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MEMORANDUM

Arizona Corporation Commission
DOCKETED

FEB 17 2010

DOCKETED BY

TO: THE COMMISSION

FROM: Utilities Division

DATE: February 17, 2010

RE: ARIZONA PUBLIC SERVICE COMPANY - APPLICATION FOR APPROVAL OF A DISTRIBUTED ENERGY INITIATIVE: THE COMMUNITY POWER PROJECT – FLAGSTAFF PILOT (DOCKET NO. E-01345A-09-0227)

I. Background

On May 11, 2009, Arizona Public Service Company ("APS" or "Company") filed an Application for approval of the Community Power Project - Flagstaff Pilot ("Project") which would promote residential and small commercial distributed energy ("DE") by making it possible for customers to obtain DE on their property without cost.

On October 29, 2009, APS made a Supplemental Filing requesting that utility owned renewable energy produced at customers' homes and businesses be counted under the Renewable Energy Standard ("RES") Rule toward meeting the DE requirements. In the alternative, the Company requested a waiver of the applicable rules, if necessary, to allow this treatment.

The installation of photovoltaic ("PV") and solar water heating systems in APS' service territory has increased significantly, yet meeting the RES DE requirement, particularly residential, continues to be a challenge.

The Project would achieve a high penetration of DE resources in a localized Flagstaff area and would allow APS to study the effects of DE on the electrical distribution system.

II. The Community Power Project

APS proposes to place distributed renewable energy resources, including installations on customer premises and utility "stand-alone" PV arrays (approximately 200 systems or up to 1,500 kilowatts ("kW")), solar water heaters (approximately 50 systems), and small-scale stand-alone wind turbines (approximately six systems on utility-owned property) in a limited distribution area in northeast Flagstaff. These renewable facilities would reduce the need for conventional generation otherwise used to provide electricity to APS customers.

APS selected a portion of its Flagstaff service territory for the Community Power Project where the Company was already intending to deploy smart distribution technologies in the near future. The smart distribution grid includes intelligent diagnostics, automation technologies, and central distribution information management systems. Smart grid technology provides APS with the ability to measure and track the effects of weather, equipment failure, customer usage, and

other types of operational impacts on the distribution system. This will enable the Company to observe and measure the impacts of DE on the distribution system.

One particular distribution circuit or "feeder" in northeast Flagstaff was determined to be the most suitable for the deployment of the Community Power Project. Approximately 2,700 residential and 300 small commercial customers are served from APS' Sandvig-4 feeder. The majority of the rooftops in the area are sufficient to support PV panels, and rooftop orientation is generally appropriate for PV applications.

APS has found Flagstaff suitable for the pilot because of limited growth compared to other areas and significant community support for renewable resources. APS believes that the Project area reasonably reflects the overall demographics of Flagstaff.

APS also intends to provide solar water heating systems without cost to approximately 50 low-income households located on the Sandvig-4 feeder. Local community action agencies would select the low-income participants. Unlike the PV systems, customers would assume ownership of the solar water heating systems. APS has indicated that utility ownership is not appropriate for solar water heating systems since they are analogous to in-home appliances, they have safeguards and warranties in place through APS' third-party partnerships, and the systems do not generate electricity.

Since customers would own the solar water heating systems, operation and maintenance of these systems would be customers' responsibility. The community action agencies would provide customers with contact information for the installer to arrange for warranty service when necessary.

The Project includes plans for a limited number of stand-alone PV and wind installations to be installed on property not directly associated with an individual customer, and these facilities would provide capacity and energy for use by customers in the distribution service area. This would afford APS the opportunity to deploy systems promptly after Commission approval, and would assure that the pilot field study includes some large-scale installations.

The proposed Community Power Project would include a field study providing specific, detailed information on the interaction of two emerging technologies: a high concentration of distributed renewable resources, and an intelligent energy distribution network (smart grid).

The PV facilities on customer premises would provide eligible customers with the benefits of a renewable system on their premises, including a price for the renewable energy that would remain unchanged for 20 years. The participating customers would have no financing, operation, or maintenance costs because the renewable system would be owned by APS. Third-party professionals would be used for installation of systems and ongoing maintenance.

The Community Power Project pilot would provide APS with valuable technical information. The Company would evaluate the impacts and effectiveness of the program to learn how best to facilitate the deployment of additional DE systems in the future. APS considers the Project to be a pilot because of the limited laboratory-type study of a new business model

designed to maximize system and customer benefits of DE systems and to gain insight on operational challenges before determining whether to expand it into other areas.

