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BEFORE THE ARIZONA CORPORATION COMMISSION

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

Arizona Corporation Commission  
**DOCKETED**  
SEP -1 2010

DOCKETED BY	NR
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IN THE MATTER OF THE APPLICATION )  
OF TUCSON ELECTRIC POWER )  
COMPANY FOR APPROVAL OF )  
PURCHASED POWER AGREEMENTS )  
RELATED TO ITS RENEWABLE ENERGY )  
STANDARD AND TARIFF )  
IMPLEMENTATION PLAN )

DOCKET NO. E-01933A-10-0213  
DECISION NO. 71856  
ORDER

Open Meeting  
August 24 and 25, 2010  
Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

1. Tucson Electric Power Company ("TEP" or "Company") is engaged in providing electric service within portions of Arizona, pursuant to authority granted by the Arizona Corporation Commission.

2. On May 24, 2010, TEP filed for Commission approval of nine purchased power agreements ("PPAs") for renewable energy resources pursuant to the Renewable Energy Standards and Tariff ("REST") rules.

3. On Page 2 of its application, the Company listed 11 PPAs. However, the Company has indicated to Staff that the Solon PPA has been delayed. The nine PPAs TEP asks for approval on Page 1 of its application did not include the Sexton PPA. But subsequently, the Company has clarified that it is seeking approval of the Sexton PPA, resulting in a total of ten PPAs for which TEP is seeking approval.

1           4.     The ten contracts (excluding the Solon PPA) involve approximately 96 megawatts  
2 (“MW”) of solar energy, 50 MW of wind energy, and 2.2 MW of landfill gas.

3           5.     TEP indicates that these projects would enable TEP to meet and exceed its 2012  
4 REST requirement and effectively meet its 2014 REST requirement two years early.

5           6.     TEP’s application requests a finding from the Commission that the contracts were  
6 selected through a fair and competitive procurement practice. Staff believes that a full review of  
7 the procurement processes by which these contracts were selected is more appropriately dealt with  
8 in a prudency review in a future TEP general rate case. Further, TEP has indicated the desire for  
9 Commission action on this matter quickly. An evaluation of the procurement processes whereby  
10 these contracts were selected by TEP would inherently require further time for Staff to conduct,  
11 thus delaying possible approval of the contracts and construction of projects related to the  
12 contracts.

13          7.     Staff has recommended not making any finding regarding TEP’s procurement  
14 processes in this proceeding.

15          8.     While TEP’s application does not directly request a finding, TEP’s application also  
16 references Commission Decision No. 71702 (May 17, 2010) which required TEP to procure at  
17 least 3.4 MW of power from independent power producers and file proposals as part of TEP’s  
18 2011 REST implementation plan. TEP’s application states that “a favorable Commission Order  
19 here is necessary for the Company to comply with the Commission’s most recent order.” Staff  
20 believes that Decision No. 71702 is clear that this is a matter to be addressed in TEP’s 2011 REST  
21 implementation plan.

22          9.     Staff has recommended taking no action on the requirements of Decision No. 71702  
23 in this proceeding.

24          10.    The REST rules, contained in Title 14, Chapter 2, Article 18 of the Arizona  
25 Administrative Code (“A.A.C.”) require Affected Utilities, including TEP, to provide a percentage  
26 of its total retail kilowatt-hours (“kWh”) from renewable energy resources. The percentage  
27 increases from 1.25 percent in 2006 to 15 percent in 2025, gradually ramping up in intervening  
28 years. The current requirement is 2.5 percent for 2010, increasing in the following years.

11. Section R14-2-1802 defines Eligible Renewable Energy Resources (“ERERs”). Staff’s analysis will include a description of each contract and project under consideration, and will evaluate whether each contract and project is an appropriate part of TEP’s energy portfolio and is compatible with TEP’s implementation plan and meets the applicable REST requirements.

### Purchased Power Agreement Descriptions

The table below summarizes the major features of the ten contracts.

