



ORIGINAL

BEFORE THE ARIZONA CORPORATION

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Arizona Corporation Commission

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IN THE MATTER OF ARIZONA PUBLIC SERVICE COMPANY REQUEST FOR APPROVAL OF ITS 2014 RENEWABLE ENERGY STANDARD IMPLEMENTATION PLAN FOR RESET OF RENEWABLE ENERGY ADJUSTOR

DOCKET NO. E-01345A-13-0140

EXCEPTIONS TO THE RECOMMENDED OPINION AND ORDER

Arizona Solar Deployment Alliance ("ASDA"), by and through counsel undersigned, hereby respectfully submits exceptions to the Recommended Opinion and Order ("ROO") filed in the above captioned docket ("REST Plan").

Introduction

ASDA is an organization formed by Arizona based distributed energy ("DE") solar companies. The members of the organization are all registered solar contractors and have their principal place of business in Arizona. The REST plan is vitally important to the health of these companies as well as the Arizona solar market. For the last several years, the DE incentive has been an integral part of the REST plan. For the first time, both Staff and the Arizona Public Service Company ("APS" or the "Company") are recommending no incentive for DE. ASDA understands the need to carefully consider the amount of an incentive but the reduction of the incentive to zero will have a chilling effect on the industry. ASDA would respectfully request the Commission to consider keeping the incentive at \$0.10 for the next year by amending the ROO.

1 **APS Renewable Energy Targets**

2 As APS discussed in its application, there are two components to its renewable energy
3 requirement: the Renewable Energy Standard (“RES”) and the 2009 Rate Case Settlement¹
4 (“2009 Settlement”). The 2009 Settlement requires APS to “acquire new renewable energy
5 resources with annual generation or savings of at least 1.7 million Megawatt-hours to be in
6 service by 2015...”² The combination of these requirements into APS’s RES Implementation
7 Plans has occurred now for several years and APS’s 2014 RES Implementation Plan continues
8 the Company’s pursuit of the combined requirement.
9

10 One program designed by APS to respond to the renewable energy requirement added in
11 the 2009 Settlement is the AZ Sun program. This program is already contributing to APS
12 renewable energy goals and will help APS meet its 2009 Settlement target. Based on Exhibit 3E
13 of APS’s 2014 RES Implementation Plan, approximately 100 MW of AZ Sun facilities at five
14 sites will be constructed or have been constructed. In its current application, APS is requesting
15 approval for additional AZ Sun projects. APS indicates that it has identified sites and initiated
16 pre-development for the final 50 MW of APS’s AZ Sun program at a cost of \$22.6 million and
17 that the projects will be constructed and operational in time to meet APS’s 2009 Settlement
18 obligation.
19

20 **Distributed Energy**

21 Distributed Energy Resources (“DE Resources”) are another means by which APS is
22 attaining compliance with both components of its renewable energy requirement. In recent years,
23 Photovoltaic (“PV”) systems constitute the vast majority of the DE Resources acquired by APS.
24 By mid-year, the acquisition of new PV DE Resources in 2013 was mixed with residential PV
25 trending along a similar path as 2012 and non-residential trending significantly downward in
26

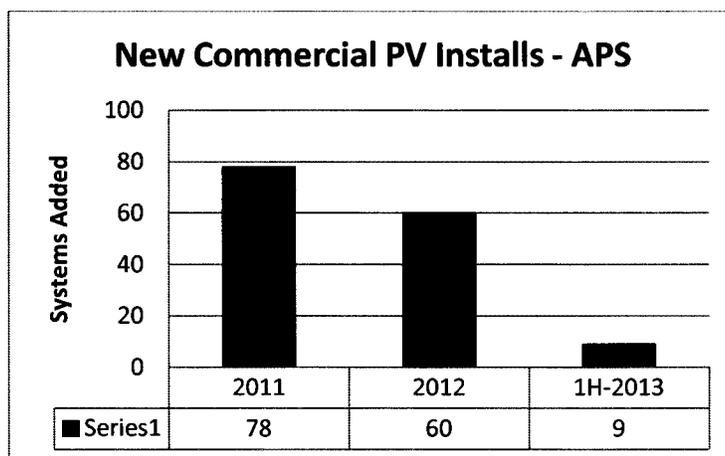
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28 ¹ Decision No. 71448

² Id.