APS intends to include Project progress reports with its annual reports filed with the Commission in compliance with the RES rules. Reporting would include program participation, energy production or savings, program cost summaries, and observations on system impacts.

The Company states that the Project involves many complex components. As a result, there is a chance that because of unforeseen circumstances including customer response, safety, reliability, administrative or economic considerations, the Company may need to modify, freeze, or discontinue some or all aspects of the pilot program. It further states that discontinuance could include halting the program prior to completing the entire installation on target or unwinding the project and removal of assets. APS requests that it be allowed to modify or discontinue the Project, if necessary, with 30 days notice to the Commission. Staff recommends that the notice should be filed with the Commission at least 120 days before modifying or discontinuing the Project unless there is a safety or reliability consideration, and any such notice should include a complete detailed discussion of the need for modification or discontinuance. The notice should also be provided to Project participants.

III. Customer Impacts

There would be several eligibility requirements that must be satisfied for customers to participate in the program. The property owner must provide a utility easement for the rooftop PV system. Structural parameters related to the rooftop itself would be taken into consideration. Customers must occupy the property for a minimum of six months each year. Residential customers must have energy consumption greater than 4,800 kWh per year; non-residential customers must have loads greater than 50 kW.

In addition to providing PV facilities at no cost to the customer, Rate Schedule CMPW-01 would be available to those eligible customers who participate in the Project. Under this rate schedule, APS would guarantee participating customers a pre-determined amount of energy for a 20-year period at a fixed cost based on the amount of kWh the customer's DE system would generate in an average month. This would provide the customer with cost certainty for a set amount of kWhs based on the specific system installed for that customer. CMPW-01 would be used in conjunction with the customer's otherwise applicable rate schedule (the "parent rate").

For this pilot, participants must be served under rate schedules E-12, ET-2, E-32, or E-32TOU as the parent rate. The majority of Flagstaff customers served from the SANDVIG-4 feeder are billed on one of these four eligible rate schedules. However, if an eligible customer is billed under a different rate schedule, that customer may participate if a switch to one of these parent rate schedules is made. This is a pilot program, and limiting participation to these four rate schedules eases implementation and administration while maintaining eligibility for nearly all SANDVIG-4 customers.

Rate Schedule CMPW-01 would provide the participating customer with a guaranteed amount of monthly kWhs as a proxy for the kWhs received if the system was owned and operated by the customer. The calculation methodology of these proxy kWhs would place any operating risk of the DE system directly on the Company, and relieve the customer from the variations in kWhs generated caused by annual and seasonal variances and weather conditions or maintenance needs. This guarantee is a benefit to the customer, and APS believes that the Company's assumption of this risk will help create a strong case for customer participation in the pilot program.

For residential customers, Rate Schedule CMPW-01 may be used in conjunction with the low-income rate riders E-3 and E-4. For these customers, any calculated low-income discount would be applied to total metered usage prior to any CMPW-01 Solar Energy computations.

Proposed Rate Schedule CMPW-01 is included with APS' application as Attachment C. Also included are comparative bill calculations that show the revenue neutral impact of the rate rider on the customer's annual bills for each of the eligible parent rates.

The calculated fixed monthly output for the PV systems would be different for residential and non-residential customers due to differences in system size and expected rooftop orientation. The kWh guarantee for Rate Schedule CMPW-01 for standardized 2, 3, or 4 kW residential systems would be 105 kWh-AC per kW-DC[1] per month, while the guarantee for non-residential systems would be 90 kWh-AC per kW-DC per month. These kWh would comprise the "Solar Energy" referred to in the rate schedule.

The goal of Rate Schedule CMPW-01 would be to provide the customer with rate certainty for the portion of the customer usage that is attributable to the output of the rooftop PV system. Those kWh have been assigned a dollar charge specific to the customer's rate schedule, and will not change over the life of the program. In the rate schedule, this charge is referred to as the "Solar Charge." This certainty is a hedge against increasing fuel prices and overall rate increases.

The Solar Charge was designed specifically to achieve revenue neutrality at the time the program begins; that is, the charge would replicate the amount the customer would otherwise pay for that same amount of usage under today's rates. Due to the different rate designs employed for the "parent" rates (E-12, ET-2, E-32 and E-32TOU), each parent rate schedule Solar Charge must be unique to realize revenue neutrality.

