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Arizona Corporation Commission
DOCKETED
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Attorneys for Arizona Public Service Company

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

BOB STUMP, Chairman
GARY PIERCE
BRENDA BURNS
ROBERT L. BURNS
SUSAN BITTER SMITH

IN THE MATTER OF ARIZONA
PUBLIC SERVICE COMPANY
APPLICATION FOR APPROVAL OF
AUTOMATED METER OPT-OUT
SERVICE SCHEDULE 17

DOCKET NO. E-01345A-13-0069
APPLICATION

Arizona Public Service Company ("APS" or "Company") files the attached Automated Meter Opt-Out Service Schedule No. 17 ("Schedule 17") for the Arizona Corporation Commission's ("Commission") review and approval. A copy of Schedule 17 is attached as Exhibit A.

A. History of Automated Metering at APS.

For approximately twelve years, APS has been installing automated metering systems in its service territory. In 2004, the Company initiated a formal pilot program intended to determine whether these meters would meet the needs of both APS and its customers on an ongoing basis. Functionality of the meters, the ability of the meters to appropriately measure usage during specific time periods, and the necessary interfaces with the Company's customer information and billing systems were tested during the

1 pilot period. The pilot program proved to be successful, and in 2006 APS began phasing
2 in automated meters in specific areas of the Company's service territory and has been
3 installing these advanced meters since that time. In Decision No. 69736, as a result of
4 deliberations on the requirements of the Energy Policy Act of 2005 and the Public
5 Utility Regulatory Policy Act ("PURPA"), the Commission adopted a modified version
6 of the PURPA time based metering and communication standards and directed that
7 "each electric distribution utility shall investigate advanced metering infrastructure for
8 its service territory and shall begin implementing the technology"¹

9 Today, APS considers automated meters (hereafter "AMI Meters," "automated"
10 or "smart" meters) its standard metering configuration. These meters provide many
11 operational efficiencies including remote reading, remote connect and disconnect
12 capabilities, improved employee safety, elimination of the majority of the Company's
13 meter reading access issues, and reductions in energy theft. APS customers enjoy the
14 benefits of AMI Meters through the availability of hourly usage information, rapid
15 service order completion, less meter reading costs, and the ability to take advantage of
16 Company programs and rate options that require the functionality of automated meters.
17 As of the end of February 2013, the Company has installed over one million AMI
18 Meters.

19 In 2011, a small group of APS customers began voicing concerns to the Company
20 and the Commission regarding the perceived health effects of radio frequency
21 transmissions and the security of AMI Meter-transmitted data.² These customers, along
22 with other stakeholders and interested parties, requested the ability to retain the
23 Company's non-transmitting analog meters. To gain an understanding of the issues
24 surrounding AMI Meters, the Commission held a special open meeting in September of
25

26 ¹ Decision No. 69736 in Docket No. E-00000A-06-0038, dated July 30, 2007.

27 ² These concerns, however, have proven unfounded. See "Radio Frequency: Brief Review of
28 Science," Leeka Kheifets Ph.D., Professor of Epidemiology at UCLA, presentation given at Arizona
Corporation Commission Special Open Meeting September 8, 2011. Additionally, APS has outlined the
steps it takes to protect customer information in its comments on the Draft Proposed Meter Guidelines
filed in this docket March 16, 2012.

1 2011. At the conclusion of the meeting, the Commission directed Staff to develop
2 proposed metering guidelines with input from interested parties. Staff issued proposed
3 guidelines, to which APS and other jurisdictional utilities provided comments, and a
4 workshop was convened by Staff in March of 2012 for stakeholder input on the
5 guidelines. APS and other jurisdictional utilities jointly provided supplemental
6 comments to Staff in August of 2012. Staff issued revised guidelines in October of 2012
7 which include a guideline aimed at allowing customers to request and retain non-
8 transmitting meters from their utility. The Commission has not yet acted upon Staff's
9 recommended guidelines.

10 **B. Customers With Non-Automated Meters Forfeit Benefits Offered by**
11 **AMI Meters.**

12 As noted earlier, both the Company and its customers receive many benefits from
13 AMI Meters. Automated metering is an integral part of the overall modern electric grid,
14 anticipated to provide safer, more reliable, and more efficient electric service when fully
15 deployed. AMI Meters create cost savings and contribute to reduced vehicle usage and
16 reduced CO₂ emissions. Customers with automated metering are able to actively
17 manage and reduce energy costs by reviewing hourly household energy usage provided
18 by AMI Meters. These customers may also participate in a variety of Company
19 programs designed to provide options to control energy costs and meet individual needs.

