metering Equipment

6.1 Customer Equipment - The customer shall install and maintain all wiring and equipment beyond the point of delivery, except for Company's meters and special equipment. The customer's entire installation must conform to all applicable construction standards and safety codes and the customer must furnish an inspection or permit if required by law or by Company.

6.1.1 The customer shall provide, in accordance with Company's current service standards and/or Electric Service Requirements Manual, at no expense to Company, and close to the point of delivery, a sufficient and suitable space acceptable to Company's agent for the installation, accessibility and maintenance of Company's metering equipment. A current



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version of the Electric Service Requirements Manual is available on-line at
<http://esp.apsc.com/resource/metering.asp>.

6.1.2 Where a customer requests, and Company approves of, a special meter reading device or communications services or devices to accommodate the customer's needs, the cost for such additional equipment and usage fees shall be the responsibility of the customer.

6.2 Company Equipment

6.2.1 A Meter Service Provider (MSP) or its authorized agents may remove Company's metering equipment pursuant to Company's Schedule 10. Meters not returned to Company or returned damaged will result in charge to the MSP of the replacement costs, plus an administration fee of fifteen percent (15%), less five (5) years depreciation.

6.2.2 Company will lease lock ring keys to MSP's and/or their agents authorized to remove Company meters pursuant to the terms and conditions of Company's Schedule 10 at a refundable charge of \$70.00 per key. The charge will not be refunded if a key is lost, stolen, or damaged. If Company must replace ten percent (10%) of the issued keys within any twelve (12) month period due to loss by the MSP's agent, Company may, rather than leasing additional lock ring keys, require the MSP to arrange for a joint meeting. All lock ring keys must be returned to Company within five (5) working days if the MSP and/or its authorized agents are:

- 1) No longer permitted to remove Company meters pursuant to conditions of Company's Schedule 10;
- 2) No longer authorized by the Arizona Corporation Commission to provide services; or
- 3) The ESP Agreement has been terminated.

6.2.3 If the MSP, the customer, and/or its agent request a joint site meeting for removal of Company metering and associated equipment and/or lock ring, a base charge will be assessed of \$62.00 per site. Company may assess an additional charge of \$53.00 per hour for joint site meetings that exceed thirty (30) minutes. If Company must temporarily replace the MSP's meter and/or associated metering equipment during emergency situations or to restore power to a customer, the above charges may apply.

6.3 Service Connections - Company is not required to install and maintain any lines and equipment on the customer's side of the point of delivery except its meter.

6.3.1 For overhead service, the point of delivery shall be where Company's service conductors terminate at the customer's weatherhead or bus rider.

6.3.2 For underground service, the point of delivery shall be where Company's service conductors terminate in the customer's or development's service equipment. The customer shall furnish, install and maintain any risers, raceways and/or termination cabinet necessary for the installation of Company's underground service conductors.

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



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- 6.3.4 For the mutual protection of the customer and Company, only authorized employees or agents of Company or the Load Serving ESP are permitted to make and energize the connection between Company's service wires and the customer's service entrance conductors. Such employees carry Company issued identification which they will show on request.
- 6.4 Measuring Customer Service - All the energy sold to the customer will be measured by commercially acceptable measuring devices by Company (or the Meter Reading Service Provider (MRSP) pursuant to the terms and conditions of Company's Schedule 10). Where energy and, if applicable, demand is estimated by Company, estimation will be in accordance with Company's bill estimation procedures approved by the Arizona Corporation Commission. Where it is impractical to meter loads, such as street lighting, security lighting, or special installations, consumption will be determined by Company.
- 6.4.1 For Standard Offer customers, or where Company is the MRSP, the readings of the meter will be conclusive as to the amount of electric power supplied to the customer unless there is evidence of meter tampering or energy diversion, or unless a test reveals the meter is in error by more than plus or minus three percent (3%).
- 6.4.2 If there is evidence of meter tampering or energy diversion, the customer will be billed for the estimated energy and, if applicable, demand, for the period in which the energy diversion took place. Additionally, where there is evidence of meter tampering, energy diversion, or by-passing the meter, the customer will also be charged the cost of the investigation as determined by Company.
- 6.4.3 If after testing, a meter is found to be more than three percent (3%) in error, either fast or slow, proper correction shall be made of previous readings and adjusted bills shall be rendered or adjusted billing information will be provided to the MRSP.
- 6.4.3.1 Customer will be billed, in accordance with Section 4.3.2, for the estimated energy and demand that would have registered had the meter been operating properly.
- 6.4.4 Where Company is the MRSP, Company will, at the request of the customer or the ESP, reread the customer's meter within ten (10) working days after such request by the customer. The cost of such rereads is \$16.50 and may be charged to the customer or the ESP, provided that the original reading was not in error.
- 6.4.5 Where the ESP is the MSP or MRSP, and the ESP and/or its' agent fails to provide the meter data to Company pursuant to Company's Schedule 10 Section 8.16, Meter Reading Data Obligations, Company may, at its option, obtain the data, or may estimate the billing determinants. The charge for such reread is \$16.50 and may be charged to the ESP.
- 6.5 Meter Testing - Company tests its meters regularly in accordance with a meter testing and maintenance program as approved by the Arizona Corporation Commission. Company will, however, individually test a Company owned/maintained meter upon customer or ESP request. If the meter is found to be within the plus or minus three percent (3%) limit, Company may charge the customer or the ESP \$30.00 for the meter test if the meter is removed from the site and tested in the meter shop, and \$50.00 if the meter remains on site and is tested in the field.
- 6.6 Master Metering



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- 6.6.1 Mobile Home Parks - Company shall refuse service to all new construction and/or expansion of existing permanent residential mobile home parks unless the construction and/or expansion is individually metered by Company.
- 6.6.2 Residential Apartment Complexes, Condominiums - Company shall refuse service to all new construction of apartment complexes and condominiums which are master metered unless the building(s) will be served by a centralized heating, ventilation and/or air conditioning system and the contractor can provide to Company an analysis demonstrating that the central unit will result in a favorable cost/benefit relationship as stated in A.A.C. R14-2-205. This section is not applicable to Senior Care/Nursing Centers registered with the State of Arizona with independent living units which provide packaged services such as housing, food, and nursing care.
- 6.6.3 Multi-Unit Residential High Rise Developments - Company will allow master metering for high rise residential units where the residential units are privately owned, provided the building will be served by a centralized heating, ventilation and/or air conditioning system, and each residential unit shall be individually sub-metered and responsible for energy consumption of that unit.
 - 6.6.3.1 Sub-metering shall be provided and maintained by the builder or homeowners association.
 - 6.6.3.2 Responsibility and methodology for determining each unit's energy billing shall be clearly specified in the original bylaws of the homeowners association, a copy of which must be provided to Company prior to Company providing the initial extension.

7. Termination of Service

- 7.1 With Notice - Company may without liability for injury or damage, and without making a personal visit to the site, disconnect service to any customer for any of the reasons stated below, provided Company has met the notice requirements established by the Arizona Corporation Commission:
 - 7.1.1 A customer violation of any of the applicable rules of the Arizona Corporation Commission or Company tariffs.
 - 7.1.2 Failure of the customer to pay a delinquent bill for services provided by Company.
 - 7.1.3 The customer's breach of a written contract for service.
 - 7.1.4 Failure of the customer to comply with Company's deposit requirements.
 - 7.1.5 Failure of the customer to provide Company with satisfactory and unassisted access to Company's equipment.
 - 7.1.6 When necessary to comply with an order of any governmental agency having jurisdiction.
 - 7.1.7 Failure of a prior customer to pay a delinquent bill for utility services where the prior customer continues to reside on the premises.
 - 7.1.8 Failure to provide or retain rights-of-way or easements necessary to serve the customer.



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- 7.1.9 Company learns of the existence of any condition in Section 2.4, Grounds For Refusal of Service.
- 7.2 Without Notice - Company may without liability for injury or damage disconnect service to any customer without advance notice under any of the following conditions:
- 7.2.1 The existence of an obvious hazard to the health or safety of persons or property.
- 7.2.2 Company has evidence of meter tampering or fraud.
- 7.2.3 Company has evidence of unauthorized resale or use of electric service.
- 7.2.4 Failure of the customer to comply with the curtailment procedures imposed by Company during a supply shortage.
- 7.3 Restoration of Service - Company shall not be required to restore service until the conditions which resulted in the termination have been corrected to the satisfaction of Company.
8. Removal of Facilities - Upon termination of service, Company may without liability for injury or damage, dismantle and remove its facilities installed for the purpose of supplying service to the customer, and Company shall be under no further obligation to serve the customer. If, however, Company has not removed its facilities within one (1) year after the termination of service, Company shall thereafter give the customer thirty (30) days written notice before removing its facilities, or else waive any reestablishment charge within the next year for the same service to the same customer at the same location.
- For purposes of this Section notice to the customer shall be deemed given at the time such notice is deposited in the U.S. Postal Service, first class mail, postage prepaid, to the customer at his/her last known address.
9. Successors and Assigns - Agreements for Service shall be binding upon and for the benefit of the successors and assigns of the customer and Company, but no assignments by the customer shall be effective until the customer's assignee agrees in writing to be bound and until such assignment is accepted in writing by Company.
10. Warranty - THERE ARE NO UNDERSTANDINGS, AGREEMENTS, REPRESENTATIONS, OR WARRANTIES, EXPRESS OR IMPLIED (INCLUDING WARRANTIES REGARDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), NOT SPECIFIED HEREIN OR IN THE APPLICABLE RULES OF THE ARIZONA CORPORATION COMMISSION CONCERNING THE SALE AND DELIVERY OF SERVICES BY COMPANY TO THE CUSTOMER. THESE TERMS AND CONDITIONS AND THE APPLICABLE RULES OF THE ARIZONA CORPORATION COMMISSION STATE THE ENTIRE OBLIGATION OF COMPANY IN CONNECTION WITH SUCH SALES AND DELIVERIES.

