

ORIGINAL

OPEN MEETING



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MEMORANDUM RECEIVED

Arizona Corporation Commission

2010 DEC -1 P 3: 32

DOCKETED

DEC 1 2010

AZ CORP COMMISSION
DOCKET CONTROL

TO: THE COMMISSION

FROM: Utilities Division

DATE: December 1, 2010

DOCKETED BY *[Signature]*

RE: ARIZONA PUBLIC SERVICE COMPANY – APPLICATION FOR APPROVAL OF A SOLAR ELECTRICAL SUPPLY AGREEMENT (DOCKET NO. E-01345A-10-0339)

Introduction

On August 10, 2010, Arizona Public Service Company (“APS”) filed an application for approval of a solar electrical supply agreement (“Solar Agreement”) with Luke Air Force Base (“Luke AFB”). On August 18 2010, APS waived the 30-day time clock provision referenced in Arizona Revised Statutes § 40-367. APS provided Staff with an unredacted version of the Solar Agreement under a confidentiality agreement.

Luke AFB currently purchases a majority of its electric power from APS. Luke AFB currently owns and operates two photovoltaic (“PV”) systems, for a total of 325 kilowatts (“kW”), which generate a part of its electric load. These systems have been in operation since 2007 pursuant to an Electric Supply Agreement approved by the Arizona Corporation Commission (“Commission”) in Decision No. 69416 (April 16, 2007).

Luke AFB is subject to several federal renewable energy statutes and Executive Orders that require federal agencies to use renewable energy to the extent economically feasible and technically practicable.¹ As such, Luke AFB now wishes to procure additional solar energy.

To facilitate the procurement of additional solar resources, a 15 megawatt (“MW”) solar photovoltaic (“PV”) system (“Solar System”) will be installed on the premises of the Luke AFB. The Solar System will be owned and operated by APS. Luke AFB will provide the property and improvements on the site where the Solar System will be located, in addition to all associated environmental assessments, at no direct cost to APS. First-year production of the Solar System is expected to be 35,000 MWh.

¹ 42 U.S.C. § 15852(a)(sets a requirement that, of the total amount of electric energy consumed by the Federal Government, not less than 5 percent must be renewable in fiscal years 2010 through 2012); 10 U.S.C. § 2911 (sets a goal for the Department of Defense to produce or procure not less than 25 percent of facility energy during 2025 from renewable energy sources); Exec. Order No. 13423 (Jan. 24, 2007)(sets Federal energy and environmental management requirements to reduce energy intensity, increase use of renewable energy, reduce water intensity, design and operate sustainable buildings and manage federal fleets); Exec. Order No. 13514 (Oct. 5, 2009)(expands upon the energy reduction and environmental performance requirements of Exec. Order No. 13423).

Despite being located on customer premises, because the Solar System will be owned by APS and the energy is not directly used by Luke AFB but rather, is connected to APS' grid on the utility side of the meter, the output of the Solar System will not count as distributed energy for purposes of APS' compliance with Arizona Administrative Code ("A.A.C.") R14-2-1805. The output of the Solar System will, however, contribute to APS' overall renewable energy requirement as detailed in A.A.C. R14-2-1804. [REDACTED]

The Solar Agreement

The Solar Agreement was entered into by APS and Luke AFB on August 9, 2010 and remains in effect for 10 years, with both parties' obligations under the Agreement commencing once all applicable environmental reviews have been completed and addressed. The Solar Agreement will remain in effect for subsequent terms of 10 years, unless terminated by Luke AFB according to the terms of the Agreement, but for no longer than the useful life of the Solar System. APS retains the sole discretion to determine the useful life of the Solar System.

Luke AFB is currently served by APS under Rate Schedule E-34, Extra Large General Service, which is not time-differentiated. In accordance with the terms of the Solar Agreement, a Solar Energy Charge will be applied only to the metered production of the Solar System, in lieu of the applicable fuel charge, which consists of the Rate Schedule E-34 Generation Charge and the Power Supply Adjustment factor in Adjustment Schedule PSA-1, and will appear as a separate line item on Luke AFB's monthly bill.

The Solar Energy Charge is a fixed charge and is based on APS' current rates. The Solar Energy Charge consists of the Rate Schedule E-34 Generation Charge of \$0.0401/kWh, the Power Supply Adjustment factor in Adjustment Schedule PSA-1 of -\$0.00449/kWh, and a "solar adder" [REDACTED], which is a negotiated value, using the Green Premium rate in GPS-1, GPS-2 and GPS-3 as a benchmark. This Solar Energy Charge will remain the same amount for the term of the Agreement, regardless of any future changes to the above rate schedules.

