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April 1, 2014

Docket Control
Arizona Corporation Commission
1200 W. Washington
Phoenix, AZ 85007

ORIGINAL

RE: Arizona Public Service Company
2013 Renewable Energy Standard Annual Compliance Report
Docket Nos. E-01345A-10-0394, E-01345A-12-0290, E-01933A-12-0296 and
E-04204A-12-0297

Pursuant to Arizona Administrative Code R14-2-1812(A), Arizona Public Service Company ("APS" or "Company") is required to file an annual report detailing its compliance with the Renewable Energy Standard ("RES") rules:

Beginning April 1, 2007, and every April 1st thereafter, each Affected Utility shall file with Docket Control a report that describes its compliance with the requirements of these rules for the previous calendar year. The Affected Utility shall also transmit to the Director of the Utilities Division an electronic copy of this report that is suitable for posting on the Commission's website.

Pursuant to Commission Decision No. 72022, APS is also required to submit a summary of the RES Compliance Report and a Power Point presentation.

Attached please find the Company's 2013 RES Compliance Report, Report Summary, and Power Point presentation. Competitively confidential information contained in the Report will be submitted to Staff under separate cover. An electronic copy of the RES Compliance Report suitable for posting to the Commission website is also being provided to Commission Staff's Utilities Division Director. Excel work papers will be submitted to Staff under separate cover.

If you have any questions regarding this information, please contact Gregory Bernosky at (602)250-4849.

Sincerely,

Lisa Malagon

LM/cd
Attachment

cc: Steve Olea (w/CD containing Report)
Terri Ford
Ray Williamson
Brian Bozzo

Arizona Corporation Commission
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aps

**2013 RENEWABLE ENERGY STANDARD
COMPLIANCE REPORT**

April 1, 2014

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I. 2013 Renewable Energy Standard (RES) Results

For calendar year 2013, the Arizona Corporation Commission (Commission) established an annual RES requirement of 4 percent of the utility's 2013 retail kilowatt-hour (kWh) sales to come from renewable resources, with 30 percent of the total requirement to be fulfilled with energy produced from Distributed Energy (DE) sources. This separate DE carve-out provision requires half of the total DE requirement to come from residential sources and half from non-residential sources. A summary of APS's 2013 compliance is shown in Table 1a. Under current rules, compliance to the RES is measured using Renewable Energy Credits. For the purposes of RES compliance tracking, a REC is defined as the environmental attributes associated with a kWh derived from eligible renewable resources or the kWh equivalent of conventional resources displaced by distributed resources¹; however, throughout the Compliance Report APS discloses its production in megawatt-hours (MWh).

Table 1a below demonstrates APS compliance with its 2013 requirements and Table 1b (see page 3) reports on total RES resources as of the end of 2013. In 2013, the Company's total RES resources were 1,913,285 MWh, which is **6.8 percent** of APS's total 2013 retail sales. Total DE energy production for the year reached 696,375 MWh. Total Residential performance was **165 percent** of the requirement for 2013 and Non-Residential performance was **248 percent** of the requirement.

Table 1a - Compliance Summary

Category	Metric	%	Compliance Measure (MWh)	RES Resources (MWh or Equivalent)	
Retail Sales	Actual MWh Sales for 2013		28,127,133		
Prior year carrying balance ¹				954,778	(F)
2013 Total RES Resources [From (E) in Table 1b]				1,913,285	(E)
2013 Total RES Requirement	% of Retail Sales	4.0%	1,125,085		
DE Requirement	% of RES Requirement	30%	337,526		
<i>DE Sub-Requirements:</i>					
Residential DE	% of DE Requirement	50%	168,763	278,161	(G)
Non-Residential DE	% of DE Requirement	50%	168,763	418,214	(H)
Non-DE Target ²				428,711	(I)
Resources Used for 2013 Compliance: ((G)+(H)+(I))				1,125,085	(J)
End 2013 carrying balance ((E)-(J))				1,742,977	(K)

Notes to Table 1a:

¹The RES-eligible resource carrying balance is accounted for using First-In-First-Out (FIFO) methodology, wherein the entire carrying balance is applied to the RES requirement and the year-end carrying balance consists of current year remaining resources.