**ARIZONA CORPORATION COMMISSION
STAFF'S TENTH SET OF DATA REQUESTS
REGARDING ARIZONA PUBLIC SERVICE COMPANY RATE CASE
DOCKET NO. E-01345A-05-0816
JULY 18, 2006**

EAA 10-4 Referring to your response to EAA 4-10(a), please explain how the proposal to prohibit all master metering for new construction and apartment complexes is not in conflict with the current provision in Commission rule R14-2-205(B)(1) which allows master metering if the building is served by a centralized heating, ventilation or air conditioning system and the contractor can provide to the utility an analysis demonstrating that the central unit will result in a favorable cost/benefit relationship.

SUPPLEMENTAL RESPONSE:

Attached is the revised Service Schedule 1, APS10679, redlined, indicating changes from the current approved Schedule 1.

Witness: Greg DeLizio



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The following TERMS AND CONDITIONS and any changes authorized by law will apply to Standard Offer and Direct Access services made available by Arizona Public Service Company (Company), under the established rate or rates authorized by law and currently applicable at time of sale.

1. General

- 1.1 Services will be supplied in accordance with these Terms and Conditions and any changes required by law, and such applicable rate or rates as may from time to time be authorized by law. However, in the case of the customer whose service requirements are of unusual size or characteristics, additional or special contract arrangements may be required.
- 1.2 These Terms and Conditions shall be considered a part of all rate schedules, except where specifically changed by a written agreement.
- 1.3 In case of a conflict between any provision of a rate schedule and these Terms and Conditions, the provisions of the rate schedule shall apply.
- ~~1.4 Company will supply electric service at the standard voltages specified in the Electric Service Requirements Manual published by Company and is responsible for distribution services, emergency system conditions, outages and safety situations related to Company's distribution system.~~

2. Establishment of Service

- 2.1 Application for Service - Customers requesting service may be required to appear at Company's place of business to produce proof of identity and/or sign Company's standard form of application for service or a contract before service is supplied by Company.
 - 2.1.1 In the absence of a signed application or contract for service, the supplying of Standard Offer and/or Direct Access services by Company and acceptance thereof by the customer shall be deemed to constitute a service agreement by and between Company and the customer for delivery of, acceptance of, and payment for service, subject to Company's applicable rates and rules and regulations.
 - 2.1.2 Where service is requested by two or more individuals, Company shall have the right to collect the full amount owed Company from any one of the applicants.
 - ~~2.1.3 In mobile home parks identified by Company as being seasonal parks, Company may install or connect a meter as its scheduling permits; however, the customer will only be responsible for energy and demand recorded on and after their requested service turn on date.~~
- 2.2 Service Establishment and Customer Request for Special Service Charge - A service establishment charge of \$25.00 for residential and \$35.00 non-residential plus any applicable tax adjustment will be assessed each time Company is requested to establish, reconnect or re-establish electric service to the customer's delivery point, or to make a special read without a disconnect and calculate a bill for a partial month. ~~Billing for the service charge will be rendered as part of the service bill, but not later than the second service bill.~~

ARIZONA PUBLIC SERVICE COMPANY
Phoenix, Arizona
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The service establishment charges above may be assessed when a customer changes their rate selection from Direct Access to Standard Offer.

- 2.2.1 The customer ~~may~~will additionally be required to pay a trip charge of \$16.00 when an authorized Company representative travels to the customer's site and is unable to complete the customer's requested services due to lack of access to ~~meter panel~~the point of delivery.
- 2.2.2 The customer ~~may~~will additionally be required to pay an after-hours charge of \$75.00 ~~should~~if the customer requests service, as defined in A.A.C. R14-2-203.D.3, be established, reconnected, or re-established ~~during a period other than regular working hours, or on the same day of their request, after 5:00 p.m. on a day other than the day of request.~~
- 2.2.3 The customer will additionally be required to pay a same day connect charge of \$75.00 if the customer requests service, as defined in A.A.C. R14-2-203.D.3, be established, reconnected, or re-established on the same day the request is being made, and Company agrees to work the request on the same day of the request. This will be charged regardless of the time the order may be worked by Company, on that day. Company may, where no additional costs are incurred by Company, waive the same day fee.
- 2.2.4 The customer will additionally be required to pay \$75.00 per crew person per hour when customer requests services that do not meet the definition of service establishment as defined in A.A.C. R14-2-203.D.3. Customers will be charged for work (such as metering equipment installations, including which include instrument transformers (excluding meters), maintenance or planned outages requested by the Customer, etc.) that require the availability of Company employees after hours, on a weekend day, or on a Company holiday. The number of employees utilized by Company in fulfilling such requests shall be at the sole discretion of Company.
- Company holidays are New Year's Day, Martin Luther King, Jr. Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, The Day After Thanksgiving, and Christmas Day.
- 2.2.5 Company may waive the service establishment charge where:
- 2.2.5.1 No field trip is required because applicant accepts responsibility for energy billed and not yet paid and the change is effective with the last meter read and meter read date billed.
- 2.2.5.2 Applicant has an active Landlord Automatic Transfer of Service Agreement on file with Company. This service agreement is for property owners that have established credit with Company and provides for continuous service to the landlord between tenants.



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- ~~2.2.3~~ The charge for Company work, requested by the customer to be worked after hours or on a Company holiday that does not meet the definition of A.A.C. R14-2-203.D.3 will be \$75.00 per hour.
- 2.2.5.3 Where multiple connects are performed during the same site visit, in the same applicant name, at the same address, for the same class of service, Company will assess the Service Establishment Charge once for every two delivery points.
- 2.3 Direct Access Service Request (DASR) - A Direct Access Service Request charge of \$10.00 plus any applicable tax adjustment will be assessed to the Electric Service Provider (ESP) submitting the DASR each time Company processes a Request (RQ) type DASR as specified in Company's Schedule 10, Terms and Conditions for Direct Access.
- 2.4 Grounds for Refusal of Service - Company may refuse to connect or reconnect Standard Offer or Direct Access service if any of the following conditions exist:
- 2.4.1 The applicant has an outstanding amount due with Company for the same class of service and is unwilling to make payment arrangements that are acceptable to Company.
- 2.4.2 A condition exists which in Company's judgment is unsafe or hazardous.
- 2.4.3 The applicant has failed to meet the security deposit requirements set forth by Company as specified under Section 2.5 or 2.6 hereof.
- 2.4.4 The applicant is known to be in violation of Company's tariff.
- 2.4.5 The applicant fails to furnish such funds, service, equipment, and/or rights-of-way or easements required to serve the applicant and which have been specified by Company as a condition for providing service.
- 2.4.6 The applicant falsifies his or her identity for the purpose of obtaining service.
- 2.4.7 Service is already being provided at the address for which the applicant is requesting service.
- 2.4.8 Service is requested by an applicant and a prior customer living with the applicant owes a delinquent bill from the same or a prior service address.
- 2.4.9 The applicant is acting as an agent for a prior customer who is deriving benefits of the service and who owes a delinquent bill from the same or a prior service address.
- 2.4.10 The applicant has failed to obtain all required permits and/or inspections indicating that the applicant's facilities comply with local construction and safety codes.
- 2.5 Residential Establishment of Credit or Security Deposit
- 2.5.1 Establishment of Credit - Company shall not require a security deposit from a new applicant for service if the applicant is able to meet any of the following requirements:



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- 2.5.1.1 The applicant has had service of a comparable nature with Company within the past two (2) years and was not delinquent in payment more than twice during the last twelve (12) consecutive months or disconnected for nonpayment.
- 2.5.1.2 Company receives an acceptable credit rating, as determined by Company, for the applicant from a credit rating agency utilized by Company.
- 2.5.1.3 The applicant can produce a letter regarding credit or verification from an electric utility where service of a comparable nature was last received within six (6) months of the current date which states that the applicant had a timely payment history for the prior twelve (12) consecutive months at the time of service discontinuation.
- 2.5.1.4 In lieu of a security deposit, Company receives deposit guarantee notification from a social or governmental agency acceptable to Company or a surety bond as security for Company in a sum equal to the required deposit.
- 2.5.2 Residential Establishment of Credit or Security Deposit - When credit cannot be established as provided for in Section 2.5.1 hereof or when it is determined that the applicant left an unpaid final bill owing to another utility company, the applicant will be required to:
 - 2.5.2.1 Place a cash deposit to secure payment of bills for service as prescribed herein, or
 - 2.5.2.2 Provide a surety bond acceptable to Company in an amount equal to the required security deposit.
- 2.5.3 Nonresidential Establishment of Security Deposit ~~All nonresidential customers may. All non-residential applicants will~~ be required to:
 - ~~2.5.3.1 Place~~ place a cash deposit to secure payment of bills for service as prescribed herein, ~~or unless:~~
 - 2.5.3.1 The applicant has had service of a comparable nature with Company within the past two (2) years and was not delinquent in payment more than twice during the last twelve (12) consecutive months or disconnected for nonpayment.
 - 2.5.3.2 ~~Provide~~ The applicant provides a non-cash security deposit in the form of a Surety Bond, Irrevocable Letter of Credit, or Assignment of Monies in an amount equal to the required security deposit.
- 2.6 Reestablishment or Reestablishment of Security Deposit
 - 2.6.1 Residential - Company may require a residential customer to establish or re-establish a security deposit if the customer becomes delinquent in the payment of two (2) or more bills within a twelve (12) consecutive month period or has been disconnected for non-payment during the last twelve (12) months.



