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April 1, 2015

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

RE: Arizona Public Service Company  
2014 Renewable Energy Standard Annual Compliance Report  
Docket Nos. E-01345A-13-0140 and E-01345A-14-0250

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 2014 RES Compliance Report, Report Summary, and Power Point presentation. An electronic copy of the RES Compliance Report will also be provided to Commission Staff's Utilities Division Director. Competitively confidential information contained in the Report and Excel work papers will be submitted to Staff separately.

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

Sincerely,

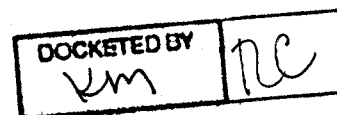
Lisa Malagon

LM/sb  
Attachment

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

Arizona Corporation Commission  
**DOCKETED**

APR 01 2015



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# **2014 RENEWABLE ENERGY STANDARD COMPLIANCE REPORT**

**April 1, 2015**

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In 2014 APS's renewable energy portfolio produced, including energy from installations for which an incentive was not provided, 2,819,880 MWh, which is **10.2 percent** of APS's 2014 retail sales. This amount is provided for informational purposes only; APS's compliance with the Renewable Energy Standard is discussed below.

## **I. 2014 Renewable Energy Standard (RES) Results**

### **A. Compliance with RES Requirements**

For calendar year 2014, the Arizona Corporation Commission (Commission) established an annual RES requirement of 4.5 percent of the utility's 2014 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 2014 compliance is shown in Table 1a. Under current rules, compliance to the RES is measured using Renewable Energy Credits (RECs). For the purposes of RES compliance tracking, a REC is defined as the environmental attributes associated with a kWh of energy derived from eligible renewable resources or the kWh equivalent of conventional resources displaced by distributed resources<sup>1</sup>; however, throughout the Compliance Report APS discloses its production in megawatt-hours (MWh).

Table 1a (see page 2) demonstrates APS compliance with its 2014 requirements and Table 1b (see page 3) reports on total RES resources as of the end of 2014. In 2014, the Company's total RES resources were 2,710,644 MWh, which is **9.8 percent** of APS's total 2014 retail sales. Total DE energy production for the year reached 761,907 MWh. Total Residential performance was **157 percent** of the requirement for 2014 and Non-Residential performance was **252 percent** of the requirement.

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<sup>1</sup> A.A.C. R14-2-1801(N).

**Table 1a - 2014 Compliance Summary**

Category	Metric	%	Compliance Measure (MWh)	RES Resources (MWh or Equivalent)	
Retail Sales	Actual MWh Sales for 2014		27,569,014		
Prior year carrying balance <sup>2</sup>				1,742,977	(I)
2014 Total RES Resources [From (H) in Table 1b]				2,710,644	(J)
2014 Total RES Requirement	% of Retail Sales	4.5%	1,240,606		
DE Requirement	% of RES Requirement	30%	372,182		
DE Sub-Requirements:					
Residential DE	% of DE Requirement	50%	186,091	292,320	(K)
Non-Residential DE	% of DE Requirement	50%	186,091	469,587	(L)
Non-DE Target				478,699	(M)
Resources Used for 2014 Compliance (K + L + M)				1,240,606	(N)
End 2014 carrying balance (I + J - N)				3,213,015	(O)

Notes to Table 1a:

<sup>2</sup>The 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.

Additionally, the Company's 2009 Rate Case Settlement Agreement (2009 Settlement)<sup>2</sup> 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 2014 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.<sup>3</sup>

<sup>2</sup> Decision No. 71448 (December 30, 2009).