²Although there is no defined requirement for Non-DE Resources, the energy reported in this section reflects Non-DE resources applied towards the overall RES requirement

NOTE: Columns, rows, and calculations may not total due to rounding.

¹ A.A.C. R14-2-1801(N).

Additionally, the Company's 2009 Rate Case Settlement Agreement (2009 Settlement)² adopted provisions that exceed the requirements of the RES. The 2009 Settlement required APS to, among other provisions, acquire energy resources with annual generation or savings of 1,700,000 MWh to be in service by December 31, 2015. It further states that the new resources are to be in addition to existing resources or commitments as of the end of 2008.

B. Installed Resources

An overview of APS's total installed portfolio as of the end of 2013 is provided in Table 1b. The table includes projects installed to-date from prior calendar years, accounting adjustments for RES eligibility standards, including the subtraction of Green Choice sales, the expected annual production from installed DE systems, a multiplier applied to in-state solar installations completed by end of year 2005, and the inclusion of wholesale DE purchases.³

² Decision No. 71448 (December 30, 2009).

³ Resources eligible to be counted as Wholesale Distributed Generation, as defined by A.A.C. R14-2-1802, include renewable resources owned by a third party and interconnected at 69kV or lower.

Table 1b - Renewable Resources

Resource	Technology	Ownership	MWdc ¹	MWdc ²	Production (Actual) ³ + (Annualized) ²	Multiplier Credits ⁴	Total kWh or Equivalent
GENERATION:							
Argonne Mesa	Wind	3rd Party PPA	90		261,916		261,916
High Lonesome	Wind	3rd Party PPA	100		263,141		263,141
Perrin Ranch	Wind	3rd Party PPA	99		210,562		210,562
Snowflake White Mountain Power	Biomass	3rd Party PPA	14		53,593		53,593
Sexton (Glendale Landfill)	Landfill Gas	3rd Party PPA	3		18,161		18,161
Northwest Regional Landfill Gas	Landfill Gas	3rd Party PPA	3		24,686		24,686
Saltion Sea/CE Turbo	Geothermal	3rd Party PPA	10		54,868		54,868
Ajo	Solar PV	3rd Party PPA	4.5		10,237		10,237
Topopah	Solar PV	3rd Party PPA	15		7,718		7,718
Maricopa County	Solar PV	3rd Party PPA	15		95		95
Prescott	Solar PV	3rd Party PPA	10		26,709		26,709
Saddle Mountain	Solar PV	3rd Party PPA	15		39,288		39,288
AZ Sun: Chino Valley	Solar PV	APS	19		49,479		49,479
AZ Sun: Cotton Center	Solar PV	APS	17		43,658		43,658
AZ Sun: Foothills VII	Solar PV	APS	35		61,094		61,094
AZ Sun: Hyder I	Solar PV	APS	16		41,701		41,701
AZ Sun: Hyder II	Solar PV	APS	14		5,299		5,299
AZ Sun: Paloma	Solar PV	APS	17		41,614		41,614
Small Solar Projects	Solar PV	APS	4		7,607	3,804	11,411
Solaina CSP	Solar CSP	3rd Party PPA	250		141,691		141,691
Gross Total			750		1,363,117	3,804	1,366,921
Adjustments					(116,259)		(116,259)
Green Choice Sales					(33,753)		(33,753)
Wholesale DE Allocation					1,219,106	3,804	1,216,010
Subtotal Generation			750				
DISTRIBUTED ENERGY (DE):⁵							
Residential:							
UFI Installations ⁴	Various	Customer-Sided DE	126	148	756		277,405
Flagstaff Community Power Project	Solar PV	APS	0.4	0.5			756
Gross Total			127	149	756		278,161
Subtotal Residential			127	149	756		278,161
Non-Residential:							
UFI Installations ⁴	Various	Customer-Sided DE	14	16	33,619		33,619
PBI Installations ⁴	Various	Customer-Sided DE	104	123	84,501		216,447
DE RFP	Solar PV	Customer-Sided DE	38	45	69,955		75,839
Schools & Government (3rd-Party Owned)	Solar PV	Customer-Sided DE	22	26	11,924		43,480
Schools & Government (Utility-Owned)	Solar PV	Customer-Sided DE	13	15	13,257		13,257
Flagstaff Community Power Project	Solar PV	APS	0.9	1.1	1,820		1,820
Gross Total			192	226	228,902		384,462
Wholesale DE			N/A	N/A	33,753		33,753
Subtotal Non-Residential			192	226	262,655		418,214
Subtotal Distributed Energy (B+C)			319	375	263,410		696,375
Total RES Resources (A+D)			1,069		1,476,516	3,804	1,913,285
Total MWdc equivalent⁵							