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- 2.6.2 Nonresidential - Company may require a nonresidential customer to establish or re-establish a security deposit if the customer becomes delinquent in the payment of two (2) or more bills within a twelve (12) consecutive month period or if the customer has been disconnected for non-payment during the last twelve (12) months, or when the customer's financial condition may jeopardize the payment of their bill, as determined by Company based on the results of using a credit scoring worksheet. Company will inform all customers of the Arizona Corporation Commission's complaint process should the customer dispute the deposit based on the financial data.
- 2.7 Security Deposits – Once it is determined that a security deposit is required, the following will apply:
- 2.7.1 Security deposits may be required for each service location.
- 2.7.2 2.7.1 Company reserves the right to increase or decrease security deposit amounts applicable to the services being provided by the Company in accordance with this section:
- 2.7.1.1 ~~If the customer's average consumption increases by more than ten (10) percent for residential accounts within a twelve (12) consecutive month period and five (5) percent for nonresidential accounts within a twelve (12) consecutive month period; or,~~
- 2.7.2.1 ~~2.7.1.2 If the customer chooses to change from Standard Offer to Direct Access services, the deposit may be decreased by an amount which reflects that portion of the customer's service being provided by a Load Serving ESP. However if the Load Serving ESP is providing ESP Consolidated Billing pursuant to Company's Schedule 10 Section 7, the entire deposit will be credited to the customer's account; or,~~
- 2.7.2.2 ~~2.7.1.3 If the customer chooses to change from Direct Access to Standard Offer service, the requested deposit amount may be increased by an amount pursuant to Section 2.5, which reflects that APSC Company is providing bundled electric service.~~
- 2.7.2 ~~Separate security deposits may be required for each service location.~~
- 2.7.2.3 If the customer's average consumption increases: by more than ten (10) percent for residential accounts or five (5) percent for nonresidential accounts within a twelve (12) consecutive month period and credit has not been established, an additional security deposit may, at Company's option, be required.
- 2.7.3 Customer security deposits shall not preclude Company from terminating an agreement for service or suspending service for any failure in the performance of customer obligation under the agreement for service.
- 2.7.4 Cash deposits held by Company six (6) months/183 days or longer shall earn interest at the established one year Treasury Constant Maturities rate, effective on the first business day of each year, as published on the Federal Reserve Website. Deposits on inactive accounts are applied to the final bill when all service options become inactive, and the



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balance, if any, is refunded to the customer of record within thirty (30) days. For refunds resulting from the customer changing from Standard Offer to Direct Access, the difference in the deposit amounts will be applied to the customer's account.

2.7.5 If the customer terminates all service with Company, the security deposit may be credited to the customer's final bill.

2.7.6 Residential security deposits shall not exceed two (2) times the customer's average monthly bill as estimated by Company for the services being provided by the Company.

2.7.6.1 Deposits or other instruments of credit will automatically expire or be returned or credited to the customer's account after twelve (12) consecutive months of service, provided the customer has not been delinquent more than twice, unless customer has filed bankruptcy in the last 12 months.

2.7.7 Nonresidential security deposits shall not exceed two and one-half (2-1/2) times the customer's maximum monthly billing as estimated by Company for the service being provided by Company.

2.7.7.1 Deposits and non-cash deposits on file with Company will be reviewed after twenty-four (24) months of service and will be returned provided the customer has not been delinquent more than twice in the payment of bills or disconnected for non-payment during the previous twelve (12) consecutive months unless the customer's financial condition warrants extension of the security deposit.

2.8 Line Extensions - Installations requiring Company to extend its facilities in order to establish service will be made in accordance with Company's Schedule #3, Conditions Governing Extensions of Electric Distribution Lines and Services filed with the Arizona Corporation Commission.

3. Rates

3.1 Rate Information - Company shall provide, in accordance with A.A.C. R14-2-204, a copy of any rate schedule applicable to that customer for the requested type of service. In addition, Company shall notify its customers of any changes in Company tariffs affecting those customers.

3.2 Rate Selection - The customer's service characteristics and service requirements determine the selection of applicable rate schedule. If the customer is ~~being served on a Standard Offer~~ ~~rate~~ receiving bundled service, Company will use reasonable care in initially establishing service to the customer under the most advantageous ~~Standard Offer~~ rate schedule applicable to the customer. However, because of varying customer usage patterns and other reasons beyond its reasonable knowledge or control, Company cannot guarantee that the most economic applicable rate will be applied. Company will not make any refunds in any instances where it is determined that the customer would have paid less for service had the customer been billed on an alternate applicable rate or provision of that rate.

3.3 Standard Offer Optional Rates - Certain optional ~~Standard Offer~~ rate schedules applicable to certain classes of service allow the customer the option to select the rate schedule to be effective



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initially or after service has been established. A customer desiring service under an alternate rate schedule after service has been established must make such request in writing to Company. Billing under the alternate rate will become effective from the next regularly scheduled meter reading, or ~~when~~after the appropriate metering equipment is installed. No further rate schedule changes, however, may be made within the succeeding twelve-month period. Where the rate schedule or contract pursuant to which the customer is provided service specifies a term, the customer may not exercise its option to select an alternate rate schedule until expiration of that term.

3.4 Direct Access rate selection service will be effective upon the next meter read date if DASR is processed fifteen (15) calendar days prior to that read date and the appropriate metering equipment is in place. If a DASR is made less than fifteen (15) days prior to the next regular read date the effective date will be at the next meter read date thereafter. The above timeframes are applicable for customers changing their selection of Electric Service Providers or for customers returning to Standard Offer service.

3.5 Any customer ~~making~~ that selects Direct Access rate selection service may return to Standard Offer service in accordance with the rules, regulations, and orders of the Commission. However, such customer will not be eligible for Direct Access service for the succeeding twelve (12) month period. If a customer returning to Standard Offer, in accordance with the rules, regulations and orders of the Commission, was not given the required notification in accordance with the rules and regulations of the Commission by their Load Serving ESP of its intent to cease providing competitive services then the above provision will only apply if the customer fails to select another ESP within sixty (60) days of returning to Standard Offer service.

4. Billing and Collection

4.1 Customer Service Installation and Billing - Service billing periods normally consist of approximately 30 days unless designated otherwise under rate schedules, through contractual agreement, or at Company option.

4.1.1 Company normally meters and bills each site separately; however, at customer's request, adjacent and contiguous sites not separated by private or public property or right of way and operated as one integral unit under the same name and as a part of the same business, will be considered a single site as specified in Company's Schedule 4, Totalized Metering of Multiple Service Entrance Sections at a Single Site for Standard Offer and Direct Access Service.

4.1.2 The customer's service installation will normally be arranged to accept only one type of service at one point of delivery to enable service measurement through one meter. If the customer requires more than one type of service, or total service cannot be measured through one meter according to Company's regular practice, separate meters will be used and separate billing rendered for the service measured by each meter.

4.2 Collection Policy - The following collection policy shall apply to all customer accounts:

4.2.1 All bills rendered by Company are due and payable no later than ~~fifteen (15) calendar days~~ fifteen (15) calendar days from the billing date. Any payment not received within this time frame ~~shall~~will be considered delinquent. All delinquent bills for which payment has



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not been received shall be subject to the provisions of Company's termination procedure. Company reserves the right to suspend or terminate the customer's service for non-payment of any Arizona Corporation Commission approved servicescharges. All delinquent charges will be subject to a late charge at the rate of eighteen percent (18%) per annum.

4.2.2 If the customer, as defined in A.A.C. R 14-2-201.9, has two or more services with Company and one or more of such services is terminated for any reason leaving an outstanding bill and the customer is unwilling to make payment arrangements that are acceptable to Company, Company shall be entitled to transfer the balance due on the terminated service to any other active account of the customer for the same class of service. The failure of the customer to pay the active account shall result in the suspension or termination of service thereunder.

4.2.3 Unpaid charges incurred prior to the customer selecting Direct Access will not delay the customer's request for Direct Access. These charges remain the responsibility of the customer to pay. Normal collection activity, including discontinuing service, may be followed for failure to pay.

4.3 Responsibility for Payment of Bills

4.3.1 The customer is responsible for the payment of bills until service is ordered discontinued and Company has had reasonable time to secure a final meter reading for those services involving energy usage, or if non-metered services are involved until the Company has had reasonable time to process the disconnect request.

