

P.O. Box 711  
Tucson, Arizona 85702-0711



RECEIVED

April 1, 2013

APR 01 2013

AZ CORP COM  
Director - Utilities

Docket Control  
Arizona Corporation Commission  
1200 West Washington Street  
Phoenix, AZ 85007

Re: Notice of Filing - UNS Electric, Inc.'s 2013 REST Compliance Report  
Docket No. E-04204A-11-0267

Pursuant to Arizona Administrative Code R14-2-1812, each Affected Utility shall file with Docket Control a report that describes its compliance with the requirements of the Renewable Energy Standard and Tariff ("REST") Rules. Arizona Corporation Commission Decision No. 72738 (January 18, 2012) approved UNS Electric, Inc.'s ("UNS Electric") 2012 REST Plan. Please find enclosed UNS Electric's 2013 REST Compliance Report for year-end 2012. The report contains confidential information that is being provided directly to Commission Staff pursuant to the terms of the Protective Agreement executed in Docket No. E-04204A-11-0267.

If you have questions or comments please contact me at (520) 884-3680.

Sincerely,

A handwritten signature in black ink that reads "Jessica Bryne". The signature is written in a cursive style.

Jessica Bryne  
Regulatory Services

Enclosure: Compliance Report

cc: Compliance Section, ACC





**UNS ELECTRIC, INC.**

**Response to R14-2-1812 Utility Reporting Requirements  
of the  
Arizona Corporation Commission**

---

**RENEWABLES DATA  
FOR  
YEAR-END 2012**

---

# Executive Summary

## I. Standardized Reporting Format

Arizona Corporation Commission (“Commission”) Decision No. 72738 January 18, 2012 required UNS Electric, Inc. (“UNSE” or “Company”) to submit a report for Commission Staff approval on the Company’s joint RES plan formatting efforts with Arizona Public Service (“APS”) Tucson Electric Power Company (“TEP”) and in consultation with other state utility representatives and industry stakeholders. On February 19, 2013, Commission Staff docketed its formal approval of the group’s standardized reporting format for use in subsequent RES Compliance Reports and Implementation Plans.

## II. 2012 Renewable Energy Standard (RES) Results

### A. Compliance with RES Requirements

For calendar year 2012, the Commission established an annual RES requirement of 3.5 percent of the utility’s 2012 retail kilowatt-hour (“kWh”) sales, with 30 percent of the total requirement to be fulfilled with energy produced from Distributed Generation (“DG”) resources. This separate DG carve-out provision requires half of the total DG requirement to come from residential resources and half from non-residential resources. A summary of UNSE’s 2012 compliance requirements is shown in Table 1a. For the purposes of RES compliance tracking, a Renewable Energy Credit (“REC”) is defined as a kWh or kWh equivalent of eligible renewable resources; however, throughout this Compliance Report, UNSE reports its production in MWh. *See* A.A.C. R14-2-1801(N).

Table 1b (see page 4) shows UNSE compliance and total RES resources. In 2012, the Company’s total RES resources were 72,698 MWh, which is 4.14 percent of UNSE’s total 2012 retail sales requirement. Total DG energy production for the year reached 29,235 MWh. Total Residential performance was 141 percent of the requirement for 2012 and Non-Residential was 177 percent of the Non-Residential requirement.

**Compliance Report - Energy**  
**Table 1a - Renewable Resources**

**UNS Electric, Inc.**

Resource	Technology	Ownership	MWac <sup>1</sup>	MWdc <sup>1</sup>	Production (Actual) kWh	+	Production (Annualized) <sup>2</sup>	+	Multiplier Credits	=	Total kWh or Equivalent
Purchased Power Agreements											
Western Wind	Wind	PPA	10.500		23,613,092		23,613,092		1.000		23,613,092
Black Mountain Generating Station	PV	PPA		9.870	1,377,540		17,766,000		1.000		17,766,000
Total UNSE Owned	PV	UNSE		1.220	2,142,509		2,142,509		1.000		2,142,509
Manufacturing Credit	Manufacturing	UNSE		0.815					2,190.000		1,785,316
<i>Gross Total (if needed)</i>					27,133,141		43,521,601				45,306,917
<i>Adjustments (if needed)</i>											(1,843,318)
<b>Subtotal Generation</b>					<b>27,133,141</b>		<b>43,521,601</b>				<b>43,463,599</b>
<b>DISTRIBUTED ENERGY (DE):</b>											
<i>Residential:</i>											
PV	PV	Customer/Lease		6.851	9,793,168		11,989,250		1.000		11,989,250
H2O	Water Heating	Customer					416,000		1.000		416,000
Wind	Wind	Customer	0.300		206,264		206,264		1.000		206,264
Reserved	PV	Customer/Lease		0.164			286,388		1.000		286,388
<i>Gross Total (if needed)</i>					9,999,432		12,897,902				12,897,902
<i>Adjustments (if needed)</i>											
Extra Credits <sup>4</sup>											
In-State Manufacturing and Installation Content											8,548
In-State Power Plant Installation Credit											28,494
Distributed Generation Credit											28,494
<b>Subtotal Residential</b>					<b>9,999,432</b>		<b>12,897,902</b>				<b>12,963,438</b>
<i>Non-Residential:</i>											
PV	PV	Customer/Lease		4.218	6,344,477		7,381,500				7,381,500
H2O	Water Heating	Customer					352,362				352,362
Reserved PV	PV						6,287,956				6,287,956
Total Pool Heating	Pool Heating	Customer					400,000				400,000
Total Wind	Wind Turbine	Customer	0.010				6,216				6,216
Wholesale 10% of DG requirements											1,843,318
<i>Gross Total (if needed)</i>					6,344,477		14,428,034		-		16,271,352
<i>Adjustments (if needed)</i>											
<b>Subtotal Non-Residential</b>					<b>6,344,477</b>		<b>14,428,034</b>		-		<b>16,271,352</b>
<b>Subtotal Distributed Energy (B + C)</b>					<b>16,343,909</b>		<b>27,325,936</b>		-		<b>29,234,790</b>
<b>Total RES Resources (A + D)</b>					<b>43,477,050</b>		<b>40,223,837</b>		-		<b>72,698,389</b>
<b>Total MWac equivalent<sup>3</sup></b>											