The Solar Charge for each of the rate schedules available to program participants would be as follows:

---

[1] The PV system generates electricity in the form of direct current ("DC"). The DC is converted into alternating current ("AC") by a DC to AC inverter. The AC matches the utility-generated power and is therefore usable by the customer. The capacity of the generating unit is measured in kilowatts ("kW"), and the energy that it produces is measured in kilowatt-hours ("kWh").

Solar Charge per kWh

Residential E-12	$0.11242
Residential Time of Use ET-2	$0.13480
General Service E-32	$0.09293
General Service Time of Use E-32TOU	$0.05855

The Solar Charge would be shown on the customer's monthly bill as a separate charge. As other electric prices change over time, the Solar Charge would not; thus the customer would see that a solar DE system can truly impact the price of electricity in the long term. As an example for a residential E-12 customer using an average 1,169 kWh per month and with a 3 kW PV system installed, the customer would pay $141.41 under the proposed CMPW-01. A detailed bill comparison is shown below.

	Residential E-12			
	Current Rates		**Current Rate with Proposed CMPW-01 Rider**	
Base Rates				
Basic Service Charge	$	8.55	$	8.55
Per kWh Charge	$	131.79	$	95.35
Adjustors				
Total PSA	$	-5.25	$	-3.83
TCA	$	2.64	$	1.93
CRCC	$	0.40	$	0.29
EIS	$	0.19	$	0.14
RES	$	3.46	$	3.46
DSMAC	$	0.71	$	0.52
Subtotal	$	142.49	$	106.41
Solar Charge	$	-	$	35.00
Total bill before taxes and fees	**$**	**142.49**	**$**	**141.41**

IV. Costs and Funding

APS forecasts capital expenditures of $10.8 million, deployment costs of $3.8 million, and ongoing expenses of $410,000 per year.

The average costs of individual systems are given by APS as follows.

APS Budgeted System Costs

Residential Rooftop PV	$7,750/kW
Commercial PV	$6,500/kW
Stand-Alone PV	$6,500/kW
Solar water heater	$5,400/kW
Small wind turbine	$6,000/kW

APS proposes that a portion of the capital costs for the PV facilities would be paid from REST funds through standard incentives. APS proposes that the remaining capital costs of the PV facilities and the full capital cost of wind turbines would be included in rate base in the next APS rate case consistent with traditional cost recovery for generating resources.

APS proposes that program costs such as solar water heater capital cost, operation and maintenance expense, customer communication cost, data collection equipment cost, and all other program expenses be recovered through the RES adjustment mechanism. APS also proposes that carrying costs on capital expenditures would be recovered through the RES adjustment mechanism, but only until the next rate case, when the Company would include those expenditures in rate base and would recover costs in the same manner as other APS generating resources.

No increase in the RES adjustor rate would be necessary for the Project. APS proposes two sources of RES funding: $4.3 million from the 2009 budget and $3.8 million from remaining 2008 funds.

In Decision No. 71488, the Commission approved the Settlement Agreement ("SA") between the parties in the Company's last rate case. Section XV of the SA involved additional commitments by the Company to invest in renewable energy projects. APS witness Lockwood testified that the new renewable resources required by the SA are in addition to existing resources or commitments as of the end of 2008 as identified in APS' 2008 annual RES Compliance Report.

Subsection 15.7 of the SA provides in part as follows:

> All reasonable and prudent expenses incurred by APS pursuant to this Section of the Agreement shall be recoverable through the Power Supply Adjustor, a renewable energy adjustment mechanism, or the Transmission Cost Adjustor, as appropriate. To encourage least cost renewable resources to benefit customers, these expenses would also include the capital carrying costs of any capital investments by APS in renewable energy projects (depreciation expenses at rates established by the Commission, property taxes, and return on both debt and equity at the pre-tax weighted average cost of capital).

Staff believes that the Company's proposals are consistent with this provision of the SA, subject to the understanding that the reasonableness and prudency of such costs shall be determined at the Company's next rate case, and that the Company shall be required to refund any amounts that are determined to be unreasonable or not prudent.

V. Renewable Energy Standard Rules

APS is seeking the Commission's interpretation of the RES Rules regarding distributed generation and the Distributed Renewable Energy Requirements.[2]

APS made a Supplemental Filing in this Docket proposing that the RES Rules be interpreted with respect to DE on customer premises, to allow utility-owned solar units on the rooftops of customer homes and businesses to be counted as DE under the RES Rules.