4.3.2 When an error is found to exist in the billing rendered to the customer, Company will correct such an error to recover or refund the difference between the original billing and the correct billing. Such adjusted billings will not be rendered for periods in excess of the applicable statute of limitations from the date the error is discovered. ~~Any refunds to customers resulting from overbillings will be made promptly upon discovery by Company. Underbillings by Company shall be billed to the customer who shall be given an equal length of time such as number of months underbilled to pay the backbill without late payment penalties, unless there is evidence of meter tampering or energy diversion. Except in situations where the account is billed on a special contract or non-metered rate, where service has been established but no bills have been rendered, or where there is evidence of meter tampering or energy diversion, underbillings for residential accounts shall be limited to three (3) months and non-residential accounts shall be limited to six (6) months.~~

4.3.2.1 Refunds to customers resulting from overbillings will be made promptly upon discovery by Company.

4.3.2.2 Corrected charges for underbillings shall be billed to the customer who shall be given an equal length of time such as number of months underbilled to pay the backbill without late payment penalties, unless there is evidence of meter tampering or energy diversion



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- 4.3.2.3 Except as specified below, corrected charges for underbillings shall be limited to three (3) month for residential accounts and six (6) months for non-residential accounts.
- 4.3.2.3.1 Where the account is billed on a special contract or non-metered rate, corrected charges for underbillings shall be billed in accordance with the contract or rate schedule requirements and is not limited to three or six months as applicable.
- 4.3.2.3.2 Where service has been established but no bills have been rendered, corrected charges for underbillings shall go back to the date service was established.
- 4.3.2.3.3 Where there is evidence of meter tampering or energy diversions, corrected charges for underbillings shall go back to the date meter tampering or energy diversions began, as determined by Company.
- 4.3.3 — Where Company is responsible for rendering the customer's bill, Company may provide a one time incentive of up to \$10.00 per customer to customers who elect to pay their bills using Company's electronically transmitted payment options.
- 4.3.2.3.4 Where lack of access to the meter (caused by the customer) has resulted in estimated bills, corrected charges for underbillings shall go back to the billing month of the last actual Company obtained meter read date.
- 4.3.4 — Where Company is responsible for rendering the customer's bill, Company may provide a one time incentive of \$5.00 per customer for a customer electing to forego the presentation of a paper bill.
- 4.3.2.4 Company may forgo billing and collection of corrected charges for an underbilling if Company believes the cost of billing and collecting the underbilling would not justify pursuing the underbill.
- 4.4 Dishonored Payments - If Company is notified by the customer's financial institution that they will not honor a payment tendered by the customer for payment of any bill, Company may require the customer to make payment in cash, by money order, certified or cashier's check, or other means which guarantee the customer's payment to Company.
- 4.4.1 The customer shall will be charged a fee of \$15.00 for each instance where the customer tenders payment of a bill with a payment that is not honored by the customer's financial institution.
- 4.4.2 The tender of a dishonored payment shall in no way (i) relieve the customer of the obligation to render payment to Company under the original terms of the bill, or (ii) defer Company's right to terminate service for nonpayment of bills.
- 4.4.3 Where the customer has tendered two (2) or more dishonored payments in the past twelve (12) consecutive months, Company may require the customer to make payment in cash, money order or cashier's check for the next twelve (12) consecutive months.



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4.5 Termination Process Charges

4.5.1 ~~4.5~~ ~~Field Call Charge~~—Company ~~may~~will require payment of a Field Call Charge of \$15.00 when an authorized Company representative travels to the customer's site to accept payment ~~of~~on a delinquent account, notify of service termination, make payment arrangements or terminate the service. This charge will only be applied for field calls resulting from the termination process.

~~4.5.14~~5.2 If a termination is required at the pole, a reconnection charge of \$96.50 will be required; if the termination is in underground equipment, the reconnection charge will be \$115.00.

4.5.3 ~~4.5.2~~ To avoid termination of service, the customer ~~may~~will make payment in full, including any necessary deposit in accordance with Section 2.5 hereof or make payment arrangements satisfactory to Company.

4.6 On-site Evaluation – Company ~~may~~will require payment of an On-site Evaluation Charge of \$82.00 when an authorized Company field investigator performs an on-site visit to evaluate how the customer may reduce their energy usage. This charge may be assessed regardless of ~~if~~whether the customer actually implements Company suggestions.

5. Service Responsibilities of Company and Customer

5.1 Service Voltage—Company will deliver electric service to the designated point of delivery, as specified in Section 6.3 of this Schedule, at the standard voltages specified in the Electric Service Requirements Manual published by Company and as specified in A.A.C. R14-2-208.F. Company may deliver service for special applications at higher voltages, with prior approval from Company's Engineering Department and in accordance with Company's Schedule 3, Conditions Governing Extensions of Electric Distribution Lines and Services filed with the Arizona Corporation Commission.

5.2 Responsibility: Use of Service or Apparatus

5.2.1 The customer shall save Company harmless from and against all claims for injury or damage to persons or property occasioned by or in any way resulting from the services being provided by Company or the use thereof on the customer's side of the point of delivery. Company shall have the right to suspend or terminate service in the event Company should learn of service use by the customer under hazardous conditions.

5.2.2 The customer shall exercise all reasonable care to prevent loss or damage to Company property installed on the customer's site for the purpose of supplying service to the customer.

5.2.3 The customer shall be responsible for payment for loss or damage to Company property on the customer's site arising from neglect, carelessness or misuse and shall reimburse Company for the cost of necessary repairs or replacements.



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- 5.2.4 The customer shall be responsible for payment for any equipment damage and/or estimated unmetered usage resulting from unauthorized breaking of seals, interfering with, tampering with, or by-passing the meter.
- 5.2.5 The customer shall be responsible for notifying Company of any failure in Company's equipment.
- 5.3 Service Interruptions: Limitations on Liability of Company
- 5.3.1 Company shall not be liable to the customer for any damages occasioned by Load Serving ESP's equipment or failure to perform, fluctuations, interruptions or curtailment of electric service, except where due to Company's willful misconduct or gross negligence. Company may, without incurring any liability therefore, suspend the customer's electric service for periods reasonably required to permit Company to accomplish repairs to or changes in any of Company's facilities. The customer needs to protect their own sensitive equipment from harm caused by variations or interruptions in power supply.
- 5.3.2 In the event of a national emergency or local disaster resulting in disruption of normal service, Company may, in the public interest and on behalf of Electric Service Providers or Company, interrupt service to other customers to provide necessary service to civil defense or other emergency service agencies on a temporary basis until normal service to these agencies can be restored.
- 5.4 Company Access to Customer Sites - Company's authorized agents shall have satisfactory unassisted access to the customer's sites at all reasonable hours to install, inspect, read, repair or remove its meters or to install, operate or maintain other Company property, or to inspect and determine the connected electrical load. If, after six (6) months (not necessarily consecutive) of good faith efforts by Company to deal with the customer, Company in its opinion does not have satisfactory unassisted access to the meter, then Company shall have sufficient cause for termination of service or denial of any existing rate options where, in Company's opinion, access is required. The remedy for unassisted access will be at Company discretion and may include the installation by Company of a specialized meter. If such specialized meter is installed, the customer will be billed the difference between the otherwise applicable meter for their rate and the specialized meter plus and the cost incurred to install the specialized meter as a one-time charge and any reoccurring incremental costs. If service is terminated as a result of failure to provide unassisted access, Company verification of unassisted access may be required before service is restored. Written termination notice is required prior to disconnecting service under this schedule.
- 5.5 Easements
- 5.5.1 All suitable easements or rights-of-way required by Company for any portion of thean extension to serve a customer, which is either on sites owned, leased or otherwise controlled by the customer or developer, or other property required for the extension, shall be furnished in Company's name by the customer without cost to or condemnation by Company and in reasonable time to meet proposed service requirements. All easements or rights-of-way granted to, or obtained on behalf of Company shall contain such terms and conditions as are acceptable to Company.
- 5.5.2 When Company discovers that the customer or the customer's agent is performing work, has constructed facilities, or has allowed vegetation to grow adjacent to or within an



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easement or right-of-way or Company-owned equipment, and such work, construction, vegetation or facility poses a hazard or is in violation of federal, state, or local laws, ordinances, statutes, rules or regulations, or significantly interferes with Company's safe use, operation or maintenance of, or access to, equipment or facilities, Company shall notify the customer or the customer's agent and shall take whatever actions are necessary to eliminate the hazard, obstruction, interference or violation at the customer's expense. Company will notify the customer in writing of the violations.

- 5.6 Load Characteristics – The customer shall exercise reasonable care to ~~assure~~ensure that the electrical characteristics of its load, such as deviation from sine wave form (a minimum standard is IEEE 519) or unusual short interval fluctuations in demand, shall not impair service to other customers or interfere with operation of telephone, television, or other communication facilities. ~~The deviation from phase balance shall not be greater than ten percent (10%) at any time. Customers receiving service at voltage levels below 69 kV shall maintain a power factor of 90% lagging but in no event leading unless agreed to by Company. In situations where Company suspects that a customer's load has a non-conforming power factor, Company may install at its cost the appropriate metering to monitor such loads. If the customer's power factor is found to be non-conforming, the customer will be required to pay the cost of installation and removal of VAR metering and recording equipment. Customers found to have a power factor of less than 90%, or leading, or other detrimental conditions shall be required to remedy problems in order to achieve a power factor in conformance with above standards, or pay for facilities/equipment that Company must install on its system to correct for problems caused by the customer's load. Until such time as the customer remedies the problem, kVa may be substituted for kW in determining the applicable charge for billing purposes for each month in which such failure occurs. Customer shall meet power factor requirements as specified on applicable rate schedules.~~

6. Metering and Metering Equipment

- 6.1 Customer Equipment - The customer shall install and maintain all wiring and equipment beyond the point of delivery except for Company's meters and special equipment. ~~The~~ customer's entire installation must conform to all applicable construction standards and safety codes and the customer must furnish an inspection or permit if required by law or by Company.