<sup>3</sup> 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	MWac <sup>1</sup>	MWdc <sup>1</sup>	Production (Actual)	Production (Annualized) <sup>2</sup>	Multiplier Credits	Total MWh or Equivalent
<b>GENERATION:</b>								
<b>Non-Dispatchable Resources</b>								
Aragonne Mesa	Wind	3rd Party PPA	90		263,988			263,988
High Lonesome	Wind	3rd Party PPA	100		276,225			276,225
Perrin Ranch	Wind	3rd Party PPA	99		208,842			208,842
Ajo	Solar PV	3rd Party PPA	5		10,209			10,209
Badger 1 Solar	Solar PV	3rd Party PPA	15		40,078			40,078
Gillespie 1 Solar	Solar PV	3rd Party PPA	15		44,651			44,651
Prescott	Solar PV	3rd Party PPA	10		26,602			26,602
Saddle Mountain	Solar PV	3rd Party PPA	15		37,671			37,671
AZ Sun: Chino Valley	Solar PV	APS	19		47,090			47,090
AZ Sun: Cotton Center	Solar PV	APS	17		43,648			43,648
AZ Sun: Foothills I/II	Solar PV	APS	35		113,417			113,417
AZ Sun: Hyder I	Solar PV	APS	16		42,000			42,000
AZ Sun: Hyder II	Solar PV	APS	14		42,821			42,821
AZ Sun: Paloma	Solar PV	APS	17		40,298			40,298
AZ Sun: Gila Bend	Solar PV	APS	32		63,746			63,746
Small Solar Projects	Solar PV	APS	4		7,826		3,913	11,740
<b>Dispatchable Resources</b>								
Snowflake White Mountain Power	Biomass	3rd Party PPA	14		93,249			93,249
Sexton (Glendale Landfill)	Landfill Gas	3rd Party PPA	3		16,581			16,581
Northwest Regional Landfill Gas	Landfill Gas	3rd Party PPA	3		23,833			23,833
Salton Sea/CE Turbo	Geothermal	3rd Party PPA	10		49,714			49,714
Solana CSP	Solar CSP	3rd Party PPA	250		603,568			603,568
<b>Gross Total</b>			<b>783</b>		<b>2,096,057</b>		<b>3,913</b>	<b>2,099,971</b>
<b>Adjustments</b>								
Green Choice Sales					(114,016)			(114,016)
Wholesale DE Allocation					(37,218)			(37,218)
<b>Subtotal Generation</b>			<b>783</b>		<b>1,944,824</b>		<b>3,913</b>	<b>1,948,737</b> (A)
<b>DISTRIBUTED ENERGY (DE):</b>								
<b>Residential:</b>								
UFI Installations <sup>3</sup>	Various	Customer-Sided DE	132	155	131,476	160,079		291,556
Non Incentive Installations	Solar PV	Customer-Sided DE	46	54	3,612	86,037		89,649
Flagstaff Community Power Project	Solar PV	APS	0.4	0.5	764			764
<b>Gross Total</b>			<b>178</b>	<b>209</b>	<b>135,852</b>	<b>246,116</b>		<b>381,969</b>
<b>Subtotal Residential</b>			<b>178</b>	<b>209</b>	<b>135,852</b>	<b>246,116</b>		<b>381,969</b> (B)
<b>Non-Residential:</b>								
UFI Installations <sup>3</sup>	Various	Customer-Sided DE	14	17	11,505	28,162		39,667
PBI Installations <sup>3</sup>	Various	Customer-Sided DE	116	136	217,983	8,651		226,634
Non Incentive Installations	Solar PV	Customer-Sided DE	10	12	2,402	17,185		19,587
DE RFP <sup>4</sup>	Solar PV	Customer-Sided DE	38	45	80,010			80,010
Schools & Government (3rd-Party Owned)	Solar PV	Customer-Sided DE	36	42	40,176	20,784		60,960
Schools & Government (Utility-Owned)	Solar PV	APS	13	15	23,331			23,331
Flagstaff Community Power Project	Solar PV	APS	0.9	1.1	1,766			1,766
<b>Gross Total</b>			<b>227</b>	<b>267</b>	<b>377,174</b>	<b>74,782</b>		<b>451,956</b>
Wholesale DE					n/a	n/a		37,218
<b>Subtotal Non-Residential</b>			<b>227</b>	<b>267</b>	<b>414,392</b>	<b>74,782</b>		<b>489,174</b> (C)
<b>Subtotal Distributed Energy (B + C)</b>			<b>405</b>	<b>477</b>	<b>550,244</b>	<b>320,899</b>		<b>871,143</b> (D)
<b>Total Renewable Energy Resources (A + D)</b>					<b>2,495,068</b>	<b>320,899</b>	<b>3,913</b>	<b>2,819,880</b> (E)
<b>Total MWac equivalent<sup>5</sup></b>			<b>1,188</b>					
<b>Total Non Incentive Energy Resources</b>								
					<b>6,014</b>	<b>103,222</b>		<b>109,236</b> (F)
<b>Total Non Incentive MWac equivalent</b>			<b>56</b>					
<b>Total RES Resources<sup>6</sup> (E - F)</b>					<b>2,489,054</b>	<b>217,676</b>	<b>3,913</b>	<b>2,710,644</b> (H)
<b>Total MWac equivalent<sup>5</sup></b>			<b>1,132</b>					