20 Conversely, customers who wish to retain non-transmitting meters such as analog
21 meters will forfeit any benefits provided by automated meters. Unlike AMI Meters,
22 analog meters do not have the ability to communicate electronically and cannot track or
23 record usage data by time-of-day; therefore, a customer who elects an analog meter will
24 not be able to track, analyze, and manage energy usage to the same extent available to
25 customers with automated metering. Customers with analog metering will be unable to
26 take service under time-of-use ("TOU") rate schedules due to the relatively limited
27 technology of these meters, and will sacrifice any cost savings that may be associated
28 with a TOU rate structure because the ability to create savings by shifting energy usage

1 to off-peak hours will be lost. A non-automated metering customer will also be unable
2 to participate in programs or rate options that require the ability to remotely or
3 electronically communicate with the meter such as peak pricing rates, demand response
4 programs, and pre-pay billing.

5 Although customers with non-automated metering have limited choices with
6 respect to rate options and other considerations, in accordance with Staff's proposed
7 meter guidelines the Company has developed an automated meter opt-out program
8 based on the customer feedback APS has received (to date, less than one-half of one
9 percent of the Company's overall customer base has requested non-transmitting analog
10 meters). APS's proposal, as described in the attached Schedule 17, will allow customers
11 to request a non-automated meter as an alternative to the Company's standard meter.

12 **C. APS's Proposed Automated Meter Opt-Out Program (Schedule 17).**

13 APS prefers that all of its customers use the same type of meter where possible
14 — specifically, the Company's standard AMI Meter. However, under the program
15 parameters outlined in Schedule 17, APS will install a non-automated meter when a
16 residential customer of record elects to opt out of the Company's standard metering
17 program. As requested by APS customers, Schedule 17 identifies a non-automated
18 meter as an analog meter.

19 Participation in the Company's automated meter opt-out program is completely
20 voluntary; however, residential customers must meet certain eligibility requirements to
21 qualify for service under Schedule 17. For example, as APS must manually read analog
22 meters,³ opt-out customers must provide unassisted access to the Company's non-
23 automated metering equipment for meter reading and maintenance purposes.
24 Additionally, customers who in any way alter the accurate measurement of energy or
25 otherwise engage in energy theft, or have exhibited threatening behavior to APS meter
26

27 ³ APS has deployed AMI Meters to approximately 85% of its customers. Once deployment is
28 complete, APS will need far fewer meter readers because the Company's AMI meters are read remotely
and do not require the use of meter readers. In contrast, the analog meters that will be installed as part of
Schedule 17 will require a meter reader to travel to the customer's location to read the meter each month.

1 readers or other Company employees, will become ineligible and will be automatically
2 removed from the program by the Company. A full list of opt-out program requirements
3 and exclusions is set forth in the Company's Schedule 17.

4 Customers taking service under Schedule 17 will be placed on the Company's
5 Rate Schedule E-12 once the requested analog meter is installed at the customer's
6 residence. Rate Schedule E-12 is the only residential rate option in which charges (other
7 than the basic service charge) are based solely on non-timed kilowatt-hour usage. As
8 discussed above, analog meters cannot record energy usage by time intervals; therefore,
9 no other residential rate schedule will be available to opt-out customers. For the same
10 reasons, opt-out customers will not be able to participate in critical peak pricing (Rate
11 Rider Schedule CPP-RES), peak-time rebates (Rate Rider Schedule PTR-RES), or the
12 Home Energy Information Pilot (Service Schedule 16). Also, customers that have
13 installed on-site distributed generation such as a solar photovoltaic system will not be
14 eligible for this program because an analog meter is not able to record the bi-directional
15 electricity flow necessary to support certain distributed generation programs.

16 It is important to note that analog meters are no longer manufactured by any
17 domestic meter supplier, and only refurbished models are available for purchase from
18 established and reliable meter suppliers. The Company anticipates that these meters will
19 become more difficult to obtain and more expensive to maintain in the future.