PPA	MW	MWh	Technology	Location
Sexton Energy	2.2	15,400	Bio-mass	Tangerine Landfill, north of Tucson
Amonix	1.5	4,100	Concentrating PV	University of Arizona STP
Swan Solar	12	32,500	Concentrating PV	South Swan Road, Tucson
Avalon Solar	35	64,400	Fixed PV	Marana, Arizona
First Light	5	9,900	Fixed PV	University of Arizona STP
Emcore Solar	1.5	3,400	Concentrating PV	University of Arizona STP
FSP Solar	4	10,200	Single-axis Tracking PV	University of Arizona STP
FSP Solar	12	30,700	Single-axis Tracking PV	20 miles south of Tucson
NRG Solar	25	57,800	Fixed PV	20 miles south of Tucson
Macho Springs	50	133,300	Wind	27 miles NW of Deming, NM

#### *Sexton Energy, LLC Purchased Power Agreement for 2.2 MW Landfill Gas Project*

12. This agreement was entered into on March 18, 2010, by TEP and Sexton Energy, LLC (“Sexton”). Previously in Decision Number 71640 (April 14, 2010), the Commission, in response to a filing similar to this filing, provided limited approval of a number of PPAs, including one with Phoenix Gas Producers, LLC (or DTE) for a landfill gas project sourced from the Tangerine Landfill, north of Tucson. Subsequently, Sexton was awarded the rights to the landfill gas at the Tangerine Landfill, rather than Phoenix Gas Producers, LLC. Thus, the Sexton PPA in effect replaces the previously considered PPA addressed in Decision Number 71640.

13. The Sexton agreement is for a 15-year term, commencing on the commercial operation date. The agreement does not identify the commercial operation date. TEP has indicated to Staff that it is unsure what the commercial operation date will be for this facility, but that it estimated a commercial operation date of the first quarter of 2012. The facility would be a 2.2 MW landfill gas generation facility, with a provision for the possibility of further expansion at a later date. The estimated annual generation from the facility is between 8,000 and 19,000 megawatt-hours (“MWh”). The cost per MWh to be paid by TEP was provided to Staff pursuant to a confidentiality agreement.

1           14. Staff believes that this resource falls within the definition of Landfill Gas Generator  
2 as defined in R14-2-1802.A.8.

3 *Amonix UASTP Solar Power Generation Station 1 LLC Purchased Power Agreement for 1.5 MW*  
4 *Solar Project*

5           15. This agreement was entered into on April 19, 2010 by TEP and Amonix UASTP  
6 Solar Power Generation Station 1, LLC. This agreement has a regulatory approval clause that  
7 provides that either party may terminate the agreement if the ACC does not grant approval within  
8 180 days. This agreement is for a 20-year period from the commercial operation date. The  
9 concentrating photovoltaic facility would be located at the University of Arizona's Science and  
10 Technology Park ("UASTP").

11           16. The UASTP is located at 9000 S. Rita Road in Tucson, Arizona. Under the  
12 agreement, commercial operation would be by June 30, 2011 or 12 months after receiving buyer  
13 regulatory approvals, whichever is later. A number of the PPAs in this filing involve production  
14 facilities that would be located at the UASTP. In response to a data request from Staff, TEP  
15 described the UASTP as follows: "The concept behind the UASTP was to create a single location  
16 that would contain multiple utility-scale projects representing each of the primary, commercially-  
17 available solar technologies (fixed PV, concentrating PV, single-axis tracking PV, and solar  
18 thermal (TEP's Bell IPC project from the 2008 RFP)). We have established a Public-Private  
19 partnership with the UASTP to create what TEP believes will be the preeminent solar generating  
20 and research facility in the desert southwest, allowing entities from all over the world to come to  
21 the facility and see how each of the technologies operate on a utility-scale basis."