6.1.1 The customer shall provide, in accordance with Company's current service standards and/or Electric Service Requirements Manual, at no expense to Company, and close to the point of delivery, a sufficient and suitable space acceptable to Company's agent for the installation, accessibility and maintenance of Company's metering equipment. A current version of the Electric Service Requirements Manual is available on-line at <http://esp.apsc.com/resource/metering.asp>.

6.1.2 ~~If telephone lines or any other devices are required to read the customer's meter, the customer is responsible for the installation, maintenance, and usage fees at no cost to Company.~~

6.1.2 ~~6.1.3~~ — Where a customer requests, and Company approves of, a special meter reading device or communications services or devices to accommodate the customer's needs, the cost for such additional equipment and usage fees shall be the responsibility of the customer.



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6.2 Company Equipment

6.2.1 A Meter Service Provider (MSP) or its authorized agents may remove Company's metering equipment pursuant to Company's Schedule 10. Meters not returned to Company or returned damaged will be charged result in charge to the MSP of the replacement costs less five (5) years depreciation, plus an administration fee of fifteen percent (15%), less five (5) years depreciation.

6.2.2 Company will lease lock ring keys to MSP's and/or their agents authorized to remove Company meters pursuant to the terms and conditions of Company's Schedule 10 at a refundable charge of \$70.00 per key. The charge will not be refunded if a key is lost, stolen, or damaged. If Company must replace ten percent (10%) of the issued keys within any twelve (12) month period due to loss by the MSP's agent, Company may, rather than leasing additional lock ring keys, require the MSP to arrange for a joint meeting. All lock ring keys must be returned to Company within five (5) working days if the MSP and/or its authorized agents are:

- 1) No longer permitted to remove Company meters pursuant to conditions of Company's Schedule 10;
- 2) No longer authorized by the Arizona Corporation Commission to provide services; or
- 3) The ESP Agreement has been terminated.

6.2.3 If the MSP, the customer, and/or its' agent request a joint site meeting for removal of Company metering and associated equipment and/or lock ring, a base charge will be assessed of \$62.00 per site. Company may assess an additional charge of \$53.00 per hour for joint site meetings that exceed thirty (30) minutes. ~~In the event~~ If Company must temporarily replace the MSP's meter and/or associated metering equipment as necessary during emergency situations or to restore power to a customer, the above charges may apply.

6.3 Service Connections - Company is not required to install and maintain any lines and equipment on the customer's side of the point of delivery except its meter.

6.3.1 For overhead service, the point of delivery shall be where Company's service conductors terminate at the customer's weatherhead or bus rider.

6.3.2 ~~6.3 Service Connections~~ Company is not required to install and maintain any lines and equipment on the customer's side of the point of delivery except its meter. For overhead service, the point of delivery shall be where Company's service conductors terminate at the customer's weatherhead or bus rider. For underground service, the point of delivery shall be where Company's service conductors terminate in the customer's or development's service equipment. The customer shall furnish, install and maintain any risers, raceways and/or termination cabinet necessary for the installation of Company's underground service conductors. ~~For the mutual protection of the customer and Company, only authorized employees or agents of Company or the Load Serving ESP are~~



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

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

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

6.4 Measuring Customer Service - All the energy sold to the customer will be measured by commercially acceptable measuring devices by Company (or the Meter Reading Service Provider (MRSP) pursuant to the terms and conditions of Company's Schedule 10.10). Where energy and, if applicable, demand is estimated by Company, estimation will be in accordance with Company's bill estimation procedures approved by Schedule 8, Bill Estimation, as filed with the Arizona Corporation Commission. Where it is impractical to meter loads, such as street lighting, security lighting, or special installations, consumption will be determined by Company.

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

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

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

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

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

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



**SERVICE SCHEDULE 1
TERMS AND CONDITIONS FOR
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Data Obligations, Company may, at its option, obtain the data, or may estimate the billing determinants. The charge for such reread is \$16.50 and may be charged to the ESP.

- 6.5 Meter Testing - Company tests its meters regularly in accordance with a meter testing and maintenance program as approved by the Arizona Corporation Commission. Company will, however, individually test a Company owned/maintained meter upon customer or ESP request. If the meter is found to be within the plus or minus three percent (3%) limit, Company may charge the customer or the ESP \$30.00 for the meter test if the meter is removed from the site and tested in the meter shop, and \$50.00 if the meter remains on site and is tested in the field.
- 6.6 Master Metering
- 6.6.1 Mobile Home Parks - Company shall refuse service to all new construction and/or expansion of existing permanent residential mobile home parks unless the construction and/or expansion is individually metered by Company.
- 6.6.2 Residential Apartment Complexes, Condominiums and Other Multiunit Residential Buildings - Company shall refuse service to all new construction of apartment complexes and condominiums which are master metered ~~unless the building(s) will be served by a centralized heating, ventilation and/or air conditioning system and the contractor can provide to Company an analysis demonstrating that the central unit will result in a favorable cost/benefit relationship as stated in A.A.C. R14-2-205.~~ unless the building(s) will be served by a centralized heating, ventilation and/or air conditioning system and the contractor can provide to Company an analysis demonstrating that the central unit will result in a favorable cost/benefit relationship as stated in A.A.C. R14-2-205. This section is not applicable to Senior Care/Nursing Centers registered with the State of Arizona with independent living units which provide packaged services such as housing, food, and nursing care.
- 6.6.3 Multi-Unit Residential High Rise Developments - Company will allow master metering for high rise residential units where the residential units are privately owned, provided the building will be served by a centralized heating, ventilation and/or air conditioning system, and each residential unit shall be individually sub-metered and responsible for energy consumption of that unit.
- 6.6.3.1 Sub-metering shall be provided and maintained by the builder or homeowners association.
- 6.6.3.2 Responsibility and methodology for determining each unit's energy billing shall be clearly specified in the original bylaws of the homeowners association, a copy of which must be provided to Company prior to Company providing the initial extension.
7. Termination of Service
- 7.1 With Notice - Company may without liability for injury or damage, and without making a personal visit to the site, disconnect service to any customer for any of the reasons stated below, provided Company has met the notice requirements established by the Arizona Corporation Commission:



**SERVICE SCHEDULE 1
TERMS AND CONDITIONS FOR
STANDARD OFFER AND DIRECT ACCESS SERVICES**

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- 7.1.1 A customer violation of any of the applicable rules of the Arizona Corporation Commission or Company tariffs.
 - 7.1.2 Failure of the customer to pay a delinquent bill for services provided by Company.
 - 7.1.3 The customer's breach of a written contract for service.
 - 7.1.4 Failure of the customer to comply with Company's deposit requirements.
 - 7.1.5 Failure of the customer to provide Company with satisfactory and unassisted access to Company's equipment.
 - 7.1.6 When necessary to comply with an order of any governmental agency having jurisdiction.
 - 7.1.7 Failure of a prior customer to pay a delinquent bill for utility services where the prior customer continues to reside on the premises.
 - 7.1.8 Failure to provide or retain rights-of-way or easements necessary to serve the customer.
 - 7.1.9 Company learns of the existence of any condition in Section 2.4, Grounds For Refusal of Service.
- 7.2 Without Notice - Company may without liability for injury or damage disconnect service to any customer without advance notice under any of the following conditions:
- 7.2.1 The existence of an obvious hazard to the health or safety of persons or property.
 - 7.2.2 Company has evidence of meter tampering or fraud.
 - 7.2.3 Company has evidence of unauthorized resale or use of electric service.
 - 7.2.4 Failure of the customer to comply with the curtailment procedures imposed by Company during a supply shortage.
- 7.3 Restoration of Service - Company shall not be required to restore service until the conditions which resulted in the termination have been corrected to the satisfaction of Company.
8. Removal of Facilities - Upon termination of service, Company may without liability for injury or damage, dismantle and remove its facilities installed for the purpose of supplying service to the customer, and Company shall be under no further obligation to serve the customer. If, however, Company has not removed its facilities within one (1) year after the termination of service, Company shall thereafter give the customer thirty (30) days written notice before removing its facilities, or else waive any reestablishment charge within the next year for the same service to the same customer at the same location.
- For purposes of this Section notice to the customer shall be deemed given at the time such notice is deposited in the U.S. Postal Service, first class mail, postage prepaid, to the customer at his/her last known address.



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9. Successors and Assigns - Agreements for Service shall be binding upon and for the benefit of the successors and assigns of the customer and Company, but no assignments by the customer shall be effective until the customer's assignee agrees in writing to be bound and until such assignment is accepted in writing by Company.
10. Warranty - THERE ARE NO UNDERSTANDINGS, AGREEMENTS, REPRESENTATIONS, OR WARRANTIES, EXPRESS OR IMPLIED (INCLUDING WARRANTIES REGARDING MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), NOT SPECIFIED HEREIN OR IN THE APPLICABLE RULES OF THE ARIZONA CORPORATION COMMISSION CONCERNING THE SALE AND DELIVERY OF SERVICES BY COMPANY TO THE CUSTOMER. THESE TERMS AND CONDITIONS AND THE APPLICABLE RULES OF THE ARIZONA CORPORATION COMMISSION STATE THE ENTIRE OBLIGATION OF COMPANY IN CONNECTION WITH SUCH SALES AND DELIVERIES.