20 Once the Company receives Commission approval of Schedule 17, APS
21 anticipates notifying all customers of its automated meter opt-out program through a bill
22 message. In addition, APS will communicate information about the program on its
23 website, as well as through the letters and door hangers it uses to notify customers
24 regarding the further deployment of AMI Meters. Customers who have already advised
25 the Company of their desire to opt-out of automated metering will be notified about the
26 program and will be provided with information regarding how to confirm election of an
27 analog meter.

28

1 **D. Non-Automated Metering Cost Considerations.**

2 One of the continued benefits of AMI Meter deployment is the reduction in
3 overall Company expense associated with meter reading. These cost savings, including
4 reduced fuel and vehicle maintenance costs, will be passed on to the entire APS
5 customer base as the Company continues to deploy AMI Meters throughout its service
6 territory. In contrast, when customers are allowed to choose a non-standard metering
7 option, these cost savings to the Company and its customers are diminished. Not only
8 are savings diminished, the Company continues to incur certain costs in order to provide
9 non-standard metering over and above the cost of the meters themselves. Several factors
10 contribute to these costs, including APS's remote and geographically dispersed service
11 territory. Customers who create increased costs due to participation in an automated
12 meter opt-out program should bear responsibility for those increased costs or a portion
13 thereof.

14 Taking the foregoing into consideration, and identifying other additional
15 expenses associated with the provision of analog meters to a small segment of APS
16 customers, the Company estimates that it will cost approximately \$75 per opt-out
17 customer in initial set-up costs. These costs include such expenses as installation and
18 refurbishment of analog meters, as well as the development and administration of an
19 opt-out program and the higher infrastructure costs associated with maintaining and
20 supporting a non-standard metering technology. In addition, the Company estimates it
21 will incur meter reading costs of approximately \$30 per opt-out customer per meter
22 read.⁴

23 APS investigated deployment of AMI Meters and requests for non-automated
24 meter programs in other jurisdictions while developing the Company's proposed
25 program. Jurisdictions that allow customers to opt-out of an AMI Meter almost
26 universally charge opt-out customers an up-front and/or monthly fee. However, the

27 _____
28 ⁴ This cost estimate is based upon 4,500 customers electing to opt-out. If fewer customers elect to opt-out, then the costs could be higher. If more customers opt-out, then the costs could potentially decrease depending upon the geographic locations of the opt-out customers.

1 portion of cost related to automated meter opt-out programs that is assigned to the non-
2 automated metering customer and, conversely, the portion that remaining customers on
3 standard metering may be required to bear, has become a policy decision that has varied
4 from jurisdiction to jurisdiction. For example, the Oregon Public Utilities Commission
5 assigned all additional costs to the automated meter opt-out customer, approving a one-
6 time set-up charge of \$254 and a monthly charge of \$51 for Portland General Electric
7 customers who take advantage of the utility's opt-out program. Commissions in Ohio,
8 Oklahoma, and the District of Columbia, however, have determined that no opt-out
9 option will be made available.

10 The California Public Utilities Commission, in contrast, has approved interim
11 non-cost-based charges of \$75 for a set-up charge with a monthly meter reading charge
12 of \$10 for its investor-owned jurisdictional utilities. Southern California Edison, Pacific
13 Gas and Electric, and San Diego Gas and Electric have all been authorized to track costs
14 not recovered from opt-out customers for eventual recovery from all customers.
15 Likewise, the automated meter opt-out program approved by the Nevada Public Utilities
16 Commission for NV Energy is a four-year pilot program with set-up charges of \$52.86
17 and a monthly meter reading charge of \$8.82. These charges will be re-evaluated at the
18 end of the pilot period.

19 Additionally, several jurisdictions are currently conducting proceedings in which
20 opt-out programs and fees are being considered (including Texas and Michigan). For
21 the Commission's convenience, Exhibit B provides examples of charges allocated to
22 non-standard metering customers in selected jurisdictions.

23 **E. Conclusion.**

24 For the reasons set forth above, APS respectfully requests that the Commission
25 approve APS's proposed Schedule 17. Schedule 17 addresses APS's customers'
26 requests to opt-out of automated metering in a reasonable manner.
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RESPECTFULLY SUBMITTED this 22nd day of March, 2013.