22           17. The facility related to this PPA has an expected production capacity of 1.5 MW.  
23 The estimated annual production would be 4,100 MWh in its first year of operation and then  
24 declining by a small percentage each year thereafter. The cost per MWh to be paid by TEP was  
25 provided to Staff pursuant to a confidentiality agreement.

26           18. Staff believes that this resource falls within the definition of Solar Electric  
27 Resources as defined in R14-2-1802.A.10.

1 *Swan Solar Power Generation Station 1 LLC Purchased Power Agreement for 12 MW Solar*  
2 *Project*

3       19. This agreement was entered into on April 19, 2010 by TEP and Swan Solar Power  
4 Generation Station 1, LLC. This agreement has a regulatory approval clause that provides that  
5 either party may terminate the agreement if the ACC does not grant approval within 180 days.  
6 This agreement is for a 20-year period from the commercial operation date. The concentrating  
7 photovoltaic facility would be located at 9301 South Swan Road, Tucson, Arizona. Under the  
8 agreement, commercial operation would begin by December 31, 2012, or 18 months after  
9 receiving buyer regulatory approvals, whichever is later. Under the agreement, the facility  
10 capacity is expected to be 12 MW. The estimated production is 32,500 MWh in the first  
11 production year and then declining by a small percentage each year thereafter. The cost per MWh  
12 to be paid by TEP was provided to Staff pursuant to a confidentiality agreement.

13       20. Staff believes that this resource falls within the definition of Solar Electric  
14 Resources as defined in R14-2-1802.A.10.

15 *Avalon Solar, LLC Purchased Power Agreement for 35 MW Solar Project*

16       21. This agreement was entered into on April 19, 2010, by TEP and Avalon Solar,  
17 LLC. This agreement has a regulatory approval clause that provides that either party may  
18 terminate the agreement if the ACC does not grant approval within 180 days. This agreement is  
19 for a 20-year period from the commercial operation date. The fixed photovoltaic system would be  
20 located in Marana, Arizona. Under the agreement, commercial operation would be the latter of 15  
21 months after receiving all necessary permits or 18 months after receiving buyer regulatory  
22 approvals. The facility is expected to have a capacity of 35 MW. The estimated annual  
23 production would be 64,400 MWh. The cost per MWh to be paid by TEP was provided to Staff  
24 pursuant to a confidentiality agreement.

25       22. Staff believes that this resource falls within the definition of Solar Electric  
26 Resources as defined in R14-2-1802.A.10.

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1 *First Light, LLC Purchased Power Agreement for 5 MW Solar Project*

2 23. This agreement was entered into on April 19, 2010, by TEP and First Light, LLC.  
3 This agreement has a regulatory approval clause that provides that either party may terminate the  
4 agreement if the ACC does not grant approval within 180 days. This agreement is for a 20-year  
5 period from the commercial operation date. This fixed photovoltaic facility would be located at  
6 the UASTP. Under the agreement, commercial operation would be within 18 months after  
7 receiving buyer regulatory approvals. The facility is expected to have a capacity of 5 MW. The  
8 estimated annual production would be 9,900, MWh. The cost per MWh to be paid by TEP was  
9 provided to Staff pursuant to a confidentiality agreement.

10 24. Staff believes that this resource falls within the definition of Solar Electric  
11 Resources as defined in R14-2-1802.A.10.

12 *Emcore Solar Arizona, Inc. Purchased Power Agreement for 1.5 MW Solar Project*

13 25. This agreement was entered into on April 26, 2010, by TEP and Emcore Solar  
14 Arizona, Inc. This agreement has a regulatory approval clause that provides that either party may  
15 terminate the agreement if the ACC does not grant approval within 180 days. This agreement is  
16 for a 20-year period from the commercial operation date. The concentrating photovoltaic facility  
17 would be located at the UASTP. Under the agreement, commercial operation would be within 18  
18 months after receiving buyer regulatory approvals. The facility is expected to have a capacity of 2  
19 MW. The estimated annual production would be 3,400 MWh. The cost per MWh to be paid by  
20 TEP was provided to Staff pursuant to a confidentiality agreement.

