



0000116141

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28

BEFORE THE ARIZONA CORPORATION COMMISSION

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

Arizona Corporation Commission

DOCKETED

AUG 10 2010

DOCKETED BY	ne
-------------	----

IN THE MATTER OF TUCSON ELECTRIC
POWER COMPANY'S APPLICATION FOR
APPROVAL OF ITS RENEWABLE
ENERGY STANDARD AND TARIFF
IMPLEMENTATION PLAN - BRIGHT
TUCSON COMMUNITY SOLAR
PROGRAM

DOCKET NO. E-01933A-09-0340

DECISION NO. 71835

ORDER

Open Meeting
July 27 and 28, 2010
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

1. Tucson Electric Power Company ("TEP" or "Company") is certificated to provide electric service as a public service corporation in the State of Arizona.

Background

2. On July 1, 2009, TEP filed its application for approval of its 2010 Implementation Plan ("Plan") pursuant to the Renewable Energy Standard and Tariff ("REST") Rules. On September 18, 2009, TEP supplemented its Plan with the addition of proposed renewable projects, and Purchased Power Agreements ("PPAs"). The Supplemental filing included the proposed Bright Tucson Community Solar Program ("Program"), through which customers could purchase blocks of solar energy from TEP-owned photovoltaic ("PV") solar generating facilities. On February 26, 2010, TEP further supplemented its Plan with an amended funding plan for some projects including a 1.6 MW single-axis tracking PV facility at the Tucson Airport which would

1 provide solar energy for the first phase of the Program. Funding for the proposed 1.6 MW facility
2 was approved by the Commission under Decision No. 71702 on May 17, 2010.

3 3. Although the Commission has previously approved the funding for the first PV
4 generating facility for the Bright Tucson Community Solar Program, the proposed tariffs and
5 associated protocols were not addressed at that time. Those aspects of the Program are being
6 addressed in this document.

7 **Community Solar Concepts**

8 4. Community solar programs are designed to enable participation in renewable
9 energy programs by groups or individuals who are typically unable to participate in traditional
10 options to utilize solar energy. Renters and other persons in multi-unit buildings often are
11 precluded from participation in renewable energy programs because they lack the ownership
12 control of their dwelling's rooftop. Homeowners with shaded or small roofs are also frequently
13 unable to participate in renewable energy programs due to the physical limitations of their
14 rooftops. Community solar programs attempt to address these issues so that a larger community of
15 persons can invest in "greening" their energy supply.

16 **The Bright Tucson Community Solar Program**

17 11. The Bright Tucson Community Solar Program seeks to provide customers with
18 greater accessibility to solar distributed energy that does not require the customer to invest in a
19 self-owned system, thereby avoiding large up-front costs and requiring a long-term commitment.
20 TEP states that this program would reduce economic and other feasibility barriers to solar energy
21 for thousands of customers and would assist the Company in meeting the DE component of its
22 REST requirements.

23 12. TEP believes this Program would simulate a customer-owned PV array by
24 providing a hedge against future energy price increases. There would be no up-front capital
25 expenditure required by the customer, nor a long-term commitment (i.e. customers may cancel
26 participation in the program at any time, with no penalty). Other potential benefits of TEP-owned
27 or -controlled facilities would include economies of scale and associated volume discounts,
28 placement of generation resources where they will benefit the distribution system the most, and

1 investment tax credits and accelerated tax depreciation, reducing revenue requirements. TEP
2 states that the Program will allow easier project financing supported by the Company's balance
3 sheet and an increased certainty that projects will actually be developed.

4 13. The Program would consist of two primary elements: one or more solar PV power
5 plants and a fixed price tariff. TEP anticipates that the generation facilities would be ground-
6 mounted solar PV systems, either TEP-constructed and owned or PPAs for solar energy from
7 private developers who own the facilities. These solar power plants would be on the order of 2
8 MW to 4 MW in size and would be sited around TEP's service area with their energy production
9 connected to TEP's distribution system. The first phase of the Program would be the 1.6 MW
10 Solar PV facility at the Tucson Airport as mentioned above, owned by TEP. Subsequent phases
11 would utilize PPAs with yet-to-be-named developers, potentially in conjunction with shortlisted
12 proposals from the Solar RFP issued September 11, 2009.

13 14. TEP customers may choose to participate directly in the Program by purchasing 1
14 kW blocks of solar capacity from the PV arrays. Each block of solar capacity ("Solar Block") will
15 be equal to 150 kWh (per month) of electric energy. A participating customer would switch from
16 its current tariff to a new tariff that would have a "Standard" rate and a "Solar" rate. There would
17 be a new customer tariff for each of five rate classes. The new Standard rate consists of a Delivery
18 Services-Energy Charge, a Base Power Charge, and the Purchased Power and Fuel Adjustment
19 Clause ("PPFAC") rate. These components are similar to the bundled components of TEP's
20 existing tariff rates, with the difference being that the seasonal inclining block rates of the Delivery
21 charge and the seasonal rates of the Base Power charge have been averaged into a flat fee for each
22 component.