The renewable energy sold to Luke AFB under the Solar Agreement will be treated as "energy-only" for purposes of monthly billings and will be counted as a reduction against consumption only, not serving to reduce Luke AFB's billing demand. All other charges and provisions under Rate Schedule E-34 and any applicable adjustor Rate Schedule, including any new, non-emissions-related adjustor, will continue to apply. Electricity required by Luke AFB, net of the solar provided or currently installed, will continue to be charged according to Rate Schedule E-34 pursuant to the Original Agreement.

In determining the economic impact of this project on Luke AFB, APS makes certain assumptions regarding fuel costs, based on historical information, and the annual output of the Solar System. Based on these assumptions, over the initial 10-year term of the Solar Agreement,

APS estimates that Luke AFB will have paid APS about [REDACTED] under the proposed agreement, compared to about [REDACTED] under Rate Schedule E-34, making the Solar Agreement economical for Luke AFB.

APS' Agreement with SunPower Corporation Systems

APS has executed an Agreement for Engineering, Procurement, and Construction with SunPower Corporation Systems ("SunPower") for all services necessary to engineer, design, procure, construct, install, test and commission the Solar System. Although Commission approval is not required for the construction agreement, the obligations of APS and SunPower are expressly conditioned upon Commission approval of the Solar Agreement between APS and Luke AFB.

The AZ Sun Program

The Solar System at Luke AFB is the first project proposed under APS' AZ Sun Program.² As described in APS' 2010 REST Implementation Plan, the AZ Sun Program supports an investment of \$500 million of capital to develop 100 MWs of utility-owned solar generation facilities, based on an estimated solar PV capital cost of \$5.00 per watt, beginning in 2010 through 2014, with APS anticipating development of approximately 25 MWs a year. In Decision No. 71502 (March 17, 2010), the Commission approved APS' request to develop 100 MW of utility-owned solar generation through the AZ Sun Program. As part of the implementation of the AZ Sun Program, APS states that it anticipates utility-scale PV installations to range in size from 10 MW to 25 MW.

The contract between APS and SunPower provides competitive pricing, terms and conditions when evaluated with other proposals for similarly sized projects scheduled for installation beginning in 2011. In addition, the proposed contract reflects a cost per installed watt that is consistent with the price budgeted by APS for AZ Sun Program projects and authorized by the Commission in Decision No. 71502.

Decision No. 71502 also authorized the Company to develop the first 50 MW and recover the revenue requirements associated with these installations through the RES adjustor until such time as it can either be incorporated into APS' base rates or recovered through an alternate mechanism. This project is the first 15 MWs proposed as part of the AZ Sun Program.

² See Decision No. 71502 (March 17, 2010). The AZ Sun Program was approved in a Decision subsequent to approval of APS' 2010 REST Implementation Plan as Staff required more time to thoroughly analyze the issues related to the Program.

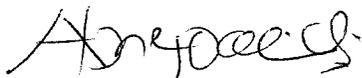
As such, the revenue requirement associated with the 15 MW Solar System at Luke AFB will be recovered through the RES adjustor as discussed in APS' 2011 REST Implementation Plan (Docket No. E-01345A-10-0262).³

Fair Value Implications

Staff has also analyzed this application in terms of whether there were fair value implications. In Decision No. 71448, issued on December 30, 2009, the Commission determined the fair value of APS' jurisdictional rate base to be \$7,665,727,000. That determination is appropriate for purposes of this analysis. Compared to APS' total revenues, any revenue impact from this agreement would be de minimus, and any impact on APS' fair value rate base and rate of return would also be de minimus.

Recommendations

Staff recommends approval of the Solar Agreement as a special contract between APS and Luke AFB.

for 
Steven M. Olea
Director
Utilities Division

SMO:LAF:lhm\SH

ORIGINATOR: Laura Furrey

³ More detailed information on the AZ Sun Program, including sample revenue requirements, operation and maintenance costs, and impacts to the RES Adjustor are included in Exhibit 3E of the Supplemental Filing to the Application of Arizona Public Service Company for Approval of its 2011 Renewable Energy Standard Implementation Plan and Distributed Energy Administrative Plan and Request for Reset of Renewable Energy Adjustor (Docket No. E-01345A-10-0262, filed October 13, 2010).