With respect to this Project, APS is requesting that the Commission find that the renewable energy produced by the APS owned Community Power Project facilities (both residential and non-residential) counts toward compliance with the distributed renewable energy requirements of the RES Rules. R14-2-1805 states:

> D. An Affected Utility shall meet one-half of its annual Distributed Renewable Energy Requirement from residential applications and the remaining one-half from non-residential, non-utility applications.

APS' argument in support of including utility owned projects is twofold. First it states that the definition section (RI4-2-1801) defines distributed generation as that located at the customer's premises. [See sections (E) and (G).]. APS, therefore, believes that the language does not preclude utility-owned distributed generation.

Second, APS believes that the intent of the distributed energy requirements is to incent the installation of renewable energy systems that would provide direct benefit to customers and serve their load. The Flagstaff Pilot was developed to meet those criteria.

The Commission has already ruled on the portion of the Company's request dealing with non-residential projects. During the Open Meeting on APS' 2010 REST Implementation Plan, the following amendment was proposed and adopted by the Commission: "IT IS FURTHER ORDERED that Arizona Public Service Company shall be, consistent with the Renewable Energy Standard rules, prohibited from utilizing utility-owned facilities for purposes of meeting the *non-residential* portion of its distributed generation requirement." [italics added]

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[2] APS cites to what it believes to be the relevant RES rules: A.A.C. R14-2-1801(E), (G) and (R) and R14-2-1805.

Staff believes that residential utility-owned DE is not precluded by the RES Rules (R14-2-1805(D)).

VI. Staff Analysis

Staff believes that the APS Community Power Project:

- Provides the benefits of renewable energy to customers,
- Helps meet the Commission's goal of bringing more renewable resources to Arizona,
- Will increase recognition of the value of DE,
- Will increase understanding of system impacts from large scale deployment of DE, and
- Is a reasonable means of achieving RES targets.

Staff has analyzed APS' application in terms of whether there were fair value implications. Compared to APS' total revenues, any impact from this Project would be de minimus, and any impact on APS' fair value rate base and earned rate of return would also be de minimus.

VII. Summary of Recommendations

Staff recommends that the Community Power Project and Rate Schedule CMPW-01 be approved by the Commission as discussed herein.

Staff recommends that the Commission find that the allocation of RES funding for the operation, maintenance, deployment, and carrying costs of the Community Power Project as proposed by APS is appropriate and reasonable. Staff further recommends that the determination as to the reasonableness and prudency of these costs be reviewed as part of the Company's next rate case.

Staff recommends that the Commission find that the renewable energy produced by utility-owned Community Power Project facilities not count toward compliance with the non-residential portion of the distributed renewable energy requirements of the RES Rules.

Staff recommends that APS be allowed to modify or discontinue the Project with 120 days written notice to the Commission before modifying or discontinuing the Project unless there is a safety or reliability consideration, and any such notice should include a complete detailed discussion of the need for modification or discontinuance. The notice should also be provided to Project participants.

Staff recommends that APS file its CMPW-01 tariff consistent with the Commission Decision approving the Project within 15 days of the effective date of that Decision.

Steven M. Olea
Director
Utilities Division

SMO:JJP:lhm\MAS

ORIGINATOR: Jeffrey Pasquinelli

BEFORE THE ARIZONA CORPORATION COMMISSION

KRISTIN K. MAYES
Chairman
GARY PIERCE
Commissioner
PAUL NEWMAN
Commissioner
SANDRA D. KENNEDY
Commissioner
BOB STUMP
Commissioner

IN THE MATTER OF ARIZONA PUBLIC SERVICE COMPANY'S APPLICATION FOR APPROVAL OF A DISTRIBUTED ENERGY INITIATIVE: THE COMMUNITY POWER PROJECT – FLAGSTAFF PILOT	DOCKET NO. E-01345A-09-0227 DECISION NO. _____ ORDER

Open Meeting
March 2 and 3, 2010
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

1. Arizona Public Service Company ("APS" or "Company") is certificated to provide electric service as a public service corporation in the State of Arizona.

I. Background

2. On May 11, 2009, APS filed an Application for approval of the Community Power Project - Flagstaff Pilot ("Project") which would promote residential and small commercial distributed energy ("DE") by making it possible for customers to obtain DE on their property without cost.

3. On October 29, 2009, APS made a Supplemental Filing requesting that utility-owned renewable energy produced at customers' homes and businesses be counted under the Renewable Energy Standard ("RES") Rules toward meeting the RES DE requirements. In the alternative, the Company requested a waiver of the applicable rules, if necessary, to allow this treatment.

4. The installation of photovoltaic ("PV") and solar water heating systems in APS' service territory has increased significantly, yet meeting the RES DE requirement, particularly residential, continues to be a challenge.