21 26. Staff believes that this resource falls within the definition of Solar Electric  
22 Resources as defined in R14-2-1802.A.10.

23 *FSP Solar Two LLC Purchased Power Agreement for 4 MW Solar Project*

24 27. This agreement was entered into on April 16, 2010, by TEP and FSP Solar Two  
25 LLC. This agreement has a regulatory approval clause that provides that either party may  
26 terminate the agreement if the ACC does not grant approval within 180 days. This agreement is  
27 for a 20-year period from the commercial operation date. This single-axis tracking facility would  
28 be located at the UASTP. Under the agreement, commercial operation would be no later than the

1 latter of 24 months after receiving buyer regulatory approvals or the seller obtaining sight control.  
2 The facility is expected to have a capacity of 4 MW. The estimated annual production would be  
3 10,200 MWh. The cost per MWh to be paid by TEP was provided to Staff pursuant to a  
4 confidentiality agreement.

5 28. Staff believes that this resource falls within the definition of Solar Electric  
6 Resources as defined in R14-2-1802.A.10.

7 *FSP Solar One LLC Purchased Power Agreement for 12 MW Solar Project*

8 29. This agreement was entered into on April 16, 2010, by TEP and FSP Solar One  
9 LLC. This agreement has a regulatory approval clause that provides that either party may  
10 terminate the agreement if the ACC does not grant approval within 180 days. This agreement is  
11 for a 20-year period from the commercial operation date. The single-axis tracking facility would  
12 be located on degraded land at a mine property approximately 20 miles south of Tucson off of I-  
13 19. Under the agreement, commercial operation would be no later than the latter of 24 months  
14 after receiving buyer regulatory approvals or the seller obtaining sight control. The facility is  
15 expected to have a capacity of 12 MW. The estimated annual production would be 30,700 MWh.  
16 The cost per MWh to be paid by TEP was provided to Staff pursuant to a confidentiality  
17 agreement.

18 30. Staff believes that this resource falls within the definition of Solar Electric  
19 Resources as defined in R14-2-1802.A.10.

20 *NRG Solar LLC Purchased Power Agreement for 25 MW Solar Project*

21 31. This agreement was entered into on April 29, 2010, by TEP and NRG Solar LLC.  
22 This agreement has a regulatory approval clause that provides that either party may terminate the  
23 agreement if the ACC does not grant approval within 180 days. This agreement is for a 20-year  
24 period from the commercial operation date. This fixed photovoltaic facility would be located on  
25 degraded land at a mine property approximately 20 miles south of Tucson off of I-19. Under the  
26 agreement, commercial operation would be within 18 months of receiving buyer regulatory  
27 approvals. The facility is expected to have a capacity of 25 MW. The estimated annual  
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1 production would be 57,800 MWh. The cost per MWh to be paid by TEP was provided to Staff  
2 pursuant to a confidentiality agreement.

3 32. Staff believes that this resource falls within the definition of Solar Electric  
4 Resources as defined in R14-2-1802.A.10.

5 *Macho Springs Power 1 LLC Purchased Power Agreement for 50 MW Wind Project*

6 33. This agreement was entered into on April 19, 2010, by TEP and Macho Springs  
7 Power 1 LLC. This agreement has a regulatory approval clause that provides that either party may  
8 terminate the agreement if the ACC does not grant approval within 120 days. This agreement is  
9 for a 20-year period from the commercial operation date. Under the agreement, commercial  
10 operation would begin by December 31, 2011. This project involves approximately 50 MW of  
11 wind electric generation approximately 27 miles NW of Deming, New Mexico, in Sierra and Luna  
12 Counties. The facility would be in the same area as the Luna Generating Station which is partially  
13 owned by TEP. Macho Springs has requested an interconnection from El Paso Electric Company  
14 on the Luna to Springerville 345 kilovolt transmission line. TEP currently has 200 MW of  
15 transmission rights on this line and has indicated it does not anticipate any problems in delivering  
16 the wind power from this project to its service territory in Arizona. The estimated annual  
17 production would be 133,000 MWh. The cost per MWh to be paid by TEP was provided to Staff  
18 pursuant to a confidentiality agreement.