Notes to Table 1b:

<sup>1</sup> Generation capacity is reported in MWac and DE is generally reported in MWdc.<sup>2</sup> Assumes an average of 1,660 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 nonresidential segment.<sup>3</sup> Includes energy for all installations, but only notes capacity for solar electric and wind installations.<sup>4</sup> Approved PBI program per Decision Nos. 70313 and 71459.<sup>5</sup> Represents the total RES portfolio capacity in MWac. Assumes a 85% dc-ac conversion factor applied to MWdc capacity.<sup>6</sup> Total RES Resources does not include energy from non-incentive installations which may be considered for compliance in future years.

## **1. Renewable Generation Resources**

The Company's portfolio of Renewable Generation (RG)<sup>4</sup> energy encompasses utility-scale renewable resources.

In 2014, as part of the AZ Sun Program, the Gila Bend solar plant (32 MWac) reached commercial operation.

## **2. Distributed Energy Resources**

In 2014, 77 MWdc of new DE systems were installed (approximately 57 MWdc of residential and 20 MWdc of non-residential). A total of 8,102 residential installations (7,799 PV Grid-Tied, 249 Solar Water heating, 41 Solar Space Heating and 13 other technologies) were completed in 2014. Among non-residential customers a total of 134 installations (131 PV Grid Tied and 3 other technologies) were completed in 2014. At the end of 2014, approximately 477 MWdc of cumulative DE capacity had been installed in APS service territory.

Of the 8,236 installations that took place in 2014, 7,096 were installed without receiving an incentive (7,029 residential and 67 non-residential).

## **II. 2014 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 2014 was approximately \$156 million.

The Renewable Energy Standard Adjustment Schedule (REAC-1)<sup>5</sup> collects funds for the RES programs based on a per kWh charge for most customers. In 2014, customers without a DG system, those that installed a DG system prior to July 1, 2012 and those that installed a DG system after July 1, 2012, but before February 1, 2013, and did not receive an incentive, the monthly surcharge was \$0.010264/kWh, up to a monthly cap of \$4.11 for residential, \$152.49 for small non-residential, \$256.60 for medium non-residential customers, \$513.20 for large non-residential and \$3,335 for industrial customers.

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<sup>4</sup> 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.

<sup>5</sup> As required by Decision Nos. 73183, 73660, 73636 and 74237.



For customers who installed a DG system and received a direct cash incentive beginning July 1, 2012, and those who install a DG system and interconnect with the APS distribution system beginning February 1, 2013, regardless of incentive, the monthly surcharge for 2014 was \$3.74 for residential, \$24.55 for small non-residential, \$225.28 for medium non-residential, \$493.65 for large non-residential and \$3,335 for industrial customers.

**Table 2a:**  
**2014 RES Associated Revenues and Costs**

**Collected (Revenues)**

System Benefit Charge (SBC) Revenue <sup>1</sup>	\$ 6,000,000
Renewable Energy Standard (RES) Revenue & Other <sup>2</sup>	105,654,614
<i>Subtotal: 2014 Collections</i>	<i>111,654,614</i>
2013 Committed Accrual <sup>3</sup>	6,412,455
Prior Years Collected and Unallocated Funds	38,340,804
<i>Subtotal: Prior Year Funds</i>	<i>44,753,259</i>
<b>Total: Available Revenue</b>	<b>\$ 156,407,873</b>