23 15. Each new Solar rate would replace the Base Power and PPFAC components of the
24 Standard rate with a Solar Capacity Charge. The Solar Capacity Charge is the rate charged for the
25 Power Supply component for each contracted Solar Block. In setting each Solar Capacity Charge,
26 TEP achieves a 2 cent per kWh solar premium for each of the five affected rate classes. In
27 addition, the Demand Side Management ("DSM") Surcharge (Rider R-2 DSMS) and the
28 ...

1 Renewable Energy Standard and Tariff ("REST") Surcharge (REST-TS1) are not applied to the
2 Solar Blocks contracted by the customer.

3 16. In return for the 2 cent solar premium, customers would have the Solar Capacity
4 component of their bill fixed for 10 years. This 10-year period will commence at the time each
5 individual customer subscribes to the Program. The 2 cent solar premium would be returned to the
6 REST fund pool to help off-set the REST funds used to fund the deployment of the 1.6 MW solar
7 plant located at the Tucson airport and any future Program generation assets.

8 17. The cost to participate in the Program would add approximately \$3.00 per month to
9 a customer's bill for each block of energy purchased with the customer able to cancel participation
10 at any time. The proposed solar tariffs would only apply to power purchased in the 1 kW block
11 increments; power consumed over and above the block purchases would be billed at the Standard
12 rate set in the tariff for Base Power and would include the PPFAC rate, the DSM Surcharge and
13 the REST Surcharge. However, Staff notes that the DSM Surcharge and PPFAC rate should not
14 be included on the proposed RL-03-01 Solar Residential Lifeline tariff because low-income
15 customers are not subject to those charges.

16 18. TEP has proposed five new rate schedules available for the Bright Tucson
17 Community Solar Program as summarized below. Note that the column labeled "Total with Base
18 Power" reflects the rate of the proposed Standard rate while the column labeled "Total with Solar
19 Capacity Charge" reflects the proposed new tariff that incorporates the Solar Capacity Charge in
20 lieu of the Base Power component of the underlying tariff.

21 **Table 1**
22 **Bright Tucson Community Solar**
23 **Rates per kWh**

	<u>Delivery Service</u>	<u>Base Power</u>	<u>Solar Capacity Charge</u>	<u>Total with Base Power</u>	<u>Total with Solar Capacity Charge</u>
24 Residential Service	5.8663¢	3.0324¢	5.0324¢	8.8987¢	10.8987¢
25 Residential Lifeline	5.5942¢	3.0198¢	5.0198¢	8.6140¢	10.6140¢
26 General Service	8.0428¢	2.8475¢	4.8475¢	10.8903¢	12.8903¢
27 Large General Service	2.4915¢	2.9371¢	4.9371¢	5.4286¢	7.4286¢
28 Municipal Service	5.5689¢	2.9086¢	4.9086¢	8.4775¢	10.4775¢

1 19. If full blocks of purchased Community Solar energy are not used during a month,
2 excess Community Solar kWhs are rolled over to the next month. Any excess Solar Block energy
3 remaining upon termination of service would be purchased back from the customer at the Solar
4 Capacity charge. Staff has recommended that any excess Solar Block energy be purchased back
5 from the customer not only upon termination of service, but also at the time the customer
6 terminates participation in the Program. Staff has further recommended that the Program contain
7 an annual "true-up" accounting provision in October (September usage) to eliminate the possibility
8 of customers accruing an excessive credit.

9 **Renewable Energy Standard Rules**

10 20. TEP has suggested that the solar power plants developed under the Program could
11 be considered DE projects fulfilling distributed energy requirements of the REST Rules.
12 However, Staff believes that resources developed under the Program would not qualify as DE.
13 R14-2-1805(A) requires utilities to meet the Distributed Renewable Energy Requirement with
14 renewable energy credits from Distributed Renewable Energy Resources. R14-2-1802(B)
15 describes Distributed Renewable Energy Resources as applications of defined technologies "that
16 are located at a customer's premises" that displace conventional energy resources. Specifically, the
17 Program does not propose electric generation to be sited at customer premises. Further, R14-2-
18 1805(D) specifically excludes utility-owned resources from counting towards the non-residential
19 DE requirement. This exclusion was reinforced by Decision No. 71459 on APS' 2010 REST
20 Implementation Plan, which ordered that APS shall be prohibited from utilizing utility-owned
21 facilities for purposes of meeting the non-residential portion of its distributed generation
22 requirement, except for non-utility-owned wholesale generation pursuant to R14-2-1805E.

23 21. Therefore, Staff has recommended that projects constructed under the Bright
24 Tucson Community Solar Program not count towards either the residential or non-residential
25 portion of TEP's distributed energy requirement.

26 **Recommendations**

27 22. The Bright Tucson Community Solar program is similar to other Community Solar
28 programs that have been implemented by other electric utilities here in Arizona and in other states.