19 34. Staff believes that this resource falls within the definition of a Wind Generator as  
20 defined in R14-2-1802.A.11.

21 35. In summary, based upon available information, Staff believes all of the above  
22 contracts are reasonable means for TEP to achieve its REST targets and assist TEP in complying  
23 with its long-term REST requirements.

24 36. Specifically, Staff believes that all of the above contracts fall within the definitions  
25 contained in R14-2-1802 of Eligible Renewable Energy Resources.

26 37. Staff further believes that these contracts are compatible with TEP's 2010 REST  
27 implementation plan approved by the Commission in Decision No. 71465 (January 26, 2010).  
28 Staff's recommendations do not include approval of the contracts, their costs, or prudence.

1 **Staff Recommendations**

2 38. Staff has recommended that the Commission make the following findings regarding  
3 the contracts addressed in this proceeding:

- 4 • The contracts are an appropriate component of TEP's energy portfolio and are  
5 compatible with TEP's 2010 REST implementation plan as approved by the  
6 Commission in Decision No. 71465.
- 7 • The contracts meet the requirements for Eligible Renewable Energy Resources,  
8 pursuant to R14-2-1802.
- 9 • In any subsequent inquiry into the prudence of these contracts, the expense of  
10 renewable energy purchased resulting from these contracts should not be deemed  
11 imprudent solely because the expense is greater than for conventional generation.
- 12 • This decision is not intended to address the prudence of the contracts or their  
13 ratemaking treatment.
- 14 • This decision does not include approval of the contracts, beyond the findings  
15 contained herein.

16 39. While the Commission finds that the Company's contract with Macho Springs  
17 Power 1 LLC for 50 Megawatts of purchased wind power in New Mexico falls within the  
18 definition of wind generator as defined in R14-2-1802.A.11, and find that this project will assist  
19 TEP in meeting its REST requirements, we are also cognizant of the fact that TEP has yet to  
20 develop or purchase any wind energy from generators located within Arizona. We are interested  
21 in determining whether, in addition to the New Mexico project, TEP could procure or build a  
22 similar project in Arizona, in an effort to diversify the Company's energy portfolio. We therefore  
23 will require TEP to conduct a Request for Proposal for at least 50 Megawatts of wind power from  
24 an in-state wind generator, and file its results with the Commission for review and consideration as  
25 part of TEP's 2012 REST Implementation Plan.

26 CONCLUSIONS OF LAW

27 1. TEP is an Arizona public service corporation within the meaning of Article XV,  
28 Section 2, of the Arizona Constitution.

29 2. The Commission has jurisdiction over TEP and over the subject matter of the  
30 application.



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IT IS FURTHER ORDERED that Tucson Electric Power Company shall conduct a Request for Proposal for at least 50 Megawatts of wind power from an in-state wind generator, and file its results with the Commission for its review and consideration as part of Tucson Electric Power Company's 2012 REST Implementation Plan.

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

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



CHAIRMAN



COMMISSIONER

Commissioner Newman  
Excused

COMMISSIONER

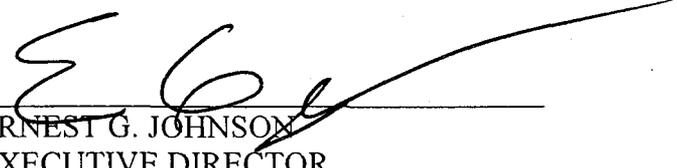


COMMISSIONER



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 31<sup>st</sup> day of August, 2010.



ERNEST G. JOHNSON  
EXECUTIVE DIRECTOR

DISSENT: \_\_\_\_\_

DISSENT: \_\_\_\_\_

SMO:RGG:lhmr\RM

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