1 terms of customer participation compared to 2012.

2 Incentives for non-utility owned, non-residential DE systems were mostly eliminated in
3 2013 and the result on customer participation is significant. As noted in the graph below³, only
4 nine new non-utility owned, non-residential systems were interconnected to the APS grid in the
5 first-half of 2013.



15

16 In terms of residential PV market activity, ASDA believes total customer participation in 2013
17 will resemble that of 2012⁴. By the middle of 2013, APS had interconnected approximately half
18 the number of customers it interconnected in all of 2012. To achieve the participation rates seen
19 in 2013, the residential PV market has benefited from an Up-front Incentive (“UFI”) of \$0.10/W-
20 DC (approximately \$0.003/REC), retail net metering and no significant changes to residential PV
21 system costs.

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23

24

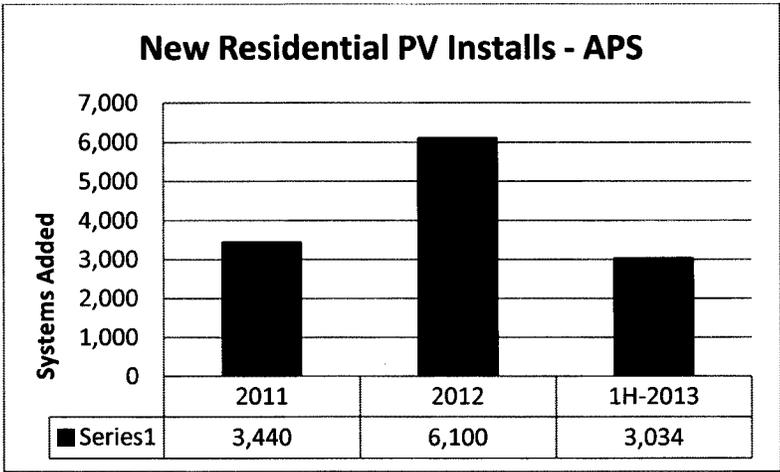
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26

27 ³ The information used in this chart was gathered from APS’ response to ASDA’s First Set of
Data Requests which are attached as Exhibit A.

28 ⁴ With the understanding that various rhetoric regarding solar may have a slight uptick in the
amount of solar in the last few months.

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Additionally, APS provided data to ASDA that as of June 30, 2013 only 38 residential customers had interconnected residential PV systems without participating in the 2013 UFI REC Purchase Program. This is approximately 1.2% of all APS customers interconnecting PV systems in the first half of this year and signals that even at a low UFI rate of \$0.10/W-DC, the UFI is still the mechanism driving customer adoption of rooftop solar in APS service territory.

As of the date of this filing, APS has extinguished its UFI budget for residential PV and significant changes to retail net metering have been proposed. The impacts of the loss of UFI and changes to net metering, should they occur, are unknown at this time. Additionally, other challenges to the DE market (and non-DE market) loom in the near future. Significant changes to the Federal Tax Credit that benefits both DE customers and APS, are only a couple of years away. Additionally, a higher ramp rate in the RES is nearly upon us and the ability of APS to allocate DE Resources to the non-DE target if DE market participation slows or halts altogether is possible if the DE market is not supported and scaled over the coming years.

ASDA Recommendations

The ROO does not have funding for REC purchases from DE Resources in 2014. APS states it has eliminated REC purchases from DE Resources because it has over-complied with the RES DE Requirement. While APS's statement is correct, the fact is that DE acquisition through

1 REC purchases is allowing APS to bank non-DE resources to aid in compliance with its total
2 renewable energy requirement.

3 As noted earlier, the cost of RECs from DE Resources is at an all-time low. As an
4 example, 50 MW of residential PV DE Resources could be acquired in 2014 using a REC
5 Purchase Program funded at \$5 million (UFI = \$0.10/W-DC). Alternately, with the
6 implementation of a small Performance Based Incentive ("PBI") or \$.10/W-DC UFI, similar
7 results could be achieved in the non-residential market. The benefit to ratepayers is a lower cost
8 to the RES Budget than any other source of compliance with APS's total renewable energy
9 requirement.
10