Notes to Table 1b:
¹ Generation capacity is reported in MWdc and DE is generally reported in MWdc.
² Assumes an average of 1,650 kWh per installed kW for non-metered or current year installed residential PV systems, and metered average kWh per installed kW for non-residential systems, by non-residential segment.
³ Reported Distributed Energy does not include interconnect-only DE systems which did not receive an incentive through UFI or PBI programs.
⁴ Includes energy and offsets for all installations, but only notes capacity for solar electric and wind installations.
⁵ Represents the total RES portfolio capacity in MWdc. Assumes a 85% dc-ac conversion factor applied to MWdc capacity.
⁶ APS began installing production meters in February of 2013, therefore production is annualized for all non-utility-owned residential systems and all UFI commercial systems.
 NOTE: Columns, rows, and calculations may not total due to rounding.

1. Renewable Generation Resources

The Company's portfolio of Renewable Generation (RG)⁴ energy encompasses utility-scale renewable resources. Third-party owned Power Purchase Agreements (PPAs) totaling 280 MWac reached commercial operation in 2013. These generation facilities include the Tonopah solar facility (15 MWac); Maricopa County solar facility (15 MWac); and the Solana solar facility (250 MWac).

The AZ Sun Program had two additional solar PV facilities reach commercial operation in 2013. These facilities were the Hyder II solar plant (14 MWac) and the Foothills I/II solar plant (35 MWac).

In total, APS added 329 MWac of RG resources to its operating portfolio in 2013.

2. Distributed Energy Resources

In 2013, 106 MWdc of new RES-eligible, DE systems were installed (approximately 49 MWdc of residential and 57 MWdc of non-residential). A total of 7,985 RES-eligible, residential installations (6,902 PV Grid-Tied, 952 Solar Water Heating, 105 Solar Space Heating, and 26 other technologies) were completed in 2013. Among non-residential customers, 48 systems were installed using the UFI program in 2013 along with 132 non-residential PV Grid-Tied PBI installations. At the end of 2013, approximately 377 MWdc of cumulative incented DE capacity had been installed through the life of the program.

In addition, DE systems were installed in 2013 that did not receive an incentive through either the UFI or PBI programs. In 2013, 4.2 MWdc of interconnection-only DE systems were installed, which were comprised of 387 residential DE systems with a cumulative capacity of 2.7 MWdc and 27 non-residential systems with a cumulative capacity of 1.5 MWdc. To further illustrate the growth of interconnection-only DE systems, APS received over 2,700 applications for interconnection-only DE systems in 2013. The energy production from these DE systems can not currently be counted towards RES compliance.

II. 2013 RES Workplan

Each year, APS develops a total renewable energy program budget based on estimated expenses for renewable generation and distributed energy programs and projects. Revenues to offset these expenses are collected through both the RES Adjustor and base rates. Revenue collected in a prior year that has been accrued and designated to offset expenses in the current year is also available. As shown in the top section of Table 2a, total available funding in 2013 was approximately \$134 million.

The Renewable Energy Standard Adjustment Schedule (REAC-1) collects funds for the RES programs based on a per kWh charge for most customers. In 2013, the

⁴ APS defines Renewable Generation as renewable resources interconnected on the utility side of the meter. Renewable Generation resources are generally utility-scale projects and apply to the RES total production requirement.

charge that customers contribute is capped for each monthly bill at \$4.27 for residential, \$158.42 for small and medium sized non-residential customers, and \$1,000.00 for large non-residential customers with demands of 3 MW or greater, with an increase of \$200 to large non-residential customers every two months.

In Decision No. 74237, the Commission approved the application of \$21 million in prior year accrued revenue to be applied to offset 2014 budget expenses, which includes \$14 million in previous year rollover funds and \$7 million collected but unallocated funds due to the delayed in-service date for the Solana Generating Station.