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ORIGINAL and thirteen (13) copies
of the foregoing filed this 22nd day of
March 2013, with:

Docket Control
ARIZONA CORPORATION COMMISSION
1200 West Washington Street
Phoenix, Arizona 85007

Christel Dodson



SERVICE SCHEDULE 17 AUTOMATED METER OPT OUT

The purpose of this service schedule is to provide a voluntary, Non-Automated Metering service option for eligible customers that do not wish to be served by the standard Automated Metering equipment. Arizona Public Service Company (Company) will provide such service upon Customer request according to the following terms and conditions.

1 Definitions

- 1.1 Automated Meter. An automated meter is an electronic measurement device that records and communicates information regarding the use of electricity through one- or two-way wireless communications technology. Automated metering (also referred to as advanced metering) is the Company's standard method of measuring electrical usage.
- 1.2 Customer. Customer means the person or entity in whose name service is rendered, as evidenced by the signature on the application or contract for that service, or by the receipt and/or payment of bills regularly issued regardless of the identity of the actual user of the service. (See A.A.C. R14-2-201.9.)
- 1.3 Meter Tampering. Customers who alter or bypass a meter or alter accurate measurement of energy without prior authorization from the Company are meter tampering. Common examples of meter tampering include broken meter seals and the use of any device that alters the accurate recording of the flow of electricity. (See A.A.C. R14-2-201.26.)
- 1.4 Non-Automated Meter. For purposes of this service schedule, this type of meter is commonly referred to as an analog meter. A non-automated meter (analog) has no wireless communication ability.

2 Description of Service

- 2.1 This service schedule governs the provision of a voluntary, optional metering service for eligible residential customers who request a Non-Automated Meter and a manual meter reading process.
- 2.2 The request for enrollment in this service schedule must be made by the Customer. An enrollment request by another person or entity will not be accepted.
- 2.3 The Company will determine the Customer's eligibility, enroll the customer in the service schedule, install a Non-Automated Meter, schedule the Customer for manual meter reads, make any necessary changes to the Customer's rate schedule as described below, and begin to assess the additional metering charges.
- 2.4 The Company will manually read non-automated meters once a month. If an estimated monthly billing meter read is required, the estimate will be performed in accordance with Service Schedule 8 (Bill Estimation). However, because Service Schedule 17 represents a voluntary, non-standard meter reading process, the reasons for estimating a bill is expanded beyond those provided in Service Schedule 8 to include manpower availability and transportation reliability.



**SERVICE SCHEDULE 17
AUTOMATED METER OPT OUT**

3 Eligibility

- 3.1 This service schedule is available to residential Standard Offer Customers, as defined in the Company's Classification of Services and Service Schedule 1 (Terms and Conditions for Standard Offer and Direct Access Services).
- 3.2 This service schedule is available for Customers whose electrical service can be reasonably and economically provided through a Non-Automated Meter, as determined by the Company.
- 3.3 The eligible Customer must meet and maintain meter access requirements and avoid the default provisions described below.

4 Use with Other Rates

In general, this service schedule may only be used in conjunction with rate schedules, rate rider schedules, service schedules and billing options that can be reasonably and economically provided with a Non-Automated Meter, as determined by the Company.

- 4.1 This service schedule may only be used in conjunction with the standard Rate Schedule E-12. Other rate schedules, such as time-of-use rates or demand rates, are not available with this service schedule.
 - 4.1.1 A Customer that is currently served under another rate schedule will be automatically placed on Rate Schedule E-12 when service begins under this service schedule.
- 4.2 This service schedule may be used in conjunction with the Company's limited-income support and medical equipment programs, Rate Rider Schedules E-3 and E-4. However, the monthly billing discounts provided in those programs shall not apply to the charges in this service schedule.
- 4.3 This service schedule may not be used in conjunction with any demand response programs and associated rates, rate riders, or service schedules that may be offered and revised from time to time because a Non-Automated Meter is not capable of supporting the load recording requirements for these programs. These programs include, but are not limited to, critical peak pricing (Rate Rider Schedule CPP-RES), peak-time rebates (Rate Rider Schedule PTR-RES), and the Home Energy Information Program (Service Schedule 16).
- 4.4 A Customer participating in this service schedule may not have on-site distributed generation, such as a solar photovoltaic system. A Non-Automated Meter is not able to record the bi-directional electricity flow necessary to support these programs.
- 4.5 This service schedule may not be used in conjunction with other programs that may be offered and revised from time to time that require or rely on an Automated Meter, such as Rate Rider Schedule CMPW-1 (Community Power – Flagstaff Sandvig 04).