5. The Project would achieve a high penetration of DE resources in a localized Flagstaff area and would allow APS to study of the effects of DE on the electrical distribution system.

II. The Community Power Project

6. APS proposes to place distributed renewable energy resources, including installations on customer premises and utility "stand-alone" PV arrays (approximately 200 systems or up to 1,500 kilowatts ("kW")), solar water heaters (approximately 50 systems), and small-scale stand-alone wind turbines (approximately six systems on utility-owned property) in a limited distribution area in northeast Flagstaff. These renewable facilities would reduce the need for conventional generation otherwise used to provide electricity to APS customers.

7. APS selected a portion of its Flagstaff service territory for the Community Power Project where the Company was already intending to deploy smart distribution technologies in the near future. The smart distribution grid includes intelligent diagnostics, automation technologies, and central distribution information management systems. Smart grid technology provides APS with the ability to measure and track the effects of weather, equipment failure, customer usage, and other types of operational impacts on the distribution system. This will enable the Company to observe and measure the impacts of DE on the distribution system.

8. One particular distribution circuit or "feeder" in northeast Flagstaff was determined to be the most suitable for the deployment of the Community Power Project. Approximately 2,700 residential and 300 small commercial customers are served from APS' Sandvig-4 feeder. The majority of the rooftops in the area are sufficient to support PV panels, and rooftop orientation is generally appropriate for PV applications.

9. APS has found Flagstaff suitable for the pilot because of limited growth compared to other areas and significant community support for renewable resources. APS believes that the Project area reasonably reflects the overall demographics of Flagstaff.

10. APS also intends to provide solar water heating systems without cost to approximately 50 low-income households located on the Sandvig-4 feeder. Local community action agencies would select the low-income participants. Unlike the PV systems, customers would assume ownership of the solar water heating systems. APS has indicated that utility ownership is not appropriate for solar water heating systems since they are analogous to in-home appliances, they have safeguards and warranties in place through APS' third-party partnerships, and the systems do not generate electricity.

11. Since customers would own the solar water heating systems, operation and maintenance of these systems would be customers' responsibility. The community action agencies would provide customers with contact information for the installer to arrange for warranty service when necessary.

12. The Project includes plans for a limited number of stand-alone PV and wind installations to be installed on property not directly associated with an individual customer, and these facilities would provide capacity and energy for use by customers in the distribution service area. This would afford APS the opportunity to deploy systems promptly after Commission approval, and would assure that the pilot field study includes some large-scale installations.

13. The proposed Community Power Project would include a field study providing specific, detailed information on the interaction of two emerging technologies: a high concentration of distributed renewable resources, and an intelligent energy distribution network (smart grid).

14. The PV facilities on customer premises would provide eligible customers with the benefits of a renewable system on their premises, including a price for the renewable energy that would remain unchanged for 20 years. The participating customers would have no financing, operation, or maintenance costs because the renewable system would be owned by APS. Third-party professionals would be used for installation of systems and ongoing maintenance.

15. The Community Power Project pilot would provide APS with valuable technical information. The Company would evaluate the impacts and effectiveness of the program to learn how best to facilitate the deployment of additional DE systems in the future. APS considers the

Project to be a pilot because of the limited laboratory-type study of a new business model designed to maximize system and customer benefits of DE systems and to gain insight on operational challenges before determining whether to expand it into other areas.

16. APS intends to include Project progress reports with its annual reports filed with the Commission in compliance with the RES rules. Reporting would include program participation, energy production or savings, program cost summaries, and observations on system impacts.

17. The Company states that the Project involves many complex components. As a result, there is a chance that because of unforeseen circumstances including customer response, safety, reliability, administrative or economic considerations, the Company may need to modify, freeze, or discontinue some or all aspects of the pilot program. It further states that discontinuance could include halting the program prior to completing the entire installation on target or unwinding the project and removal of assets. APS requests that it be allowed to modify or discontinue the Project, if necessary, with 30 days notice to the Commission. Staff has recommended that the notice should be filed with the Commission at least 120 days before modifying or discontinuing the Project unless there is a safety or reliability consideration, and any such notice should include a complete detailed discussion of the need for modification or discontinuance. The notice should also be provided to Project participants.

III. Customer Impacts

18. There would be several eligibility requirements that must be satisfied for customers to participate in the program. The property owner must provide a utility easement for the rooftop PV system. Structural parameters related to the rooftop itself would be taken into consideration. Customers must occupy the property for a minimum of six months each year. Residential customers must have energy consumption greater than 4,800 kWh per year; non-residential customers must have loads greater than 50 kW.