**Notes to Table 1:**

<sup>1</sup> Generation capacity is generally reported in MWac and DE is generally reported in MWdc.

<sup>2</sup> Assumes 1,750 kWh per installed kW for non-metered or current year installed residential PV systems, and 1,750 kWh per installed kW for similar non-residential systems.

<sup>3</sup> Represents the total RES portfolio capacity in MWac. An 85% dc-ac conversion factor is applied to all dc capacity.

<sup>4</sup> Extra Credit Multipliers

Early Installation Extra Credit: Installed and Began Operating in

2001	0.3
2002	0.2
2003	0.1

In-State Power Plant Extra Credit (1997-2005)

In-State Manufacturing and Installation Content (1997-2005)

DE Solar Electric Generator and Solar Incentive Program (1997-2005)

**Table 1b - Compliance Summary**

Category	Metric	%	Compliance Measure (MWh)	RES Resources (MWh or Equivalent)	
Retail Sales	Actual MWh Sales for 2012		1,755,541		
Prior year carrying balance <sup>1</sup>				<b>98,692.0</b>	(F)
2012 Total RES Resources [From (E) in Table 1a]					<b>72,698.4</b>
<b>(E)</b>					
2012 Total RES Requirement	% of Retail Sales	3.5%	61,444		
<b>DE Requirement</b>	% of RES Requirement	30%	18,433		
<b>DE Sub-Requirements:</b>					
Residential DE	% of DE Requirement	50%	9,217	<b>12,963</b>	(G)
Actual RECs				12,677	
Reserved RECs				286	
Non-Residential DE	% of DE Requirement	50%	9,217	<b>16,271</b>	(H)
Actual RECs				9,983	
Reserved RECs				6,288	
<b>Non-DE Target</b>	% of RES Requirement	70%	43,011	<b>142,156</b>	(I)
2012 RECs				43,464	
Carrying Balance				98,692	
Resources Used for 2012 Compliance (G + H + I)			<b>61,444</b>	<b>61,444</b>	<sup>2</sup> (J)
<b>End 2012 carrying balance (F + E - J)</b>				<b>103,372</b>	(K)
<b>Residential Carrying Balance</b>				3,460	
<b>Non-Residential Carrying Balance</b>				767	
<b>Non-DE Carrying Balance</b>				99,145	

Notes to Table 1b:

<sup>1</sup> Carrying Balance only applies to Non-DE RECs

<sup>2</sup> On March 31, 2013 UNS Electric Power (UNE) retired 61,444,000 Renewable Energy Credits towards meeting its 2012 RES requirements.