1 However, Staff believes that the instant Program is flawed in its reliance on the substitution of
2 multiple new solar tariffs rather than through the use of a more typical tariff rider. Specifically,
3 Staff is concerned that the non-solar portion of the proposed rates deviate from tariffs previously
4 approved by the Commission. Staff believes, however, that the goals of the program can be
5 accomplished by restructuring TEP's proposed tariffs. Therefore, Staff has recommended
6 approval of the Bright Tucson Community Solar Program with the following modifications:

- 7 a. The five proposed solar tariffs should be eliminated in favor of a single solar
8 "rider" attached to the five existing base tariffs listed on Table 1 (that shall
9 include the Delivery Service and Base Power shown in Table 1) using the 2¢
10 per kWh solar premium as the rider.
- 11 b. All adjustors, except the PPFAC and REST, shall apply to the Solar Block
12 energy purchased under the Program.
- 13 c. The Solar Capacity rates of the Bright Tucson Community Solar Program
14 tariff be fixed for 20 years to reflect the typical length of a PPA.
- 15 d. Any excess Solar Block energy shall be purchased back from the customer at
16 the time the customer terminates participation in the Program.
- 17 e. The Program shall contain an annual "true-up" accounting provision in
18 October (September usage) to eliminate the possibility of customers accruing
19 an excessive credit.

20 23. Staff further recommends that the Commission find that Program generation does
21 not count toward compliance with the distributed renewable energy requirements of the REST
22 Rules, except for non-utility-owned wholesale generation pursuant to R14-2-1805E.

23 24. Staff further recommends that the determination as to the reasonableness and
24 prudence of these Program costs be reviewed as part of Tucson Electric Power Company's next
25 rate case.

26 25. Staff further recommends that TEP indicate on the tariff that subscription to the
27 Bright Tucson Community Solar Program is based upon solar generation resources available.

28 26. Staff further recommends that TEP include in its annual REST reports information
on the amount (MW) of solar resources available for the Bright Tucson Community Solar Program
and the amount (MW) of solar resources subscribed by customers participating in the program.

1 IT IS FURTHER ORDERED that Tucson Electric Power shall file a revised Bright Tucson
2 Community Solar Program tariff in compliance with the Decision in this case within 90 days of the
3 effective date of the Decision.

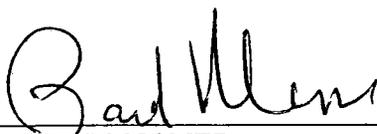
4 IT IS FURTHER ORDERED that this Order shall become effective immediately.

5
6 **BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION**

7 

8 CHAIRMAN

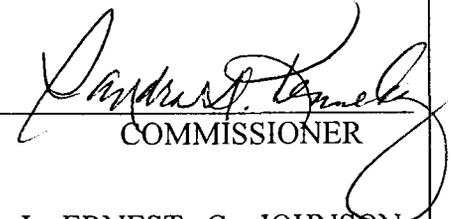
COMMISSIONER

9
10 

11 COMMISSIONER



COMMISSIONER



COMMISSIONER

12
13 IN WITNESS WHEREOF, I, ERNEST G. JOHNSON,
14 Executive Director of the Arizona Corporation Commission,
15 have hereunto, set my hand and caused the official seal of
16 this Commission to be affixed at the Capitol, in the City of
17 Phoenix, this 10th day of August, 2010.



18 ERNEST G. JOHNSON
19 EXECUTIVE DIRECTOR

20 DISSENT: _____

21
22 DISSENT: _____

23 SMO:RBL:lh\RM
24
25
26
27
28

1 SERVICE LIST FOR: Tucson Electric Power Company
2 DOCKET NO. E-01933A-09-0340

3 Mr. David Townley
4 6811 West Okanogan Place
5 Kennewick, Washington 99336

6 Mr. Adam Browning
7 300 Brannan Street, Suite 609
8 San Francisco, California 94107

9 Mr. Scott Wakefield
10 201 North Central Avenue, Suite 3300
11 Phoenix, Arizona 85004-1052

12 Daniel Haws OSJA, ATTN: ATZS-JAD
13 USA Intelligence Center and Ft. Huachuca
14 Ft. Huachuca, Arizona 85613-6000

15 Mr. Peter Nyce
16 U.S. Army Legal Services Agency
17 901 North Stuart Street - 713
18 Arlington, Virginia 22203-1837

19 Mr. Dan Neidlinger
20 Neidlinger & Assoc.
21 3020 North 17 Drive
22 Phoenix, Arizona 85015

23 Mr. Michael Patten
24 Roshka, DeWulf & Patten PLC
25 One Arizona Center
26 400 East Van Buren Street - 800
27 Phoenix, Arizona 85004

28 Mr. C. Webb Crockett
3003 North Central Avenue - 2600
Phoenix, Arizona 85012-2913

Mr. Philip Dion
UniSource Energy Corporation
One South Church Avenue, Suite 200
Tucson, Arizona 85701-1623

Mr. Steven M. Olea
Director, Utilities Division
Arizona Corporation Commission
1200 West Washington St.
Phoenix, Arizona 85007

Ms. Janice Alward
Chief Counsel, Legal Division
Arizona Corporation Commission
1200 West Washington St.
Phoenix, Arizona 85007