19. In addition to providing PV facilities at no cost to the customer, Rate Schedule CMPW-01 would be available to those eligible customers who participate in the Project. Under this rate schedule, APS would guarantee participating customers a pre-determined amount of energy for a 20-year period at a fixed cost based on the amount of kWh the customer's DE system

would generate in an average month. This would provide the customer with cost certainty for a set amount of kWhs based on the specific system installed for that customer. CMPW-01 would be used in conjunction with the customer's otherwise applicable rate schedule (the "parent rate").

20. For this pilot, participants must be served under rate schedules E-12, ET-2, E-32, or E-32TOU as the parent rate. The majority of Flagstaff customers served from the SANDVIG-4 feeder are billed on one of these four eligible rate schedules. However, if an eligible customer is billed under a different rate schedule, that customer may participate if a switch to one of these parent rate schedules is made. This is a pilot program, and limiting participation to these four rate schedules eases implementation and administration while maintaining eligibility for nearly all SANDVIG-4 customers.

21. Rate Schedule CMPW-01 would provide the participating customer with a guaranteed amount of monthly kWhs as a proxy for the kWhs received if the system was owned and operated by the customer. The calculation methodology of these proxy kWhs would place any operating risk of the DE system directly on the Company, and relieve the customer from the variations in kWhs generated caused by annual and seasonal variances and weather conditions or maintenance needs. This guarantee is a benefit to the customer, and APS believes that the Company's assumption of this risk will help create a strong case for customer participation in the pilot program.

22. For residential customers, Rate Schedule CMPW-01 may be used in conjunction with the low-income rate riders E-3 and E-4. For these customers, any calculated low-income discount would be applied to total metered usage prior to any CMPW-01 Solar Energy computations.

23. Proposed Rate Schedule CMPW-01 is included with APS' application as Attachment C. Also included are comparative bill calculations that show the revenue neutral impact of the rate rider on the customer's annual bills for each of the eligible parent rates.

24. The calculated fixed monthly output for the PV systems would be different for residential and non-residential customers due to differences in system size and expected rooftop orientation. The kWh guarantee for Rate Schedule CMPW-01 for standardized 2, 3, or 4 kW

residential systems would be 105 kWh-AC per kW-DC[1] per month, while the guarantee for non-residential systems would be 90 kWh-AC per kW-DC per month. These kWh would comprise the "Solar Energy" referred to in the rate schedule.

25. The goal of Rate Schedule CMPW-01 would be to provide the customer with rate certainty for the portion of the customer usage that is attributable to the output of the rooftop PV system. Those kWh have been assigned a dollar charge specific to the customer's rate schedule, and will not change over the life of the program. In the rate schedule, this charge is referred to as the "Solar Charge." This certainty is a hedge against increasing fuel prices and overall rate increases.

26. The Solar Charge was designed specifically to achieve revenue neutrality at the time the program begins; that is, the charge would replicate the amount the customer would otherwise pay for that same amount of usage under today's rates. Due to the different rate designs employed for the "parent" rates (E-12, ET-2, E-32 and E-32TOU), each parent rate schedule Solar Charge must be unique to realize revenue neutrality.

27. The Solar Charge for each of the rate schedules available to program participants would be as follows:

Solar Charge per kWh

Residential E-12	$0.11242
Residential Time of Use ET-2	$0.13480
General Service E-32	$0.09293
General Service Time of Use E-32TOU	$0.05855

28. Staff finds the Company's rate design proposals to be reasonable and in the public interest.

29. The Solar Charge would be shown on the customer's monthly bill as a separate charge. As other electric prices change over time, the Solar Charge would not; thus the customer would see that a solar DE system can truly impact the price of electricity in the long term. As an

[1] The PV system generates electricity in the form of direct current ("DC"). The DC is converted into alternating current ("AC") by a DC to AC inverter. The AC matches the utility-generated power and is therefore usable by the customer. The capacity of the generating unit is measured in kilowatts ("kW"), and the energy that it produces is measured in kilowatt-hours ("kWh").

example for a residential E-12 customer using an average 1,169 kWh per month and with a 3 kW PV system installed, the customer would pay $141.41 under the proposed CMPW-01. A detailed bill comparison is shown below.