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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 THE APPLICATION)
 OF ARIZONA PUBLIC SERVICE)
 COMPANY FOR A SOLAR ELECTRICAL)
 SUPPLY AGREEMENT)

DOCKET NO. E-01345A-10-0339
 DECISION NO. _____
ORDER

Open Meeting
 December 14 and 15, 2010
 Phoenix, Arizona

BY THE COMMISSION:

FINDINGS OF FACT

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

BACKGROUND

2. On August 10, 2010, APS filed an application for approval of a solar electrical supply agreement ("Solar Agreement") with Luke Air Force Base ("Luke AFB"). On August 18 2010, APS waived the 30-day time clock provision referenced in Arizona Revised Statutes § 40-367. APS provided Staff with an unredacted version of the Solar Agreement under a confidentiality agreement.

3. Luke AFB currently purchases a majority of its electric power from APS. Luke AFB currently owns and operates two photovoltaic ("PV") systems, for a total of 325 kilowatts ("kW"), which generate a part of its electric load. These systems have been in operation since 2007 pursuant to an Electric Supply Agreement approved by the Arizona Corporation Commission ("Commission") in Decision No. 69416 (April 16, 2007).

1 4. Luke AFB is subject to several federal renewable energy statutes and Executive
2 Orders that require federal agencies to use renewable energy to the extent economically feasible
3 and technically practicable.¹ As such, Luke AFB now wishes to procure additional solar energy.

4 5. To facilitate the procurement of additional solar resources, a 15 megawatt (“MW”)
5 solar photovoltaic (“PV”) system (“Solar System”) will be installed on the premises of the Luke
6 AFB. The Solar System will be owned and operated by APS. Luke AFB will provide the property
7 and improvements on the site where the Solar System will be located, in addition to all associated
8 environmental assessments, at no direct cost to APS. First-year production of the Solar System is
9 expected to be 35,000 MWh.

10 6. Despite being located on customer premises, because the Solar System will be
11 owned by APS, the output of the Solar System will not count as distributed energy for purposes of
12 APS’ compliance with Arizona Administrative Code (“A.A.C.”) R14-2-1805. The output of the
13 Solar System will, however, contribute to APS’ overall renewable energy requirement as detailed
14 in A.A.C. R14-2-1804.

15 **THE SOLAR AGREEMENT**

16 7. The Solar Agreement was entered into by APS and Luke AFB on August 9, 2010
17 and remains in effect for 10 years, with both parties’ obligations under the Agreement
18 commencing once all applicable environmental reviews have been completed and addressed. The
19 Solar Agreement will remain in effect for subsequent terms of 10 years, unless terminated by Luke
20 AFB according to the terms of the Agreement, but for no longer than the useful life of the Solar
21 System. APS retains the sole discretion to determine the useful life of the Solar System.

22 8. Luke AFB is currently served by APS under Rate Schedule E-34, Extra Large
23 General Service, which is not time-differentiated. In accordance with the terms of the Solar
24 Agreement, a Solar Energy Charge will be applied only to the metered production of the Solar

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26 ¹ 42 U.S.C. § 15852(a) (sets a requirement that, of the total amount of electric energy consumed by the Federal
27 Government, not less than 5 percent must be renewable in fiscal years 2010 through 2012); 10 U.S.C. § 2911 (sets a
28 goal for the Department of Defense to produce or procure not less than 25 percent of facility energy during 2025 from
renewable energy sources); Exec. Order No. 13423 (Jan. 24, 2007)(sets Federal energy and environmental
management requirements to reduce energy intensity, increase use of renewable energy, reduce water intensity, design
and operate sustainable buildings and manage federal fleets); Exec. Order No. 13514 (Oct. 5, 2009) (expands upon the
energy reduction and environmental performance requirements of Exec. Order No. 13423).

1 System, in lieu of the applicable fuel charge, which consists of the Rate Schedule E-34 Generation
2 Charge and the Power Supply Adjustment factor in Adjustment Schedule PSA-1, and will appear
3 as a separate line item on Luke AFB's monthly bill.

4 9. The Solar Energy Charge is a fixed charge and is based on APS' current rates. The
5 Solar Energy Charge consists of the Rate Schedule E-34 Generation Charge of \$0.0401/kWh, the
6 Power Supply Adjustment factor in Adjustment Schedule PSA-1 of -\$0.00449/kWh, and a "solar
7 adder," which is a negotiated value, using the Green Premium rate in GPS-1, GPS-2 and GPS-3 as
8 a benchmark. This Solar Energy Charge will remain the same amount for the term of the
9 Agreement, regardless of any future changes to the above rate schedules.

10 10. The renewable energy sold to Luke AFB under the Solar Agreement will be treated
11 as "energy-only" for purposes of monthly billings and will be counted as a reduction against
12 consumption only, not serving to reduce Luke AFB's billing demand. All other charges and
13 provisions under Rate Schedule E-34 and any applicable adjustor Rate Schedule, including any
14 new, non-emissions-related adjustor, will continue to apply. Electricity required by Luke AFB, net
15 of the solar provided or currently installed, will continue to be charged according to Rate Schedule
16 E-34 pursuant to the Original Agreement.