**Expenses (Costs)**

<i>Energy/Incentives</i>	
Renewable Generation Purchased Power <sup>4</sup>	\$ 39,173,880
Paid Distributed Energy Incentives <sup>5</sup>	38,052,067
Committed Distributed Energy Incentives <sup>6</sup>	2,548,875
<i>Subtotal: Energy and Incentives</i>	<i>\$ 79,774,822</i>
<i>Non-Energy Costs</i>	
Administration & Implementation <sup>7</sup>	6,993,938
Research, Commercialization & Integration	474,358
Customer Outreach and Awareness Programs	38,186
<i>Subtotal: Non-Energy Costs</i>	<i>\$ 7,506,481</i>
<i>APS Owned Program Costs</i>	
Flagstaff CPP Revenue Requirement	172,875
AZ Sun Revenue Requirement (net of PTC)	27,318,619
Schools and Government Revenue Requirement	5,038,227
<i>Subtotal: APS Owned Program Costs</i>	<i>\$ 32,529,721</i>

**Total: Expenses** **\$ 119,811,025**

Net Balance	\$ 36,596,848
2015 RES Program Offset <sup>8</sup>	\$ (14,000,000)
<i>Unallocated Balance</i>	<i>\$ 22,596,848</i>

*Notes to Table 2a:*

<sup>1</sup> Collected from base rates.

<sup>2</sup> Collected as part of the environmental surcharge and other miscellaneous 2014 program related receipts.

<sup>3</sup> Balance of Up-front Incentives reservations issued, but not yet paid as of year-end 2013.

<sup>4</sup> Includes \$40.3M in costs less \$(1.1M) Green Choice revenue collections.

<sup>5</sup> Incentives paid in 2014 (including installations before current program year, but processed for payment in 2014).

<sup>6</sup> Balance of Up-front Incentives reservations issued, but not yet paid as of year-end.

<sup>7</sup> Includes \$179,979.24 in interest for funds "collected but unspent" per Decision No. 74237.

<sup>8</sup> Unallocated funds designated to offset 2015 budget (per Decision No. 74237, dated January 7, 2014).

## 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 2014 expenses for projects reaching commercial operation in multiple prior years and is not reflective of current market pricing.<sup>5</sup>

**Table 2b - RES Resource Costs <sup>1</sup>**

2014 RES-Attributable Energy Costs (Above Market - Utility Scale)			COMPETITIVELY CONFIDENTIAL <sup>2</sup>		
Technology	MW	MWh	RES Cost (\$/MW) <sup>2</sup>	RES Cost (\$/MWh) <sup>2</sup>	Total RES Cost <sup>2</sup>
Wind	289	749,055			
Biomass <sup>3</sup>	14	93,249			
Landfill Gas	6	40,414			
Geothermal	10	49,714			
Solar PV PPA <sup>4</sup>	60	159,211			
Solar CSP	250	603,568			
<b>2014 RES-Attributable Energy Costs (Above Market - Utility Scale)</b>					<b>\$ 37,966,444</b>

**Notes to Table 2b:**

<sup>1</sup> Includes only 2014 program year costs incurred under new and legacy projects within the RES budget and is not comparable to a levelized cost of energy.

<sup>2</sup> Redacted due to the competitively confidential nature of the information.

<sup>3</sup> Includes gross generation, and does not adjust for Wholesale DE allocations.

<sup>4</sup> Does not include Purchase Power Agreements from Distributed Energy sources.

<sup>5</sup> Invoice costs do not include associated system integration costs for these resources.

**Table 2c - RES Cash Incentive Costs****Distributed Energy Up Front Incentive Program Costs for the 2014 Solar Water Heating Program**

	MW	MWh <sup>2</sup>	Up-Front Incentives		2014 Program Incentives (\$) <sup>4</sup>
			(\$/MW)	(\$/MWh) <sup>3</sup>	
<b>Solar Water Heating<sup>1</sup></b>					
Residential:	N/A	472	N/A	\$ 289	\$ 136,221
Non-Residential:	N/A	157	N/A	274	43,083

**Distributed Energy Production Based Incentive Program Costs for Systems Paid in 2014**

	MW	MWh <sup>3</sup>	Production-Based Incentives		Total Incentives Paid (\$)
			(\$/MW)	(\$/MWh)	
Solar Electric	223	322,977	\$ 153,130	\$ 106	\$ 34,080,717
Combined Heat & Power	0.3	435	44,377	30	12,958
Solar Water Heating	N/A	2,646		55	146,582
Solar HVAC	N/A	6,181		29	178,448
<b>Subtotal: Production Based Incentives</b>	<b>223</b>	<b>332,239</b>			<b>\$ 34,418,706</b>

**Notes to Table 2c:**

<sup>1</sup> Incentives offered in 2014 were for Solar Water Heating systems in the amount of \$0.30 per first year kWh offset. Some incentives may be less than \$0.30 due to de-rating resulting from the program inspection.