Exhibit C

APS Revised Schedule 3

**ARIZONA CORPORATION COMMISSION
STAFF'S SEVENTH SET OF DATA REQUESTS
REGARDING ARIZONA PUBLIC SERVICE COMPANY RATE CASE
DOCKET NO. E-01345A-05-0816
JULY 12, 2006**

EAA 7-4 For each category of development, please identify the specific subsection of Section 4, Refunds, that would apply to each category. For instance, Section 1.2.3 of the proposed tariff for Residential Homebuilder Subdivisions refers to the refund provisions in Section 4. Please provide the specific refund methodology that would be applicable in Section 4.

Supplemental Response:

Attached is the revised Service Schedule 3 both clean, APS10683, and redlined, APS10684.

Witness: David Rumolo



SERVICE SCHEDULE 3
CONDITIONS GOVERNING EXTENSIONS OF
ELECTRIC DISTRIBUTION LINES AND SERVICES

Provision of electric service from Arizona Public Service Company (Company) may require construction of new facilities or upgrades to existing facilities. Costs for construction depend on the customer's location, load size, and load characteristics. This schedule establishes the terms and conditions under which Company will extend its facilities to provide new or upgraded facilities.

All extensions are made on the basis of economic feasibility. Construction allowance and revenue basis methodologies are offered for use in circumstances where feasibility is generally accepted because of the number of extensions made within the construction allowance and dollar limits.

All extensions shall be made in accordance with good utility construction practices, as determined by Company, and are subject to the availability of adequate capacity, voltage and Company facilities at the beginning point of an extension as determined by Company.

The following policy governs the extension of overhead and underground electric facilities rated up to 21kV to customers whose requirements are deemed by Company to be usual and reasonable in nature.

DEFINITIONS

- a. Backbone Infrastructure means the electrical distribution facilities typically consisting of main three-phase feeder lines and/or cables, conduit, duct banks, manholes, switching cabinets and capacitor banks.
- b. Conduit Only Designs mean a line extension request where the developer is only requesting the conduit layout and design to serve the project. Local distribution facilities such as transformers and services will be installed at a later date when lot sales occur.
- c. Corporate Business & Industrial Developments means a tract of land which has been divided into contiguous lots in which a developer offers improved lots for sale and the purchaser of the lot is responsible for construction of buildings for commercial and/or industrial use.
- d. High Rise Residential means residential multi-family developments built with four or more floors, usually using elevators for accessing floors.
- e. Irrigation means water pumping service. Agricultural pumping means water pumping for farms and farm-related pumping used to grow commercial crops or crop-related activity. Non-agricultural water pumping is pumping for purposes other than the growing of commercial crops, such as golf course irrigation or municipal water wells.
- f. Master Planned Community Developments means developments that consist of a number of separately subdivided parcels for different "Residential Homebuilder Subdivisions". Developments may have a variety of uses including residential, commercial, and public use facilities.
- g. Mixed Use Residential Developments means buildings that consist of both residential and commercial use, such as a high-rise building where the first level is for commercial purposes and the upper floors are residential.
- h. Residential Custom Home "Lot Sale" Developments means any tract of land which has been divided into six or more contiguous lots in which a developer offers improved lots for sale and the purchaser of the lot is responsible for construction of a residential home.



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- i. Residential Homebuilder Subdivisions means any tract of land which has been divided into six or more contiguous lots in which the developer is responsible for the construction of residential homes or permanent mobile home sites.
- j. Residential Multi-family Developments means developments consisting of apartments, condominiums, or townhouse developments.
- k. Residential Single Family means a house, an apartment, or a mobile home permanently affixed to a lot or site.
- l. System Improvement Costs means the costs of system additions over and above what is required to serve the customer, where such additions provide additional capacity for other customers.

1. RESIDENTIAL

1.1 SINGLE FAMILY HOMES

1.1.1 Residential extensions will be made to new permanent residential customers or groups of new permanent residential customers. For purposes of this section, a "group" shall be defined as five or less homes. An allowance of \$5,000 per lot will be credited against the total construction cost, as determined by Company. Any additional cost will be paid by the applicant, as a refundable advance prior to Company extending facilities.

1.1.2 Where an advance is required, Company will issue the applicant an Advance Certificate. If, within five (5) years of issuance, a lateral extension is made off the original line extension, the applicant may present his/her Advance Certificate to Company for a potential refund. Refunds will be issued when the Advance Certificate is presented for payment and the connection of the subsequent applicant has been verified. In no event will refunds exceed the original advance. Refunds will be determined as shown in the example:

EXAMPLE:

First applicant's estimated cost for a line extension	\$22,000
First applicant allowance	\$ 5,000
First applicant's advance	\$17,000
Second applicant's estimated cost for a lateral off the original extension	\$ 3,000
Second applicant's allowance	\$ 5,000
Refund to first applicant upon presentation of Advance Certificate and verification	\$ 2,000

1.2 RESIDENTIAL HOMEBUILDER SUBDIVISIONS

1.2.1 Extensions will be made to residential subdivision developments of six or more homes in advance of application for service by permanent customers provided the applicant(s) signs an extension agreement. If approved by Company, a per lot allowance of \$5,000 may be credited against the total construction cost, which costs may include applicable backbone system costs as determined by Company as determined by Company (minus street light and system improvement costs). Any



SERVICE SCHEDULE 3
CONDITIONS GOVERNING EXTENSIONS OF
ELECTRIC DISTRIBUTION LINES AND SERVICES

additional construction cost in excess of the per lot allowance will be paid by applicant as a non-refundable contribution in aid of construction.

- 1.2.2 Company reserves the right to perform a field audit as to the number of permanently connected customers within the development eighteen (18) months from the extension agreement's execution date and requires the applicant to make a refundable advance of the construction costs less the applicable credit for the number of permanently connected customers to date.
- 1.2.3 Company reserves the right to disallow the allowance and collect a full advance of the construction costs from the applicant based on the project scope, or location, or financial condition of the applicant, or where organizational structure of the applicant warrants, as determined by Company. Advances are subject to the refund provisions in Section 4.2.
- 1.2.4 The following provides examples of the application of the policy:

EXAMPLE 1:

The following example illustrates a case in which the allowance is adequate to cover the subdivision's construction costs. It is assumed that the developer sells all of the homes in the 18 month period.

Estimated Construction Cost	\$450,000
Number of Homes	100
Total Allowance	\$500,000
Non-Refundable Contribution	\$ 0

EXAMPLE 2:

Example #2 illustrates a case in which the construction costs exceed the allowance and the developer completes all homes in the subdivision. The total construction cost exceeds the allowance by \$150,000 and the developer provides the non-refundable contribution in aid of construction when the extension agreement is executed. Since the developer completes all 100 homes within the 18 month period after the execution date of the extension agreement, no additional funds are advanced by the developer.

Estimated Construction Cost	\$650,000
Number of Homes	100
Total Allowance	\$500,000
Non-Refundable Contribution	\$150,000

EXAMPLE 3:

The following example illustrates a case in which two events occur. First, the allowance does not adequately cover the required construction. This results in the requirement that the developer provide a non-refundable contribution in aid of



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construction. This payment is due at the time the extension agreement is signed by the developer.

The second event illustrated in this example is the developer does not sell sufficient homes in the development in the 18 month period following the extension agreement execution date. In the example, at the end of the 18 month period, the developer has completed 35 homes. Since there are 65 homes left to be completed the developer must provide a refundable advance of \$325,000. This advance will be refunded during the subsequent 42 months as additional homes are completed. Any un-refunded advance remaining at the end of the refund period becomes a non-refundable contribution in aid of construction.

Estimated Construction Cost	\$650,000
Number of Homes Planned	100
Potential Allowance Refundable Advance	\$500,000
Non Refundable Contribution	\$150,000
Assume Number of Completed Homes	35
Allowance Credited (35 x \$5000)	\$175,000
Potential Amount Remaining Eligible For Refund	\$325,000

1.3 RESIDENTIAL CUSTOM HOME "LOT SALE" DEVELOPMENTS

Extensions will be made to residential "lot sale" custom home developments in advance of application for service by permanent customers, provided the applicant(s) sign an extension agreement and make a refundable advance of the construction cost associated with the installation of "backbone" infrastructure. The advance should be provided at the time the extension agreement is executed.

- 1.3.1 Line extensions and/or equipment installations will be made for each permanent customer upon request for service, and the cost of the installation along with the cost for the "backbone" infrastructure will be used in determining the cost for the development. A per completed home allowance of \$5,000 will be credited against the construction cost as determined by Company (minus streetlight and system improvements costs). Any additional construction cost will be paid as a non-refundable contribution in aid of construction.
- 1.3.2 Company reserves the right to disallow the allowance and collect a full advance of the construction costs from the applicant(s) based on the project scope, or location, or financial condition of the applicant(s), or where organizational structure of the applicant(s) warrants, as determined by Company. Advances are subject to refund as specified in Section 4.2.
- 1.3.3 Company will provide "conduit only" designs provided applicant makes a non-refundable contribution in aid of construction in the amount equal to the estimated cost of preparation, in addition to the costs for any field survey and inspections that may be required.



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1.3.4 The examples provided in 1.2.4 would also be applicable to "lot sale" developments.

1.4 MASTER PLANNED COMMUNITY DEVELOPMENTS

Extensions will be made to master planned community developments in advance of application for service by permanent customers, provided the applicant(s) sign an extension agreement and make a refundable advance of the construction cost associated with the installation of "backbone" infrastructure.

1.4.1 Line extensions and equipment installation for backbone infrastructure to serve a Master Planned Development will be made in advance of application for service by permanent customers. A per lot allowance of \$1,000 may be credited against the backbone infrastructure cost as determined by Company (minus street light and system improvement costs). Any additional cost will be paid by applicant as a non-refundable contribution.