11 While ASDA does not recommend the Commission curtail APS's AZ Sun program in lieu
12 of additional DE Resources, it is important to note that DE has been a significant portion of APS'
13 compliance and should continue to play a vital role. As such, ASDA recommends the
14 Commission approve 100 MW of REC purchase programs for APS's residential and non-
15 residential customers in 2014 in conjunction with those programs contained in Staffs
16 Recommended Order & Opinion. Funding for such programs could come from a small increase
17 in the overall RES budget or through reductions in the total budget from reimbursements
18 associated to tax benefits obtained by APS through its AZ Sun Program.
19

20 **Conclusion**

21 ASDA respectfully requests that the Commission amend the ROO to allow for 100 MW
22 of REC Purchases from DE Resources in 2014.
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1 RESPECTFULLY SUBMITTED this 10th day of October 2013.

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Original and thirteen (13)
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September 10, 2013

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RE: Arizona Public Service Company's 2014 Renewable Energy Standard
Implementation Plan
Docket No. E-01345A-13-0140

Attached please find Arizona Public Service Company's Response to Arizona Solar
Deployment Association's First Set of Data Requests in the above-referenced matter.

If you have any questions regarding this information, please contact me at (602)250-
2661.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeffrey W. Johnson", written over a horizontal line.

Jeffrey W. Johnson

JJ/cd
Attachment

ARIZONA SOLAR DEPLOYMENT ASSOCIATION
FIRST SET OF DATA REQUESTS REGARDING
ARIZONA PUBLIC SERVICE COMPANY
2014 RES IMPLEMENTATION PLAN
DOCKET NO. E-01345A-13-0140
AUGUST 30, 2013

- ASDA 1.1: Please provide the number and total capacity (MW-STC) of all non-utility owned residential PV systems interconnected with your system on the following dates:
- a. 12/31/2010
 - b. 12/31/2011
 - c. 12/31/2012
 - d. 06/30/2013

Response: Total number and capacity of DE Photovoltaic Residential Systems*

Date	12/31/2010	12/31/2011	12/31/2012	6/30/2013
MWdc	30	55	100	122
Number of Systems	5,365	8,805	14,905	17,939

* Note: Excludes utility owned and PV off grid systems, but includes non-incented interconnected systems.

ARIZONA SOLAR DEPLOYMENT ASSOCIATION
FIRST SET OF DATA REQUESTS REGARDING
ARIZONA PUBLIC SERVICE COMPANY
2014 RES IMPLEMENTATION PLAN
DOCKET NO. E-01345A-13-0140
AUGUST 30, 2013

ASDA 1.2: For the dates above, please provide the number and capacity (MW-STC) of residential PV systems interconnected with your system that were not subject to the terms of a Credit Purchase Agreement.

Response: The table below represents all known systems independently installed by customers outside of APS's direct cash incentive program on the dates referenced in ASDA 1.1. Data reflects cumulative installations through the specified dates.

Date	12/31/2010	12/31/2011	12/31/2012	6/30/2013
MWdc	0.03	0.11	0.16	0.35
Number of Systems	5	15	21	59

ARIZONA SOLAR DEPLOYMENT ASSOCIATION
FIRST SET OF DATA REQUESTS REGARDING
ARIZONA PUBLIC SERVICE COMPANY
2014 RES IMPLEMENTATION PLAN
DOCKET NO. E-01345A-13-0140
AUGUST 30, 2013

ASDA 1.3: Please provide the number and capacity (MW-STC) of all residential PV systems reserved through the Credit Purchase Program that were not interconnected as of 06/30/2013.

Response: Data from June 30, 2013 was not available so the closest date possible was used for this response. As of June 27, 2013, residential PV reservations within APS's direct cash incentive program totaled 2,504 systems for a total of 18 MWdc of capacity.

ARIZONA SOLAR DEPLOYMENT ASSOCIATION
FIRST SET OF DATA REQUESTS REGARDING
ARIZONA PUBLIC SERVICE COMPANY
2014 RES IMPLEMENTATION PLAN
DOCKET NO. E-01345A-13-0140
AUGUST 30, 2013

ASDA 1.4: Please provide the number and capacity (MW-STC) of all residential customers with PV systems that have applied for interconnection (non-CPP participants) that were not interconnected as of 06/30/2013.

Response: APS interprets "non-CPP participants" to refer to customers independently installing systems outside of APS's direct cash incentive program. As of June 30, 2013, there were 13 residential PV systems with pending interconnection requests that were not yet installed. Systems can be in the interconnection request queue without reporting system capacity information. Therefore some systems may be reflected in system counts without any corresponding capacity data available.