**Table 2a – RES Resource Costs**

**REDACTED**

**Table 2b - RES Cash Incentive Costs**

**UNS Electric, Inc.**

**2012 Distributed Energy Cash Incentive Program Costs**

		Up-Front Incentives				2012 Total Incentives Paid (\$)		
<i>Residential:</i>	MW	MWh	(\$/MW) <sup>1</sup>	(\$/MWh) <sup>1</sup>				
Total PV	2.384	4,172.000	\$ 1,058,410.16	\$ 604.81		\$ 2,523,249.81		
Total Water Heating		112.170		500.94		56,190.00		
<b>Subtotal: Residential</b>	<b>2.384</b>	<b>4,284.170</b>	<b>\$ 1,058,410.155</b>	<b>\$ 1,105.742</b>		<b>\$ 2,579,439.81</b>		
		Up-Front Incentives				Production-Based Incentives		2012 Total Incentives Paid (\$)
<i>Non-Residential:</i>	MW	MWh	(\$/MW) <sup>1</sup>	(\$/MWh) <sup>1</sup>	(\$/MW)	(\$/MWh)		
<b>UFI's</b>								
PV	0.485	848.750	\$ 1,008,861.86	\$ 576.49			\$ 489,298.00	
Water Heating		360.000		499.11			179,681.00	
Pool Heating		400.000		500.00			200,000.00	
<b>PBI's</b>								
PV	1.769	241.710		122.46	\$ 16,733.18	\$ 122.46	29,601.00	
<b>PBI Legacy</b>								
PV		1,105.000				67.52	74,611.00	
<b>Subtotal: Non-Residential</b>	<b>2.254</b>	<b>2,955.460</b>	<b>\$ 1,008,861.86</b>	<b>\$ 1,698.07</b>	<b>\$ 16,733.18</b>	<b>\$ 189.985</b>	<b>\$ 973,191.00</b>	
<b>Total DE Incentive Costs</b>	<b>4.638</b>	<b>7,239.6300</b>	<b>\$ 2,067,272.01</b>	<b>\$ 2,803.81</b>	<b>\$ 16,733.18</b>	<b>\$ 189.985</b>	<b>\$ 3,552,630.81</b>	

Notes to Table:

<sup>1</sup> Based on expected annual system production.

## Other Reports

<i>UNS Electric, Inc</i>	<i>2012 Budget</i> <i>REST Collections (\$)</i>	<i>2012 Budget</i> <i>Expenditures (\$)</i>
<i>To Be Recovered Through REST Charges</i>	\$ 7,673,222	
<b>REST Expenditures</b>		
<b>Purchased Renewable Energy</b>		
<i>Above Market Cost of Conventional Generation</i>		\$ 2,126,740
<i>UNSE Owned</i>		665,159
<b>Total Purchased Renewable Energy</b>		<b>2,791,899</b>
<b>Customer Sited Distributed Renewable Energy</b>		
<i>Up-Front Payments to Customers</i>		2,443,951
<i>Production Based Payments to Customers</i>		1,786,546
<i>Consumer Education and Outreach</i>		10,000
<i>Meter Reading</i>		6,250
<b>Total Customer Sited Distributed Renewable Energy</b>		<b>4,246,747</b>
<b>Information Systems Integration Costs</b>		<b>50,000</b>
<b>Technical Training</b>		
<i>Schools Programs</i>		190,000
<i>Internal and Contractor Training</i>		37,500
<b>Total Technical Training</b>		<b>227,500</b>
<b>Net Metering</b>		<b>76,070</b>
<b>Outside Coordination, Support and R&amp;D</b>		
<b>Labor and Administration</b>		
<i>Internal and External Labor</i>		252,750
<i>Materials, Fees and Supplies</i>		
<i>AZ Solar Website</i>		1,000
<b>Total Labor and Administration</b>		<b>253,750</b>
<b>Renewable Energy Balancing, Integration and Field Test</b>		
<i>Support to University Research</i>		20,000
<i>Dues</i>		7,500
<b>Total Renewable Energy Balancing, Integration and Field Test</b>		<b>27,500</b>
<b>Grand Total</b>	<b>\$ 7,673,222</b>	<b>\$ 7,673,466</b>

<b>UNS Electric, Inc</b>	<b>2012 Actual</b>	<b>2012 Actual</b>
	<b>REST Collections (\$)</b>	<b>Expenditures (\$)</b>
<b>To Be Recovered Through REST Charges</b>	<b>\$ (6,839,180)</b>	
<b>REST Expenditures</b>		
<b>Purchased Renewable Energy</b>		
<i>Above Market Cost of Conventional Generation</i>		\$ 1,732,127
<i>UNSE Owned</i>		666,696
<b>Total Purchased Renewable Energy</b>		<b>2,398,823</b>
<b>Customer Sited Distributed Renewable Energy</b>		
<i>Up-Front Payments to Customers Reserved</i>		2,381,932
<i>Production Based Payments to Customers</i>		125,495
<i>Consumer Education and Outreach</i>		6,016
<i>Meter Reading</i>		841
<b>Total Customer Sited Distributed Renewable Energy</b>		<b>2,514,284</b>
<b>Information Systems Integration Costs</b>		<b>36,417</b>
<b>Technical Training</b>		
<i>Schools Programs</i>		159,317
<i>Internal and Contractor Training</i>		7,730
<b>Total Technical Training</b>		<b>167,047</b>
<b>Net Metering</b>		<b>76,076</b>
<b>Outside Coordination, Support and R&amp;D</b>		
<b>Labor and Administration</b>		
<i>Internal and External Labor and Administration</i>		233,216
<i>Support to University Research</i>		20,000
<i>Technology Development Projects</i>		75
<b>Total Renewable Energy Balancing, Integration and Field Test</b>		<b>20,075</b>
<b>Grand Total</b>	<b>\$ (6,839,180)</b>	<b>\$ 5,445,939</b>