**SERVICE SCHEDULE 17
AUTOMATED METER OPT OUT**

5 Charges and Billing

5.1 Participants in this service schedule will be assessed the following charges, which are in addition to the metering and meter reading charges provided in Rate Schedule E-12.

5.1.1 Non-Automated Meter Set-Up: \$75.00 initial charge, and

5.1.2 Non-Automated Meter Fee: \$30.00 per read

5.2 Service and charges under this schedule will begin on the next billing cycle after the Non-Automated Meter is installed, which will depend on the availability of metering equipment and personnel.

5.3 The first monthly bill under this service schedule will include both the Non-Automated Meter Set-Up and the Non-Automated Meter Fee. Subsequent bills will include the Non-Automated Meter Fee.

6 Meter Access

6.1 The Customer must provide adequate access to the metering equipment for the Company or its authorized agents in order to be (or remain) eligible for this service schedule. Adequate access includes, but is not limited to, unassisted 24 hour a day, seven days a week access to the Non-Automated Meter for meter reading or maintenance purposes.

6.2 If the Customer fails to provide unassisted access for two consecutive months or three months in any twelve month period, participation in this service schedule will be discontinued. Schedule 1, Section 5.4 will apply to any further access issues at a site.

7 Default Provisions

The Company may, without liability, discontinue a customer's participation in this service schedule without prior Customer consent under any of the following conditions:

7.1 The Company observes, or has evidence of, an imminent or ongoing hazard to the safety of persons or property.

7.2 The Company observes, or has evidence of, meter tampering, energy diversion, or fraud.

7.3 The Company has evidence of unauthorized use or resale of electric service.

7.4 Company employees have received verbal or physical threats.

8 Discontinuing This Service

8.1 A Customer may request to discontinue participation in this service schedule at any time.

**SERVICE SCHEDULE 17
AUTOMATED METER OPT OUT**

- 8.2 Participation may also be discontinued by the Company due to a default condition or if the Customer terminates electric service, or if customer fails to comply with Section 6.
- 8.3 If participation is discontinued, the Company will install an Automated Meter at no additional charge, remove the customer from the service schedule, and discontinue the Non-Automated Meter Reading Fee on the next billing cycle thereafter.
- 8.3.1 The Company will make best efforts to complete the meter installation within thirty business days of a default condition or Customer's request to discontinue participation in this service schedule.
- 8.4 If participation is voluntarily discontinued, the Customer must remain on standard Automated Meter service for a minimum of twelve months before requesting to re-enroll in this service schedule. Customers re-enrolling under this schedule will be subject to the Non-Automated Meter Set-up Fee.
- 9 Miscellaneous Provisions
- 9.1 The customer assumes all responsibility for, and agrees to save Company harmless against, all liability, damages, judgments, fines, penalties, claims, charges, costs and fees incurred by the customer resulting from non-automated metering.

Examples of Jurisdictional AMI Opt-Out Programs

State	Utility	Upfront Charge	Monthly Charge	Meter Read Interval	Customer Type	Meter Type	Self-read
CA	City of Glendale	None	\$56	Bi-monthly	Residential only	Smart Meter with radio off	No
	PG&E*	\$75	\$10	Monthly	Residential only	Analog	No
	SMUD	\$127	\$14	Every 3 months	Residential only	Smart Meter with radio off	No
	SDG&E*	\$75	\$10	Monthly	Residential only	Analog	No
	SCE*	\$75	\$10	Monthly	Residential only	Currently installed meter	No
DC	No Opt-Out Program Allowed to date						
ME	Central Maine Power	\$40 (Electro-mechanical)	\$12 (Electro-mechanical)	Bi-monthly	Residential and Commercial	Electro-mechanical or Smart Meter with radio off	No
NV**	NV Energy (Nevada Power)	\$52.86	\$8.82	Monthly	Residential only	Meter type to be selected by utility	No
	NV Energy (Sierra Pacific)	\$52.44	\$8.72	Monthly	Residential only	Selected by utility	No
OK	No Opt-Out Program Allowed to date						
OH	No Opt-Out Program Allowed to date						
OR	Avista (Gas)	\$221.61	\$50.88	Monthly	Residential only	Non-communicating	No
	Portland General Electric	\$254	\$51	Monthly	Residential only	Capable of capturing interval data but no RF	No

* Costs are considered interim
 ** Program is a four-year pilot