17 11. In determining the economic impact of this project on Luke AFB, APS makes
18 certain assumptions regarding fuel costs, based on historical information, and the annual output of
19 the Solar System. Based on these assumptions, over the initial 10-year term of the Solar
20 Agreement, APS estimates that Luke AFB will spend less money on electricity utilizing the Solar
21 System than it would have otherwise under Rate Schedule E-34, making the Solar Agreement
22 economical for Luke AFB.

23 APS' AGREEMENT WITH SUNPOWER CORPORATION SYSTEMS

24 12. APS has executed an Agreement for Engineering, Procurement, and Construction
25 with SunPower Corporation Systems ("SunPower") for all services necessary to engineer, design,
26 procure, construct, install, test and commission the Solar System. Although Commission approval
27 is not required for the construction agreement, the obligations of APS and SunPower are expressly
28 conditioned upon Commission approval of the Solar Agreement between APS and Luke AFB.

1 **THE AZ SUN PROGRAM**

2 13. The Solar System at Luke AFB is the first project proposed under APS' AZ Sun
3 Program.² As described in APS' 2010 REST Implementation Plan, the AZ Sun Program supports
4 an investment of \$500 million of capital to develop 100 MWs of utility-owned solar generation
5 facilities, based on an estimated solar PV capital cost of \$5.00 per watt, beginning in 2010 through
6 2014, with APS anticipating development of approximately 25 MWs a year. In Decision No.
7 71502 (March 17, 2010), the Commission approved APS' request to develop 100 MW of utility-
8 owned solar generation through the AZ Sun Program. As part of the implementation of the AZ Sun
9 Program, APS states that it anticipates utility-scale PV installations to range in size from 10 MW
10 to 25 MW.

11 14. The contract between APS and SunPower provides competitive pricing, terms and
12 conditions when evaluated with other proposals for similarly sized projects scheduled for
13 installation beginning in 2011. In addition, the proposed contract reflects a cost per installed watt
14 that is consistent with the price budgeted by APS for AZ Sun Program projects and authorized by
15 the Commission in Decision No. 71502.

16 15. Decision No. 71502 also authorized the Company to develop the first 50 MW and
17 recover the revenue requirements associated with these installations through the RES adjustor until
18 such time as it can either be incorporated into APS' base rates or recovered through an alternate
19 mechanism. This project is the first 15 MWs proposed as part of the AZ Sun Program. As such,
20 the revenue requirement associated with the 15 MW Solar System at Luke AFB will be recovered
21 through the RES adjustor as discussed in APS' 2011 REST Implementation Plan (Docket No.
22 E-01345A-10-0262).³

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25 ² See Decision No. 71502 (March 17, 2010). The AZ Sun Program was approved in a Decision subsequent to approval
26 of APS' 2010 REST Implementation Plan as Staff required more time to thoroughly analyze the issues related to the
Program.

27 ³ More detailed information on the AZ Sun Program, including sample revenue requirements, operation and
28 maintenance costs, and impacts to the RES Adjustor are included in Exhibit 3E of the Supplemental Filing to the
Application of Arizona Public Service Company for Approval of its 2011 Renewable Energy Standard Implementation
Plan and Distributed Energy Administrative Plan and Request for Reset of Renewable Energy Adjustor (Docket No.
E-01345A-10-0262, filed October 13, 2010).

1 **FAIR VALUE IMPLICATIONS**

2 16. Staff has also analyzed this application in terms of whether there were fair value
3 implications. In Decision No. 71448, issued on December 30, 2009, the Commission determined
4 the fair value of APS' jurisdictional rate base to be \$7,665,727,000. That determination is
5 appropriate for purposes of this analysis. Compared to APS' total revenues, any revenue impact
6 from this agreement would be de minimus, and any impact on APS' fair value rate base and rate of
7 return would also be de minimus.

8 **RECOMMENDATIONS**

9 17. Staff has recommended approval of the Solar Agreement as a special contract
10 between APS and Luke AFB, as discussed herein.

11 **CONCLUSIONS OF LAW**

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

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

16 3. The Commission, having reviewed the application and Staff's Memorandum dated
17 December 1, 2010 concludes that it is in the public interest to approve the application as discussed
18 herein.

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ORDER

IT IS THEREFORE ORDERED that Arizona Public Service Company's Solar Electric Supply Agreement with Luke Air Force Base be and hereby is approved, as discussed herein.

IT IS FURTHER ORDERED that this Order 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:LAF:lhms\SH

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