**Table 2a:
2013 RES Associated Revenues and Costs**

Collected (Revenues)	
System Benefit Charge (SBC) Revenue ¹	\$ 6,000,000
Renewable Energy Adjustment Charge Revenue & Other ²	89,419,653
<i>Subtotal: 2013 Collections</i>	<u>95,419,653</u>
2012 Committed Accrual ³	15,257,607
Prior Collected and Unallocated Funds	22,849,220
<i>Subtotal: Prior Year Funds</i>	<u>38,106,827</u>
Total: Available Revenue	\$ 133,526,479
Expenses (Costs)	
<i>Energy/Incentives</i>	
Renewable Generation Purchased Power ⁴	\$ 19,414,018
Paid Distributed Energy Incentives ⁵	40,792,319
Committed Distributed Energy Incentives ⁶	6,412,455
<i>Subtotal: Energy and Incentives</i>	<u>\$ 66,618,792</u>
<i>Non-Energy Costs</i>	
Administration & Implementation	9,617,112
Information Services	720,754
Research, Commercialization & Integration	420,090
Customer Outreach and Awareness Programs	14,222
<i>Subtotal: Non-Energy Costs</i>	<u>\$ 10,772,178</u>
<i>APS Owned Program Costs</i>	
Flagstaff CPP Revenue Requirement	267,444
AZ Sun Revenue Requirement (net of PTC)	13,105,016
Schools and Government Revenue Requirement	4,422,245
<i>Subtotal: APS Owned Program Costs</i>	<u>\$ 17,794,706</u>
Total: Expenses	\$ 95,185,676
Net Balance	\$ 38,340,803
2014 RES Program Offset ⁷	\$ (21,000,000)
2015 RES Program Offset ⁷	<u>\$ (14,000,000)</u>
<i>Unallocated Balance</i>	<i>\$ 3,340,803</i>

Notes to Table 2a:

¹ Collected from base rates.

² Collected as the REAC-1 and other miscellaneous 2013 program related receipts.

³ Balance of Up-front Incentives reservations issued but not yet paid as of year-end 2012.

⁴ Includes \$20.4M in costs less \$(1M) Green Choice revenue collections.

⁵ Incentives paid in 2013 (including installations before current program year but processed for payment in 2013).

⁶ Balance of Up-front Incentives reservations issued but not yet paid as of year-end.

⁷ Unallocated funds designated to offset 2014 and 2015 budget. (per Decision No. 74237, dated January 7, 2014)

NOTE: Columns, rows, and calculations may not total due to rounding.

A. Resource Costs

Pursuant to A.A.C. R-14-2-1812(b)(5), APS is required to report on any above-market, utility-scale power purchase expenditures as well as cash incentive payments by technology. Actual costs are competitively confidential and have been redacted, but will be provided to Commission Staff pursuant to a Protective Agreement in this matter. Table 2b reflects actual 2013 expenses for projects reaching commercial operation in multiple prior years and is not reflective of current market pricing.⁵

Table 2b - RES Resource Costs¹

2013 RES-Attributable Energy Costs (Above Market - Utility Scale)			COMPETITIVELY CONFIDENTIAL ²		
Technology	MW	MWh	RES Cost (\$/MW) ²	RES Cost (\$/MWh) ²	Total RES Cost ²
Wind	289	735,619			
Biomass ³	14	53,593			
Landfill Gas	6	42,847			
Geothermal	10	54,868			
Solar PV PPA ⁴	59	84,047			
Solar CSP	250	141,691			
Solar (APS-Owned) ⁵	122	254,256			
2013 RES-Attributable Energy Costs (Above Market - Utility Scale)					\$ 18,212,333

Notes to Table 2b:

¹Includes only 2013 program year costs incurred under new and legacy projects within the RES budget and is not comparable to a true levelized cost of energy.

²Redacted due to the competitively confidential nature of the information.

³Includes gross generation, and does not adjust for Wholesale DE allocations.

⁴Does not include Purchase Power Agreements from Distributed Energy sources.

⁵Includes RES multiplier for in-state solar installations prior to December 31, 2005. APS costs are at-market and therefore not included.