	Residential E-12	
	Current Rates	**Current Rate with Proposed CMPW-01 Rider**
Base Rates		
Basic Service Charge	$ 8.55	$ 8.55
Per kWh Charge	$ 131.79	$ 95.35
Adjustors		
Total PSA	$ -5.25	$ -3.83
TCA	$ 2.64	$ 1.93
CRCC	$ 0.40	$ 0.29
EIS	$ 0.19	$ 0.14
RES	$ 3.46	$ 3.46
DSMAC	$ 0.71	$ 0.52
Subtotal	$ 142.49	$ 106.41
Solar Charge	$ -	$ 35.00
Total bill before taxes and fees	**$ 142.49**	**$ 141.41**

IV. Costs and Funding

30. APS forecasts capital expenditures of $10.8 million, deployment costs of $3.8 million, and ongoing expenses of $410,000 per year. The average costs of individual systems are given by APS as follows.

APS Budgeted System Costs

Residential Rooftop PV	$7,750/kW
Commercial PV	$6,500/kW
Stand-Alone PV	$6,500/kW
Solar water heater	$5,400/kW
Small wind turbine	$6,000/kW

31. APS proposes that a portion of the capital costs for the PV facilities would be paid from REST funds through standard incentives. APS proposes that the remaining capital costs of . . .

the PV facilities and the full capital cost of wind turbines would be included in rate base in the next APS rate case consistent with traditional cost recovery for generating resources.

32. APS proposes that program costs such as solar water heater capital cost, operation and maintenance expense, customer communication cost, data collection equipment cost, and all other program expenses be recovered through the RES adjustment mechanism. APS also proposes that carrying costs on capital expenditures would be recovered through the RES adjustment mechanism, but only until the next rate case, when the Company would include those expenditures in rate base and would recover costs in the same manner as other APS generating resources.

33. APS states that no increase in the 2010 RES adjustor rate would be necessary for the Project. It states that this program leverages existing RES program parameters. APS proposes two sources of RES funding: $4.3 million from the 2009 RES incentive budget and $3.8 million from remaining 2008 funds.

34. In Decision No. 71488, the Commission approved the Settlement Agreement ("SA") between the parties in the Company's last rate case. Section XV of the SA involved additional commitments by the Company to invest in renewable energy projects. APS witness Lockwood testified that the new renewable resources required by the SA are in addition to existing resources or commitments as of the end of 2008 as identified in APS' 2008 annual RES Compliance Report.

35. Subsection 15.7 of the SA provides in part as follows:

> All reasonable and prudent expenses incurred by APS pursuant to this Section of the Agreement shall be recoverable through the Power Supply Adjustor, a renewable energy adjustment mechanism, or the Transmission Cost Adjustor, as appropriate. To encourage least cost renewable resources to benefit customers, these expenses would also include the capital carrying costs of any capital investments by APS in renewable energy projects (depreciation expenses at rates established by the Commission, property taxes, and return on both debt and equity at the pre-tax weighted average cost of capital).

36. Staff believes that the Company's proposals are consistent with any of the SA, subject to the understanding that the reasonableness and prudency of such costs shall be

determined at the Company's next rate case, and that the Company shall be required to refund any amounts that are determined to be unreasonable or not prudent.

V. Renewable Energy Standard Rules

37. APS is seeking the Commission's interpretation of the RES Rules regarding distributed generation and the Distributed Renewable Energy Requirements.[2]

38. APS made a Supplemental Filing in this Docket proposing that the RES Rules be interpreted with respect to DE on customer premises, to allow utility-owned solar units on the rooftops of customer homes and businesses to be counted as DE under the RES Rules.

39. With respect to this Project, APS is requesting that the Commission find that the renewable energy produced by the APS owned Community Power Project facilities (both residential and non-residential) counts toward compliance with the distributed renewable energy requirements of the RES Rules. R14-2-1805 states:

> D. An Affected Utility shall meet one-half of its annual Distributed Renewable Energy Requirement from residential applications and the remaining one-half from non-residential, non-utility applications.

40. APS' argument in support of including utility owned projects is twofold. First it states that the definition section (RI4-2-1801) defines distributed generation as that located at the customer's premises. [See sections (E) and (G).]. APS, therefore, believes that the language does not preclude utility-owned distributed generation.

41. Second, APS believes that the intent of the distributed energy requirements is to incent the installation of renewable energy systems that would provide direct benefit to customers and serve their load. The Flagstaff Pilot was developed to meet those criteria.