Line extensions and equipment installations will be made for each residential subdivision within the planned development in advance of application for service by permanent customers. The cost of the extensions and equipment installations needed to provide service will be used in determining the cost for the development. A per lot allowance of \$4,000 will be credited against the "subdivision" cost as determined by Company (minus street light and system improvement costs). Any additional cost will be paid as a non-refundable contribution in aid of construction.

1.4.2 Company reserves the right to disallow the credit and collect a full advance of the construction costs from the applicant based on the project scope, or location, or financial condition of the applicant, or where organizational structure of the applicant warrants, as determined by Company. Advances are subject to the refund provisions in Section 4.

1.4.3 The residential extension examples provided in 1.2.4 would be applicable to residential developments within a Master Planned Community. Extensions to multi-family developments or commercial developments would be made in accordance with the applicable sections of this Service Schedule. The following example illustrates the policy application for the entire project.

EXAMPLE 4:

Example #4 illustrates a case in which the developer of the Master Planned Community requests an extension of backbone infrastructure and individual residential developers request extensions for residential subdivisions. The developer makes a refundable contribution in aid of construction at the time the extension agreement is executed. The individual subdivision will be handled in a manner consistent with the subdivision examples found in Section 1.2.4.



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Estimated Backbone Cost	\$2,500,000
Number of Homes	1000
Potential Allowance Refundable Advance	\$1,000,000
Non Refundable Contribution	\$1,500,000
Estimated Subdivision Cost	\$600,000
Number of Homes	200
Total Allowance	\$800,000
Non-Refundable Contribution	\$0

1.5 RESIDENTIAL MULTI-FAMILY DEVELOPMENTS

- 1.5.1 Extensions will be made to multi-family apartment, condominium or townhouse developments in advance of application for service by permanent customers. If approved by Company, a per completed unit allowance of \$500 may be credited against the total construction cost, including any applicable backbone infrastructure costs as determined by the company, (minus street light and system improvement costs). Any additional cost will be paid as a non-refundable contribution in aid of construction.
- 1.5.2 Company reserves the right to perform a field audit as to the number of permanently connected customers within the development eighteen (18) months from the extension agreement's execution date and requires the applicant to make a refundable advance of the construction costs less the applicable credit for the number of permanently connected customers to date.
- 1.5.3 Company reserves the right to disallow the credit and collect a full advance from the applicant based on the project scope, or location, or financial condition, or where organizational structure of the applicant warrants, as determined by Company. Advances are subject to the refund provisions in Section 4.

1.6 HIGH RISE AND MIXED USE RESIDENTIAL DEVELOPMENTS

- 1.6.1 Extensions will be made to high rise and mixed use developments where the residential units are privately owned and either individually metered or master metered in accordance with Section 6.12.3.
- 1.6.2 In general, APS will provide service to these type of developments at one point of delivery and it is the developer's responsibility to provide and maintain the electrical distribution facilities within the building.
- 1.6.3 Extensions will be on the basis of Economic Feasibility. "Economic Feasibility", as used in this policy, shall mean a determination by Company that the estimated annual revenue based on Company's then currently effective rate for distribution service (excluding taxes, regulatory assessment and other adjustments) less the cost of service provides an adequate rate of return on the investment made by Company



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to serve the customer(s) and development.

- 1.6.4 Company reserves the right to collect a full advance from the applicant based on the project scope, or location, or financial condition, or where organizational structure of the applicant warrants, as determined by Company. Advances are subject to the refund provisions in Section 4.2.

2. NON-RESIDENTIAL

- 2.1 General service line extensions and equipment installations will be made to all applicants not meeting the definition of Residential or as provided for in Section 2.4, or Section 3 of this Schedule. General service line extensions and equipment installations will be made on the basis of Economic Feasibility or on a revenue basis as described in Section 2.2. "Economic Feasibility", as used in this policy, shall mean a determination by Company that the estimated annual revenue based on Company's then currently effective rate for distribution service (excluding taxes, regulatory assessment and other adjustments) less the cost of service provides an adequate rate of return on the investment made by Company to serve the customer. Extensions that are economically feasible as determined by the revenue basis as described in Section 2.2 or by the economic feasibility analysis described in this section are provided free to the customer. Extensions will be provided to customers that do not meet the economic feasibility determination provided the customer signs an extension agreement and advances as much of the construction cost and/or agree to pay a facilities charge to make the extension economically feasible. Advances are subject to the refund provisions of Section 4.

- 2.2 A revenue basis extension will be made to customers or applicants except those specified in Sections 2.4; 3.1; 3.2; or 3.3; when the extension does not exceed a total construction cost of \$25,000.

- 2.2.1 Such extension shall be free to the customer where the estimated annual revenue based on Company's then currently effective rate for distribution service (excluding taxes, regulatory assessment and other adjustments) multiplied by six (6.0) is equal to or greater than the total construction cost less nonrefundable customer contributions.

- 2.3 Company reserves the right to collect a full advance from the applicant based on the project scope, or location, or financial condition, or where organizational structure of the applicant warrants, as determined by Company. Advances are subject to the refund provisions in Section 4.

2.4 CORPORATE BUSINESS & INDUSTRIAL PARK DEVELOPMENTS

- 2.4.1 Extensions will be made to business and industrial park developments in advance of application for service by permanent customers, provided applicant(s) make a refundable advance of the construction cost associated with the installation of "backbone" infrastructure.

- 2.4.2 The costs for the installed infrastructure and the cost of the extensions and equipment installations needed to provide service to each permanent customer will be used in determining the developments Economic Feasibility. "Economic Feasibility", as used in this policy, shall mean a determination by Company that



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the estimated annual revenue based on Company's then currently effective rate for

distribution service (excluding taxes, regulatory assessment and other adjustments) less the cost of service, provides an adequate rate of return on the investment made by Company to serve the customer(s) and development.

- 2.4.3 For extensions and equipment installations which meet the conditions specified in Section 2.4.1, Company, after special study and at its option, may install its facilities to customers who do not satisfy the definition of economic feasibility as specified in Section 2.1, provided such customers or applicant(s) sign an extension agreement and advance as much of the construction cost and/or pay a non-refundable contribution (facilities charge) to make the extension economically feasible. Advances are subject to refund as specified in Section 4.1.

3. OTHER CONDITIONS

3.1 IRRIGATION CUSTOMERS

Customers requiring construction of electric facilities for service to agricultural irrigation pumping will advance the total construction cost. Advances are subject to refund as specified in Section 4.3. Non-agricultural irrigation pumping service to permanent customers will be extended as specified in Section 2. Non-agricultural irrigation pumping service to temporary or doubtful permanency customers will be extended as specified in Section 3.2 or 3.3 below, as applicable.

3.2 TEMPORARY CUSTOMERS

Where a temporary meter or construction is required to provide service to the customer, then the customer, in advance of installation or construction, shall make a non-refundable contribution equal to the cost of installing and removing the facilities required to furnish service, less the salvage value of such facilities. When the use of service is discontinued or agreement for service is terminated, Company may dismantle its facilities and the materials and equipment provided by Company will be salvaged and remain Company property.

3.3 DOUBTFUL PERMANENCY CUSTOMERS

When, in the opinion of Company, permanency of the customer's residence or operation is doubtful, the customer will be required to advance the total construction cost. Advances are subject to refund as specified in Section 4.4.

4. REFUNDS

4.1 ECONOMIC FEASIBILITY BASIS REFUNDS

Customer advances over \$50.00 are subject to full or partial refund. At the end of eighteen months from the date Company facilities are energized, Company will obtain actual closing costs and actual first year distribution revenues and determine if the company is receiving the required minimum rate of return. If this results in an advance lower than the amount advanced by customer, Company will refund the difference between the amount advanced and the amount that would have been advanced using actual closing costs and distribution revenues. In no event shall the amount of any refund exceed the amount originally advanced. Subsequent refund studies will be performed at one year intervals for an additional four years using actual distribution revenues for the year. At the end of this total five year refund period, any advance not refunded shall become a nonrefundable contribution in aid of



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construction.

4.2 RESIDENTIAL HOMEBUILDER SUBDIVISIONS

Customer advances over \$50.00 are subject to refund based on the number of permanently connected customers during the five year refund period commencing on the extension agreement's execution date. At the end of this total five year refund period, any advance not refunded shall become a nonrefundable contribution in aid of construction.

4.3 REFUNDS FOR EXTENSIONS TO IRRIGATION CUSTOMERS

Customer advances over \$50.00 are subject to refund of twenty-five (25) percent of the annual accumulation of twelve (12) monthly bills based on Company's then currently effective rate for distribution service (excluding taxes, regulatory assessment and other adjustments) in excess of the annual minimum bill, for service to the irrigation pump specified in the agreement for the extension being surveyed, commencing with the date of signing the agreement. In no event shall the amount of any refund exceed the amount originally advanced.

4.4 REFUNDS TO CUSTOMERS OF DOUBTFUL PERMANENCY

Customer advances over \$50.00 are subject to full or partial based on the Economic Feasibility Basis as specified in Section 3.3. In no event shall the refund exceed twenty-five (25) percent of the annual accumulation of twelve (12) monthly bills based on Company's then currently effective rate for distribution service (excluding taxes, regulatory assessment and other adjustments) in excess of the annual minimum bill for the customer specified in the extension agreement. In no event shall the amount of any refund exceed the amount originally advanced.