NOTE: Columns, rows, and calculations may not total due to rounding.

⁵ Invoice costs do not include associated system integration costs for these resources.

Table 2c - RES Cash Incentive Costs

2013 Distributed Energy Cash Incentive Program Costs

	Up-Front Incentives				2013 Total Incentives Paid (\$)		
	MW	MWh	(\$/MW) ¹	(\$/MWh) ¹			
Residential:							
<u>Up Front Incentives</u> ^{2,3}							
Solar Electric	49	80,298	\$ 180,189	\$ 109		\$ 8,768,979	
Solar Space Heating	N/A	227		\$ 594		\$ 134,738	
Solar Water Heating	N/A	2,683		\$ 466		\$ 1,250,680	
Geothermal	N/A	726		\$ 1,238		\$ 899,570	
<i>Subtotal: Residential</i>	<i>49</i>	<i>83,934</i>				<i>\$ 11,053,967</i>	
Non-Residential:							
<u>Up Front Incentives</u> ^{2,3}							
Solar Electric	1	1,576	\$ 555,885	\$ 371		\$ 583,866	
Solar Water Heating	N/A	7		\$ 9,006		\$ 65,458	
Solar Pool Heating	N/A	771		\$ 76		\$ 58,949	
<u>Production Based Incentives</u> ⁴							
Solar Electric ⁵	193	274,970			\$ 149,711	\$ 105	\$ 28,934,212
Combined Heat & Power	0.3	3,929			\$ 7,139	\$ 1	\$ 2,084
Solar Water Heating	N/A	6,953				\$ 6	\$ 40,036
Solar HVAC	N/A	7,398				\$ 7	\$ 53,747
<i>Subtotal: Non-Residential</i>	<i>195</i>	<i>295,604</i>					<i>\$ 29,738,352</i>
Total DE Incentive Costs						\$ 40,792,319	

Notes to Table 2c:

¹Reflects 2013 incentive payments divided by associated MWh. Does not reflect full levelized cost of energy.

²Includes capacity and energy installed in calendar year 2013 (annual system production).

³Includes payments made in calendar year 2013 only.

⁴Includes annualized energy produced for installations through 2013, as well as incentive payments made in 2013. Total lifetime PBI authorization as of year end 2013 is \$771.8M.

⁵Assumes a metered average kWh per installed kW for non-residential systems, by nonresidential segment.

NOTE: Columns, rows, and calculations may not total due to rounding.

B. Residential and Non-Residential Incentive Program

DE growth continues within the APS service territory as evidenced by the high level of installed resources in 2013. High participation residential DE system volume in 2013 led to an end of the solar PV grid-tied residential UFI program in September 2013. Prior to the end of the 2013 incentive program, the solar PV grid-tied incentive level was \$0.10/watt.

Figure A

Start Date	End Date	Up-Front Incentive Level
Prior to April 2010	4/2/2010	\$3.00/watt
4/3/2010	4/12/2010	\$2.15/watt
4/13/2010	9/20/2010	\$1.95/watt
9/21/2010	1/16/2011	\$1.75/watt
1/17/2011	3/25/2011	\$1.60/watt
3/26/2011	6/10/2011	\$1.45/watt
6/10/2011	11/15/2011	\$1.00/watt
11/16/2011	1/19/2012	\$0.75/watt
1/20/2012	3/21/2012	\$0.60/watt
3/22/2012	6/12/2012	\$0.55/watt
6/13/2012	7/23/2012	\$0.50/watt
7/24/2012	11/14/2012	\$0.20/watt
11/15/2012	9/24/2013	\$0.10/watt
9/25/2013	-	None

C. Green Choice Rate Program

In 2013, APS continued its three existing Green Choice⁶ rate offerings which were approved by the Commission in Decision No. 71276 in September 2009. Participating customers pay a premium on their bills based on actual energy produced at Renewable Generation facilities that are part of the APS Green Choice portfolio. GPS-1 provides a fixed level of renewable-generated power that the customer subscribes to each month in 100 kWh blocks. GPS-2 varies month to month by customer and is based on a percentage of a customer's monthly usage. Finally, GPS-3 is a single block of renewable-generated power a customer would typically purchase so that they can market a special event as using green energy.