<sup>2</sup> Includes energy installed in calendar year 2014 (estimated annual system offset)

<sup>3</sup> Reflects 2014 incentive dollars divided by associated MWh.

<sup>4</sup> Amounts do not include incentives for systems installed prior to 2014.

<sup>5</sup> Includes annualized energy produced for installations through 2014.

**B. Residential and Non-Residential Incentive Program**

Some systems installed in 2014 were associated with incentive programs from prior years. The only new incentive program in 2014 was for residential and non-residential solar water heating systems at the incentive level of \$0.30/kWh.

### **C. Green Choice Rate Program**

In 2014, APS continued its three existing Green Choice<sup>6</sup> 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 2014, 2,322 customers subscribed to these rates for 114,016 MWh of sales and a total of \$1,145,228 in revenue.

### **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 2014 as a result of non-compliance related to RES contracts.
- 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 2014 for the Flagstaff Community Power Project can be found in Tables 1B and 2A.

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

# Appendix

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## 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 for these systems. Appendix A lists the in-service dates and 2014 actual energy production<sup>7</sup> for all schools which received UFIs in 2009 as a result of this Decision. All schools installed photovoltaic (PV) systems.

**Schools Funded From 2009 UFI Program**

<b>In-service Date</b>	<b>Energy Produced in 2014 (kWh)</b>
11/16/2010	398,690
8/26/2010	1,570,055
2/18/2011	412,214
9/27/2010	1,230,251
7/12/2010	800,172
10/22/2010	522,586
11/1/2010	192,909
11/3/2010	1,728,699
7/2/2010	229,285
8/31/2010	811,486
11/11/2010	481,009
<b>Total kWh Production in 2014</b>	<b>8,377,356</b>

<sup>7</sup> Energy produced from schools in the 2009 UFI Program is reflected on table 1b as part of the Non-Residential UFI Installations (Production (Actual)).

## Appendix B: Independent Monitor Certifications

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### *Merrimack Energy Group, Inc*

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December 2, 2014

Zachary Fryer  
Director, Strategic Procurement  
Arizona Public Service Company  
400 N. 5<sup>th</sup> Street, Mail Station 9172  
Phoenix, AZ 85004

Re: Certification Letter of Merrimack Energy Group, Inc. as Independent Monitor for Arizona Public Service Company's ("APS") 2014 Request for Proposals ("RFP") for the Arizona Sun ("AZ Sun") Program – City of Phoenix Solar Project and Luke Air Force Base Solar Project

Dear Mr. Fryer:

Merrimack Energy Group, Inc. ("Merrimack Energy") has served as Independent Monitor ("IM") for APS' 2014 AZ Sun Program City of Phoenix Solar Project and Luke Air Force Base Solar Project Request for Proposals ("RFP"). This RFP is the sixth requisition in a series of solicitations designed to implement the AZ Sun Program. Through this RFP, APS seeks competitive proposals for the complete development, construction and startup of an additional 20 MW of solar PV generation comprised of two 10 MW utility-scale solar PV facilities engineered, procured, and constructed in accordance with APS requirements as defined in the RFP and associated Engineering, Procurement, and Construction ("EPC") Agreement, to be owned and operated by APS on sites to be provided by APS. Merrimack Energy's role as IM began during the development of the solicitation process and associated documents, and continued through the final selection of the preferred EPC contractor.

The role of the IM in this competitive procurement process is to ensure that APS' solicitation process for the AZ Sun Program City of Phoenix Solar Project and Luke Air Force Base Solar Project RFP process is conducted in a fair, transparent and unbiased manner in accordance with the APS Renewable Energy Competitive Procurement Procedure ("CPP") dated April 10, 2007, as well as the procurement provisions of the Arizona Corporation Commission's Resource Planning and Procurement Rules (Arizona Administrative Code R14-2-705 and R14-2-706). The CPP outlines the role of the Independent Monitor and also describes the requirements of the competitive bidding process, including the evaluation and selection process. The CPP applies only to the competitive procurement process for any solicitation to meet Arizona Public Service Company's renewable energy needs. The Commission's Resource Planning and Procurement Rules also identify the IM selection process and responsibilities. The tasks and services performed by Merrimack Energy are consistent with the requirements of the CPP, the Resource Planning and Procurement Rules and Scope of Work of the IM prepared by APS and agreed to and executed by both parties.