4.5. GENERAL REFUND CONDITIONS

- 4.5.1 Customer advances of \$50.00 or less are not subject to refund.
- 4.5.2 No refund will be made to any customer for an amount more than the unrefunded balance of the customer's advance.
- 4.5.3 Any unrefunded advance balance shall become nonrefundable five (5) years from the execution or the effective date of the agreement.
- 4.5.4 Company reserves the right to withhold refunds to any customer or developer who is delinquent on any account, agreement, or invoice and apply these refund amounts to past due bills.

5. UNDERGROUND CONSTRUCTION

5.1 GENERAL UNDERGROUND CONSTRUCTION POLICY - With respect to all underground installations, Company may install underground facilities only if all of the following conditions are met:

- 5.1.1 The extension meets feasibility requirements as specified in Sections 1, 2, or 3.
- 5.1.2 The customer or applicant(s) provides all earthwork including, but not limited to, trench, boring or punching, backfill, compaction, and surface restoration in



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accordance with Company specifications.

- 5.1.3 The customer or applicant(s) provides installation of equipment pads, pull-boxes, manholes, and conduits as required in accordance with Company specifications.
- 5.1.4 In lieu of customer or applicant(s) providing these services and equipment, the company may provide and the customer or applicant(s) will make a non-refundable contribution equal to the cost of such work plus any administrative or inspection fees incurred by Company. Customers or applicants electing this option will be required to sign an agreement indemnifying and holding APS harmless against claims, liabilities, losses or damage (Claims) asserted by a person or entity other than APS' contractors, which claims arise out of the trenching and conduit placement, provided the claims are not attributable to APS' gross negligence or intentional misconduct.
- 5.2 Where it is determined that three phase service is required to serve the customer, Customer may be required to make a nonrefundable contribution for excess service footage required by the customer equal to the increased estimated cost of installed service lines over what would be required with a maximum 40-foot service at 480 volts and 20-foot service at 120/208 or 240 volts.

6. GENERAL CONDITIONS

6.1 VOLTAGE

The extension will be designed and constructed for operation at standard voltages used by Company in the area in which the extension is located. Company may deliver service for special applications of higher voltages with prior approval from Company's Engineering Department and in accordance with this Schedule.

6.2 POINT OF DELIVERY

- 6.2.1 For overhead service, the point of delivery shall be where Company's service conductors terminate at the customer's weatherhead or bus rider.
- 6.2.2 For underground service, the point of delivery shall be where Company's service conductors terminate in the customer's or development's service equipment. The customer shall furnish, install and maintain any risers, raceways and/or termination cabinets necessary for the installation of Company's underground service conductors.
- 6.2.3 For special applications where service is provided at voltages higher than the standard voltages specified in the Electric Service Requirements Manual, APS and customer shall mutually agree upon the designated point of delivery.

6.3 THREE PHASE

Extensions for three phase service can be made under this extension policy where the customer has installed major three phase equipment. Motors with a name-plate rating of 7-1/2 HP or more or single air conditioning units of 6 tons or more or where total horsepower of all connected three phase motors exceeds 12 HP or total load exceeding 100 kVA demand shall qualify for three phase. If the estimated load is less than the above horsepower or connected kVA specifications, Company may, at



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its option and when requested by the customer, serve three phase and require a nonrefundable contribution equal to the difference in cost between single phase and three phase construction, but in no case less than \$100.

6.4 EASEMENTS

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

6.5 GRADE MODIFICATIONS

If subsequent to construction of electric distribution lines and services, the final grade established by the customer or developer is changed in such a way as to require relocation of Company facilities or the customer's actions or those of his contractor results in damage to such facilities, the cost of relocation and/or resulting repairs shall be borne by Customer or developer.

6.6 OWNERSHIP

Except for customer-owned facilities, all electric facilities, including that for which customers have made advances and/or contributions, will be owned, operated and maintained by Company.

6.7 MEASUREMENT AND LOCATION

- 6.7.1 Measurement must be along the proposed route of construction.
- 6.7.2 Construction will be on public streets, roadways, highways, or easements acceptable to Company.
- 6.7.3 The extension must be a branch from, the continuation of, or an addition to, one of Company's existing distribution lines.

6.8 UNUSUAL CIRCUMSTANCES

In unusual circumstances as determined by Company, when the application and provisions of this policy appear impractical, or in case of extension of lines to be operated on voltages other than specified in the applicable rate schedule, or when Customer's estimated load will exceed 3,000 kW, Company will make a special study of the conditions to determine the basis on which service may be provided. Additionally, Company may require special contract arrangements as provided for in Section 1.1 of Company's Schedule 1, Terms and Conditions for Standard Offer and Direct Access Service.

6.9 NON-STANDARD CONSTRUCTION

Company's construction practices employ contemporary methods and equipment and meet current industry standards. Where extensions of electric facilities require construction that is in any way nonstandard, as determined by Company, or if unusual obstructions are encountered, the customer will make a non-refundable contribution equal to the difference in cost between standard and non-standard construction, in addition to other applicable costs involved.



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6.10 ABNORMAL LOADS

Company, at its option, may make extensions to serve certain abnormal loads (such as: transformer-type welders, x-ray machines, wind machines, excess capacity for test purposes and loads of unusual characteristics), provided the customer makes a nonrefundable contribution equal to the total cost of such extension, including transformers.

6.11 RELOCATIONS AND/OR CONVERSIONS

- 6.11.1 Company will relocate or convert its facilities for the customer's convenience or aesthetics, providing the customer makes a nonrefundable contribution equal to the total cost of relocation or conversion.
- 6.11.2 When the relocation of Company facilities involve "prior rights" conditions, the customer will be required to make a non-refundable contribution equal to the total cost of relocation.
- 6.11.3 When the relocation or conversion is in conjunction with added revenue, as determined by Company and is not for the customer's convenience or aesthetics, then the relocation or conversion costs plus the costs to serve will be used to determine the customers advance on the basis specified in Section 2 or 3.

6.12 MASTER METERING

- 6.12.1 Mobile Home Parks - Company shall refuse service to all new construction and/or expansion of existing permanent residential mobile home parks unless the construction and/or expansion is individually metered by Company.
- 6.12.2 Residential Apartment Complexes, Condominiums - Company shall refuse service to all new construction of apartment complexes and condominiums which are master metered unless the builder or developer can demonstrate that the installation meets the provisions of R14-2-205 of the Corporation Commission's Rules and Regulations or the requirements discussed in 6.12.3 below. This section is not applicable to Senior Care/Nursing Centers registered with the State of Arizona with independent living units which provide packaged services such as housing, food, and nursing care.
- 6.12.3 Multi-Unit Residential Developments - Company will allow master metering for residential units where the residential units are privately owned, provided the building will be served by a centralized heating, ventilation and/or air conditioning system, and each residential unit shall be individually sub-metered and responsible for energy consumption of that unit.
 - 6.12.3.1 Sub-metering shall be provided and maintained by the builder or homeowners association.
 - 6.12.3.2 Responsibility and methodology for determining each unit's energy billing shall be clearly specified in the original bylaws of the homeowners association, a copy of which must be provided to Company prior to Company providing the initial extension.
- 6.12.4 Company will convert its facilities from master metered system to a permanent individually metered system at the customer's request provided the customer makes a nonrefundable



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contribution equal to the residual value plus the removal costs less salvage of the master meter facilities to be removed. The new facilities to serve the individual meters will be

extended on the basis specified in Section 1.

6.13 CHANGE IN CUSTOMER'S SERVICE REQUIREMENTS

Company will rebuild or revamp existing facilities to meet the customer's added load or change in service requirements on the basis specified in Section 2 or 3.

6.14 STUDY AND DESIGN DEPOSIT

Any applicant requesting Company to prepare special studies or detailed plans, specifications, or cost estimates may be required to deposit with Company an amount equal to the estimated cost of preparation. Where the applicant authorizes Company to proceed with construction of the extension, the deposit shall be credited to the cost of construction; otherwise the deposit shall be nonrefundable. Company will prepare, without charge, a preliminary sketch and rough estimate of the cost to be paid by the customer for a line extension upon request.

6.15 CUSTOMER CONSTRUCTION OF COMPANY DISTRIBUTION FACILITIES

The customer may provide construction related services, e.g. engineering, survey, materials and/or labor, associated with new distribution facilities to serve the customer's new or added load, provided the customer meets all of the requirements set forth by Company. All work and/or materials provided by the customer shall comply with Company standards in effect at the time of construction. The customer shall receive written approval from Company prior to performing any construction related services. Company will perform an Economic Feasibility Analysis prior to the approval of any proposed customer provided construction to ensure the proposed scope of work results in mutual benefits to the customer and Company.

6.16 SETTLEMENT OF DISPUTES

Any dispute between the customer or prospective customer and Company regarding the interpretation of these "Conditions Governing Extensions of Electric Distribution Lines and Services" may, by either party, be referred to the Arizona Corporation Commission or a designated representative or employee thereof for determination.

6.17 INTEREST

All advances made by the customer to Company in aid of construction shall be non-interest bearing.

6.18 EXTENSION AGREEMENTS

All line extensions or equipment upgrades requiring payment by the customer shall be in writing and signed by both the customer and Company.

6.19 ADDITIONAL PRIMARY FEED

When specifically requested by the customer to provide an alternate primary feed (excluding transformation), Company will perform a special study to determine the requests feasibility and the customer may be required to pay a nonrefundable contribution in aid of construction for the added cost as well as the applicable rate for the additional feed requested.