The revenue associated with the Green Choice rates ultimately supports the development of additional renewable resources. Green Choice sales are subtracted from total Renewable Generation, and do not count toward compliance with RES targets. All Green Choice renewable energy sold under APS's GPS-1, GPS-2, and GPS-3 rate plans are certified through Green-e, a national certification and verification program for renewable energy. In 2013, 2,488 customers subscribed to these rates for 116,259 MWh of sales and a total of \$995,499 in revenue.

⁶ Green Choice sales are subtracted from total Renewable Generation, and do not count toward compliance with RES targets.

III. Additional Reporting

- Decision No. 72022 required APS to disclose whether its affiliates, employees, or directors have any financial or other interest in a renewable energy project. Affiliates, employees, or directors have no financial or other interest in any third-party owned renewable energy project within APS's portfolio.
- Decision No. 72022 required APS to list cases within the previous three calendar years where APS has received damages or other considerations as a result of non-compliance related to RES contracts. No additional damages or other considerations were realized in 2013 as a result of non-compliance related to RES contracts. Please see APS's 2012 RES Compliance Report for any damages received in 2011 and 2012.
- Decision No. 71958 required APS to file in its annual REST reports, in the confidential materials provided to Staff, specific data associated with APS's Bagdad Solar Agreement. APS has provided this information to Commission Staff pursuant to a Protective Agreement executed in the matter.
- Decision No. 71646 required APS to provide Community Power Project - Flagstaff Pilot progress reports with its annual compliance report. APS completed the final installations associated with the Community Power Project in 2012. Updates on production and associated costs in 2013 for the Flagstaff Community Power Project can be found in Tables 1B and 2A.

Appendix

Appendix A: Schools Funded from 2009 UFI Funds – Total Production

In Decision No. 71275, APS was required to install a production meter at every school project that received an up-front incentive (UFI) pursuant to the Decision. Further, APS was required to monitor and report the actual metered production of school projects that received an up-front incentive these systems. Appendix A lists the in-service dates and 2013 actual energy production for all schools which received UFIs in 2009 as a result of this Decision. All schools installed photovoltaic (PV) systems.

In-service Date	Energy Produced in 2013 (kWh)
11/16/2010	387,778
8/26/2010	1,598,348
2/18/2011	385,072
9/27/2010	1,283,416
7/12/2010	834,677
10/22/2010	538,422
11/1/2010	220,051
11/3/2010	1,732,403
7/2/2010	229,705
8/31/2010	798,840
11/11/2010	486,974
Total kWh Production in 2013	8,495,687

For calendar year 2013, the Arizona Corporation Commission (Commission) established an annual RES requirement of 4 percent of the utility's 2013 retail kilowatt-hour (kWh) sales, a total of 1,125,085 MWh. Additionally, 30 percent of the total requirement (337,526 MWh) is to be fulfilled with energy produced from Distributed Energy (DE) resources. This separate DE carve-out provision requires half of the total DE requirement (168,763 MWh) to come from residential resources and half from non-residential resources. For the purposes of RES compliance tracking, a Renewable Energy Credit (REC) is defined as a kWh derived from eligible renewable resources or kWh equivalent of conventional resources displaced by distributed resources;¹ however, throughout the Compliance Report APS discloses its production in MWh.

Additionally, the Company's 2009 Rate Case Settlement Agreement (2009 Settlement)² adopted provisions that exceed the requirements of the RES. The 2009 Settlement required APS to, among other provisions, acquire energy resources with annual generation or savings of 1,700,000 MWh to be in service by December 31, 2015. It further states that the new resources are to be in addition to existing resources or commitments as of the end of 2008.

In 2013, the Company's total RES resources were 1,913,285 MWh, which is **6.8 percent** of APS's total 2013 retail sales. Total DE energy production for the year reached 696,375 MWh. Total Residential performance was **165 percent** of the requirement for 2013 and Non-Residential performance was **248 percent** of the requirement.

In total, APS added 329 MWac of Renewable Generation (RG)³ resources to its operating portfolio in 2013. This new capacity includes 280 MWac of facilities under third-party owned Power Purchase Agreements (PPAs) and 49 MWac of AZ Sun Program facilities.

¹ A.A.C. R14-2-1801(N).