Merrimack Energy certifies that the procedures and processes followed by APS in implementing the 2014 AZ Sun Program City of Phoenix and Luke Air Force Base Solar Project solicitation process are consistent with the requirements of the CPP and the Resource Planning and Procurement Rules. The RFP contains a detailed description of the product(s) requested, provides a schedule for the entire process including the dates for bid submission, short list selection and final award, provides detailed instructions to bidders in terms of filing requirements, includes a description of the bid evaluation and

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selection process and evaluation criteria, and provides a copy of the proforma EPC Agreement. The bid evaluation and selection processes and methodologies represent a fair, consistent and unbiased evaluation and selection process. The procedures and processes were appropriately applied by APS and are consistent with industry standards. In summary, the information included in the RFP, the evaluation criteria, and evaluation and selection process are consistent with CPP requirements.

In addition, APS filed a written notice to the Commission indicating that it had retained Merrimack Energy as IM for the solicitation as required by the Resource Planning and Procurement rules.

The 2014 AZ Sun Program City of Phoenix Solar Project and Luke Air Force Base Solar Project solicitation process was a reasonably competitive process, with eight (8) Respondents offering a total of thirty (30) proposals which encompassed each of the two project sites and the combined project sites. Although the overall response was lower than recent similar solicitations, the response was reasonable and the results illustrated continued decline in EPC pricing.

In the opinion of Merrimack Energy, the bid evaluation and selection process was undertaken by APS in a fair, transparent, consistent, and comprehensive manner. APS provided the detailed bid evaluation results to the IM for review and assessment and held discussions with the IM to review the evaluation results. In addition, this process was a very thorough, rigorous and comprehensive evaluation and selection process. Both the quantitative and qualitative assessments of the offers were effectively undertaken, which should importantly result in competitive prices and viable projects. APS provided the IM detailed documentation of the evaluation process in a manner which was easy to review and verify. The implementation of the solicitation process was effectively managed by APS, was conducted in conformance to the schedule outlined in the RFP, and will lead to competitive benefits for customers.

In conclusion, it is the opinion of the IM that the 2014 AZ Sun Program City of Phoenix Solar Project and Luke Air Force Base Solar Project solicitation process and assessment undertaken by APS was fair, consistent, comprehensive and unbiased. APS established procedures and rules which guided the evaluation and selection process, and consistently applied such procedures. The evaluation and selection process effectively conforms to the requirements of the RFP, reflects the practices of other similar utilities in conducting such a process, and represents good utility practice. The level of competition in the procurement process has led to continually lower prices and associated customer benefits which reflect recent market trends, which APS has been able to take advantage of in selecting the final EPC contractor. The final selected proposal is relatively low cost, supported by a highly experienced EPC contractor, and appears to result in very viable projects.

Very Truly Yours,



Wayne Oliver  
Principal  
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**Arizona Public Service Company**  
**2014 Renewable Energy Standard (RES) Compliance Report**  
**Summary**

In 2014 APS's renewable energy portfolio produced, including energy from installations in which an incentive was not provided, 2,819,880 MWh, which is **10.2 percent** of APS's 2014 retail sales. This amount is provided for informational purposes only; APS's compliance with the RES requirements is discussed below.

*APS 2014 Renewable Compliance Requirements*

For calendar year 2014, the Arizona Corporation Commission (Commission) established an annual RES requirement of 4.5 percent of the utility's 2014 retail kilowatt-hour (kWh) sales, a total of 1,240,606 MWh. Additionally, 30 percent of the total requirement (372,182 MWh) is to be fulfilled with energy produced from Distributed Energy (DE) resources. This separate DE carve-out provision requires one half of the total DE requirement (186,091 MWh) to come from residential resources and one 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;<sup>1</sup> however, throughout the Compliance Report APS discloses its production in MWh.

Additionally, the Company's 2009 Rate Case Settlement Agreement (2009 Settlement)<sup>2</sup> 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.