42. The Commission has already ruled on the portion of the Company's request dealing with non-residential projects. During the Open Meeting on APS' 2010 REST Implementation Plan, the following amendment was proposed and adopted by the Commission: "IT IS FURTHER ORDERED that Arizona Public Service Company shall be, consistent with the Renewable Energy

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[2] APS cites to what it believes to be the relevant RES rules: A.A.C. R14-2-1801(E), (G) and (R) and R14-2-1805.

Standard rules, prohibited from utilizing utility-owned facilities for purposes of meeting the *non-residential* portion of its distributed generation requirement." [italics added]

43. Staff believes that residential utility-owned DE is not precluded by the RES Rules (R14-2-1805(D)).

VI. Staff Analysis

44. Staff believes that the APS Community Power Project:

- Provides the benefits of renewable energy to customers,
- Helps meet the Commission's goal of bringing more renewable resources to Arizona,
- Will increase recognition of the value of DE,
- Will increase understanding of system impacts from large scale deployment of DE, and
- Is a reasonable means of achieving RES targets.

45. Staff has analyzed APS' Application in terms of whether there were fair value implications. Compared to APS' total revenues, any impact from this Project would be de minimus, and any impact on APS' fair value rate base and earned rate of return would also be de minimus.

VII. Summary of Recommendations

46. Staff has recommended that the Community Power Project and Rate Schedule CMPW-01 be approved by the Commission as discussed herein.

47. Staff has recommended that the Commission find that the allocation of RES funding for the operation, maintenance, deployment, and carrying costs of the Community Power Project as proposed by APS is appropriate and reasonable. Staff has further recommended that the determination as to the reasonableness and prudency of these costs be reviewed as part of the Company's next rate case.

48. Staff has recommended that the Commission find that the renewable energy produced by utility-owned Community Power Project facilities not count toward compliance with the non-residential portion of the distributed renewable energy requirements of the RES Rules.

49. Staff has recommended that APS be allowed to modify or discontinue the Project with 120 days written notice to the Commission before modifying or discontinuing the Project unless there is a safety or reliability consideration, and any such notice should include a complete detailed discussion of the need for modification or discontinuance. The notice should also be provided to Project participants.

50. Staff has recommended that APS file its CMPW-01 tariff consistent with the Commission Decision approving the Project within 15 days of the effective date of that Decision.

CONCLUSIONS OF LAW

1. APS an Arizona public service corporation within the meaning of Article XV, Section 2 of the Arizona Constitution.

2. The Commission has jurisdiction over APS and over the subject matter of the application.

3. The Commission, having reviewed the Company's Application and Supplemental Filing, and Staff's Memorandum dated February 17, 2010, concludes that it is in the public interest to approve the Community Power Project - Flagstaff Pilot, subject to the conditions contained herein.

ORDER

IT IS THEREFORE ORDERED that Arizona Public Service Company's Community Power Project - Flagstaff Pilot be and hereby is approved as discussed herein.

IT IS FURTHER ORDERED that the allocation of RES funding for the operation, maintenance, deployment, and carrying costs of the Community Power Project as proposed by Arizona Public Service Company is appropriate and reasonable.

IT IS FURTHER ORDERED that the determination as to the reasonableness and prudency of these costs be reviewed as part of Arizona Public Service Company's next rate case.

IT IS FURTHER ORDERED that the renewable energy produced by utility-owned Community Power Project facilities not count toward compliance with the non-residential portion of the distributed renewable energy requirements of the RES Rules.

. . .

IT IS FURTHER ORDERED that Arizona Public Service Company be allowed to modify or discontinue the Project with 120 days written notice to the Commission before modifying or discontinuing the Project unless there is a safety or reliability consideration, and any such notice should include a complete detailed discussion of the need for modification or discontinuance. The notice should also be provided to Project participants.

IT IS FURTHER ORDERED that Arizona Public Service Company file in Docket Control a revised Rate Schedule CMPW-01 Tariff in compliance with the Decision in this case within 15 days of the effective date of the Decision.

IT IS FURTHER ORDERED that this Decision shall become effective immediately.

BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION

CHAIRMAN COMMISSIONER

COMMISSIONER COMMISSIONER COMMISSIONER

IN WITNESS WHEREOF, I, ERNEST G. JOHNSON, Executive Director of the Arizona Corporation Commission, have hereunto, set my hand and caused the official seal of this Commission to be affixed at the Capitol, in the City of Phoenix, this _____day of _____, 2010.

ERNEST G. JOHNSON
EXECUTIVE DIRECTOR

DISSENT: _____

DISSENT: _____

SMO:JJP:lhm\MAS

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