² Decision No. 71448 (December 30, 2009).

³ APS defines Renewable Generation as renewable resources interconnected on the utility side of the meter. Renewable Generation resources are generally utility-scale projects and are applied to the RES total production requirement.

In 2013, 106 MWdc of new incented DE systems were installed (approximately 49 MWdc of residential and 57 MWdc of non-residential). At the end of 2013, approximately 377 MWdc of cumulative incented DE capacity had been installed through the life of the program.

A total of 7,985 incented residential installations (6,902 PV Grid-Tied, 952 Solar Water Heating, 105 Solar Space Heating, and 26 other technologies) were completed in 2013. Among non-residential customers, 48 systems were installed using the UFI program in 2013 along with 132 non-residential PV Grid-Tied PBI installations.

High participation residential DE system volume in 2013 led to an end of the residential solar PV grid-tied UFI program in September 2013. Prior to the end of the 2013 incentive program, the solar PV grid-tied incentive level was \$0.10/watt.

A number of DE systems were installed in 2013 that did not receive an incentive through either the UFI or PBI programs. In 2013, 4.2 MWdc of interconnection-only DE systems were installed, which were comprised of 387 residential DE systems with a cumulative capacity of 2.7 MWdc and 27 non-residential systems with a cumulative capacity of 1.5 MWdc. In total, APS received over 2,700 applications for interconnection-only DE systems in 2013, the majority of which will be installed in 2014. The energy production from these DE systems can not currently be counted towards RES compliance.

For the 2013 budget year, the Company received authorization for a total RES budget of \$103 million.⁴ After offsetting funding, the Renewable Energy Adjustment Charge was calculated to collect approximately \$86 million. Monthly caps were set at \$4.27 for residential, \$158.42 for small and medium sized non-residential customers, and \$1,000.00 for large non-residential customers with demands of 3 MW or greater, with an increase of \$200 to large non-residential customers every two months. In Decision No. 74237, the Commission approved the application of \$21 million in prior year accrued revenue to offset 2014 budget expenses, which includes \$14 million in previous year rollover funds and \$7 million collected but unallocated funds as a result of the actual in-service date for the Solana Generating Station.

⁴ Decision No. 73636 (January 31, 2013).

**Arizona Public Service Company
2013 Renewable Energy Standard
Compliance Report**

April 1, 2014



Regulatory Commitments

- Arizona's Renewable Energy Standard (RES)
 - 4 percent of APS's 2013 retail kWh sales are required to be generated from renewable resources, with 30 percent of that 4 percent coming from Distributed Energy (DE) resources
- 2009 APS Rate Case Settlement Agreement
 - Required APS to acquire an additional 1.7 GWh of renewable energy in addition to existing resources or commitments as of the end of 2008

2013 Performance vs RES Targets

- Total Renewable Energy → 1,913,285 MWh
6.8% of retail sales
- Total Distributed Energy → 696,375 MWh
206% of target
- Residential DE → 278,161 MWh
165% of target
- Non-Residential DE → 418,214 MWh
248% of target

APS is exceeding compliance with all RES requirements

New Renewable Generation

APS added 329 MWac in 2013:

- **Third-party owned Power Purchase Agreements (PPA)**
 - Tonopah Solar Facility (15 MWac)
 - Maricopa County Solar Facility (15 MWac)
 - Solana Solar Facility (250 MWac)

- **APS-owned AZ Sun Program**
 - Hyder II Solar Plant (14 MWac)
 - Foothills I/II Solar Plant (35 MWac)

New Distributed Energy

- 106 MWdc of new incented DE systems were installed in 2013
 - This results in 377 MWdc of cumulative installed DE capacity (through the life of the program)
 - About 49 MWdc of residential and 57 MWdc of non-residential incented DE capacity was installed
 - A total of 7,985 incented residential systems were installed in 2013 - 6,902 of which were solar PV grid-tied
- Over 2,700 interconnection-only (non-incentivized) applications for DE systems were received in 2013

2013 Incentive Program

- In 2013, APS paid approximately \$11 million in residential incentives and \$30 million in non-residential incentives.
- Approximately \$6 million in Up Front Incentive (UFI) commitments existed at the end of 2013 for project reservations not yet installed.