*APS 2014 RES Performance*

In 2014, the Company's total RES resources, which count toward compliance, were 2,710,644 MWh, which is **9.8 percent** of APS's total 2014 retail sales. Total DE energy production for the year reached 761,907 MWh. Total Residential performance was **157 percent** of the requirement for 2014 and Non-Residential performance was **252 percent** of the requirement.

*Renewable Generation Resources*

In 2014, as part of the AZ Sun Program, the Gila Bend solar plant (32 MWac) reached commercial operation.

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<sup>1</sup> A.A.C. R14-2-1801(N).

<sup>2</sup> Decision No. 71448 (December 30, 2009).

### *Distributed Energy Resources*

In 2014, 77 MWdc of new DE systems were installed (approximately 57 MWdc of residential and 20 MWdc of non-residential). A total of 8,102 residential installations (7,799 PV Grid-Tied, 249 Solar Water Heating, 41 Solar Space Heating and 13 other technologies) were completed in 2014. Among non-residential customers a total of 134 installations (131 PV Grid Tied and 3 other technologies) were completed in 2014. At the end of 2014, approximately 477 MWdc of cumulative DE capacity had been installed in APS service territory.

Of the 8,236 installations that took place in 2014, 7,096 were installed without receiving an incentive (7,029 residential and 67 non-residential).

### *RES Workplan*

For the 2014 budget year, the Company received authorization for a total RES budget of \$143.5 million.<sup>3</sup> After offsetting funding, the Renewable Energy Adjustment Charge was authorized to collect approximately \$108 million. Monthly caps for customers without a DG system, those that installed a DG system prior to July 1, 2012 and those that installed a DG system after July 1, 2012, but before February 1, 2013, and did not receive an incentive were set at \$4.11 for residential, \$152.49 for small non-residential, \$256.60 for medium non-residential customers, \$513.20 for large non-residential and \$3,335 for industrial customers.

For customers who installed a DG system and received a direct cash incentive beginning July 1, 2012, and those who install a DG system and interconnect with the APS distribution system beginning February 1, 2013, regardless of incentive, the monthly surcharge for 2014 was \$3.74 for residential, \$24.55 for small non-residential, \$225.28 for medium non-residential, \$493.65 for large non-residential and \$3,335 for industrial customers.

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<sup>3</sup> Decision No. 74237 (January 7, 2014).

# **Arizona Public Service Company 2014 Renewable Energy Standard Compliance Report**

April 1, 2015



# 2014 Renewable Energy

- In 2014, APS's renewable energy portfolio produced, including energy from installations for which an incentive was not provided, 2,819,880 MWh, which is 10.2 percent of APS's 2014 retail sales.

# Regulatory Commitments

- Arizona's Renewable Energy Standard (RES)
  - 4.5 percent of APS's 2014 retail kWh sales are required to be generated from renewable resources, with 30 percent of that 4.5 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

# 2014 Performance vs RES Targets

Category	Metric	%	Compliance Measure (MWh)	RES Resources (MWh)	% of Requirement
2014 Total RES Requirement	% of Retail Sales	4.5%	1,240,606	2,710,644	9.8%
Distributed Energy RES Requirement	% RES Requirement	30%	372,182	761,907	205%
Residential DE Requirement	% of DE Requirement	50%	186,091	292,320	157%
Non-Residential DE Requirement	% of DE Requirement	50%	186,091	469,587	252%

*APS is exceeding compliance with all RES requirements*

# New Renewable Energy

- Distributed Energy
  - 77 MWdc of new DE systems were installed in 2014
    - About 57 MWdc (7,799 PV Grid Tied installations) of residential and 20 MWdc (131 PV Grid Tied installations) of non-residential DE capacity was installed
    - This results in 477 MWdc of cumulative installed DE capacity (through the life of the program)
  - Of the 8,236 total installations that took place in 2014, 7,096 were installed without receiving an incentive
- Renewable Generation
  - APS-owned AZ Sun Program
    - Gila Bend Solar Plant (32 Mwac)



# 2014 Incentive Payments

- In 2014, APS paid approximately \$3 million in residential incentives and \$35 million in non-residential incentives.
- Approximately \$2.5 million in Up Front Incentive (UFI) commitments existed at the end of 2014 for project reservations not yet installed.