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Jason Musgrove  
Regulatory Services Analyst  
4350 East Irvington Road  
Mailstop OH122  
PO Box 711, Tucson, Arizona 85702  
(520) 745-3432 Office  
(520) 571-4106 Fax  
jmusgrove@tucsonelectric.com

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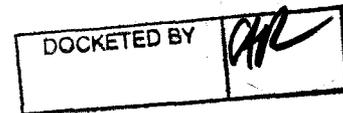


March 31, 2005

Docket Control  
Utilities Division  
ARIZONA CORPORATION COMMISSION  
1200 West Washington Street  
Phoenix, AZ 85007

Arizona Corporation Commission  
**DOCKETED**

APR - 1 2005



Re: Environmental Portfolio Standard report as required by Decision 63364,  
Docket No. RE-00000C-00-0377

Docket Control:

Enclosed is the report for the Environmental Portfolio Standard for Decision 63364,  
Docket No. RE-00000C-00-0377, for UNS Electric, Inc (thirteen copies).  
If you have questions or comments please contact me at 520-745-3432.

Best regards

Jason Musgrove  
Regulatory Services Analyst

Enclosures

Cc: Dave Couture, UNS  
John Bulanowski, ACC

**UNS Electric, Inc.**

**2004 Annual Report on  
Environmental Portfolio Standard Programs**

**Prepared for:  
Arizona Corporation Commission**

**Prepared by:  
Bill Henry**

## EPS Activity Summary

Pursuant to the Arizona Corporation Commission (“Commission”) Order in R14-2-1618, UNS Electric, Inc., a subsidiary of UniSource Energy Services (“UNS Electric”) (formerly Citizens Communication Company, Mohave Electric Division and Santa Cruz Electric Division [“Citizens”]) presents its annual report on Environmental Portfolio Standard (“EPS”) programs for the period covering January 1, 2004 through December 31, 2004.

Based on the percentage requirements of the portfolio standard, the following chart of kWh requirements has been used to forecast the UNS Electric EPS annual renewable energy needs:

### EPS kWh Requirements

<b>Year</b>	<b>UNSE/Citizens’ Retail MWh Sales</b>	<b>EPS %</b>	<b>EPS MWh Required</b>	<b>Accumulated EPS MWh Required</b>
<b>Actual</b>				
2001	1,275,036	0.20	2,550	2,550
2002	1,136,581	0.40	4,546	7,096
2003	1,392,466	0.60	8,355	15,451
2004	1,462,633	0.80	11,701	27,152
<b>Projected</b>				
2005	1,506,512	1.00	15,065	42,217
2006	1,551,707	1.05	16,293	58,510
2007	1,598,259	1.10	17,581	76,091
2008	1,646,206	1.10	18,108	94,199
2009	1,695,593	1.10	18,652	112,851
2010	1,746,460	1.10	19,211	132,062
2011	1,798,854	1.10	19,787	151,849
2012	1,723,890	1.10	18,963	170,812
<b>Total</b>	<b>18,534,197</b>		<b>170,812</b>	<b>890,840</b>

Surcharge revenues and program expenditures applicable for 2004 are summarized in Table 1. EPS energy totals for 2004 and program to date are shown in Table 2. The energy (kWh) output from UNS Electric’s on-site photovoltaic stations is outlined in Table 3.

**Table 1**  
**Summary of EPS Programs**  
**Period from January 1, 2004 through December 31, 2004**

<b>Summary of Program Revenues</b>			
Description	Thru 12/31/03	Period 1/01/04 thru 12/31/04	Life of Program
GreenWatts Total	\$0	\$0	\$0
Renewables Surcharge Total	\$1,237,408	\$507,393	\$1,744,801
<b>Total EPS Program Revenues</b>	<b>\$1,237,408</b>	<b>\$507,393</b>	<b>\$1,744,801</b>
<b>Summary of Program Expenditures</b>			
Solar Electric	\$164	\$0	\$0
Landfill Gas	\$200,000	\$117,000	\$317,000
SunShare Employee Training	\$0	\$515	\$515
TEP Support	\$0	\$9,487	\$9,487
Marketing	\$0	\$0	\$0
Hardware Buydown Program - Option 3	\$0	\$4,500	\$0
<b>Total EPS Renewables Expenditures</b>	<b>\$200,164</b>	<b>\$131,502</b>	<b>\$331,666</b>
<b>Program Balance</b>			
	\$1,037,244	\$375,891	\$1,413,135

**Table 2**  
**Summary of EPS Energy Totals**  
**Period from January 1, 2004 through December 31, 2004**

Portfolio MWh Required – 2004	11,701
Portfolio Solar MWh Generated – 2004	19.96
Portfolio “Other” MWh Purchased – 2004	4,680
Annual MWh Surplus (Deficit) - 2004	-7,001
2004 EPS Annual Renewable Energy Percentage Met	<b>41.68%</b>
Total Program EPS MWh Requirements To Date:	27,152
Total Solar EPS MWh Generated To Date:	284
Total “Other” Credits MWh To Date :	12,680
EPS Total Program MWh To Date:	12,964
Program MWh Surplus (Deficit) – To Date	-14,188
To Date EPS Annual Renewable Energy Percentage Met	<b>47.75%</b>
Surplus “Other” EPS Credits for use in Future Years - MWh	1,819
Surplus Solar EPS Credits for use in Future Years - MWh	<b>0</b>

**Table 3**

**EPS Solar Energy Production  
Period from January 1, 2004 through December 31, 2004**

Meter #	Lake Havasu City		Kingman		Totals
	66567 kWh	65616 kWh	66566 kWh	65615 kWh	
Jan-04	312	260	N/R	140	712
Feb-04	266	220	N/R	170	656
Mar-04	330	270	N/R	N/R	600
Apr-04	463	370	N/R	N/R	833
May-04	571	460	N/R	N/R	1,031
Jun-04	532	440	N/R	N/R	972
Jul-04	530	420	N/R	N/R	950
Aug-04	513	410	N/R	N/R	923
Sep-04	937	750	N/R	N/R	1,687
Oct-04	328	260	N/R	N/R	588
Nov-04	287	230	N/R	N/R	517
Dec-04	279	230	N/R	N/R	509
	5,348	4,320	0	310	9,978

Total actual kWh generated for the year:

9,978 \* 2.0 multiplier (early installation, in-state credits, distributed generation) = 19,956 kWh

**Cumulative Solar kWh generated:**

Year	kWh	Multipliers .5 Early Installation .5 In-State Installation .5 Distributed Generation	Total EPS kWh
1998	19,000	2.5	47,500
1999	19,000	2.5	47,500
2000	19,000	2.5	47,500
2001	19,000	2.5	47,500
2002	19,400	2.5	47,500
2003	13,333	2.0 (Early Install Multiplier Ended)	26,700
2004	9,978	2.0	19,956
Total			284,156

## SOLAR PROJECTS TO DATE

Two solar projects were initiated in 1997. The two systems installed by Citizens were part of a pilot project undertaken in partnership with a TEAM-UP utility working group. The group received funds from the federal Department of Energy through a partnering program with the Utility PhotoVoltaic Group.

This solar project includes two sites:

### Lake Havasu City:

- 2 Systems
- Each system comprised of 12 panels for a total of 24 panels
- Site output is approximately 4 kW
- Grid connected (no battery storage)

### Kingman:

- 2 systems
- One system is comprised of 72 panels, the other has 90 for a total of 162 panels
- Site output is approximately 10 kW
- Grid connected (no battery storage)

In addition, to further meet the EPS requirements, UNS Electric purchased 8,000 MWh of Landfill gas credits from TEP, issued under EPS Credit Certificate No. TEP/UNSE - 001. With this purchase, UNS Electric will carry a slight credit surplus of about 280 MWh of "Other" credits into 2004.

UNS Electric submitted for approval of the Commission three new renewable energy program offerings. The SunShare and GreenWatts programs and a net metering tariff were approved in August 2004. As of December 31, 2004 there were two customers participating in SunShare with a total installed capacity of 4 kW, three customers participating in net metering and no customers enrolled in the GreenWatts program.

UNS Electric is currently performing preliminary wind survey tower siting work as well as working with customers and solar installers to increase the participation in the SunShare program.

UNS Electric will develop further plans for renewable energy development after the new EPS rules are approved by the Commission. That approval is expected in late 2005.