ARIZONA SOLAR DEPLOYMENT ASSOCIATION
FIRST SET OF DATA REQUESTS REGARDING
ARIZONA PUBLIC SERVICE COMPANY
2014 RES IMPLEMENTATION PLAN
DOCKET NO. E-01345A-13-0140
AUGUST 30, 2013

ASDA 1.5: Please provide historical cancellation rates for residential PV incentives (2010-2013YTD).

Response: Historic cancellation rates for residential PV incentives are provided in the table below. Note that 2013 represents partial-year information only until September 6, 2013 and will not be reflective of actual year end 2013 cancellation rates because the end of a calendar year often results in an increase in the number of systems either being placed into service or cancelled.

	2010	2011	2012	2013 to date
Rate of Cancellations	12%	17%	19%	2%

ARIZONA SOLAR DEPLOYMENT ASSOCIATION
FIRST SET OF DATA REQUESTS REGARDING
ARIZONA PUBLIC SERVICE COMPANY
2014 RES IMPLEMENTATION PLAN
DOCKET NO. E-01345A-13-0140
AUGUST 30, 2013

ASDA 1.6: Please provide the number and capacity (MW-STC) of all distributed, non-residential, non-utility owned PV systems interconnected with your system on the following dates:

12/31/2010

12/31/2011

12/ 31/2012

06/30/2013

Response: Non-residential systems have up to a 365 day development and installation window within APS's incentive program. Additionally, there is often an increase in the number of installed systems shortly before the close of a calendar year. Thus, the 2013 installations to-date might not be reflective of year-end installations.

Date	12/31/2010	12/31/2011	12/31/2012	6/30/2013
MWdc	22	100	160	169
Number of Systems	262	472	708	789

ARIZONA SOLAR DEPLOYMENT ASSOCIATION
FIRST SET OF DATA REQUESTS REGARDING
ARIZONA PUBLIC SERVICE COMPANY
2014 RES IMPLEMENTATION PLAN
DOCKET NO. E-01345A-13-0140
AUGUST 30, 2013

ASDA 1.7: Please provide the number and capacity (MW-STC) of all distributed, non-residential, non-utility owned PV systems reserved through the Credit Purchase Program that were not interconnected as of 06/30/2013.

Response: Data was not available from June 30, 2013, so the closest date possible was used for this response. As of June 27, 2013, APS had 311 PV systems for a total of 67 MWdc reserved through APS's non-residential direct cash incentive program.

ARIZONA SOLAR DEPLOYMENT ASSOCIATION
FIRST SET OF DATA REQUESTS REGARDING
ARIZONA PUBLIC SERVICE COMPANY
2014 RES IMPLEMENTATION PLAN
DOCKET NO. E-01345A-13-0140
AUGUST 30, 2013

ASDA 1.8: Please provide the number and capacity (MW-STC) of all distributed, non-residential, non-utility owned customers with PV systems that have applied for interconnection (non-CPP participants) that were not interconnected as of 06/30/2013.

Response: By "non-CPP," APS interprets this question as asking about independent, customer installed systems that are not participating in APS's direct cash incentive program.

Note that some systems may be in the interconnection request queue without capacity information being reported. These systems may therefore be reported in system counts although they have no corresponding capacity.

	Number of Systems	MWdc
6/30/2013	18	0.56

ARIZONA SOLAR DEPLOYMENT ASSOCIATION
FIRST SET OF DATA REQUESTS REGARDING
ARIZONA PUBLIC SERVICE COMPANY
2014 RES IMPLEMENTATION PLAN
DOCKET NO. E-01345A-13-0140
AUGUST 30, 2013

ASDA 1.9: For the AZSUN program, please identify the value and type of Federal Tax Incentives claimed by APS and/or its parent corporation, Pinnacle West, for the following tax years:

- a. 2010
- b. 2011
- c. 2012

Response: Following are the Federal Tax Incentives claimed by APS for 2010, 2011 and 2012:

a. 2010

- There were no Federal Tax Incentives claimed for the AZSUN Program during 2010.

b. 2011

- \$60,592,519 Federal Investment Tax Credit
- \$173,041,997 Federal Tax Depreciation Deduction

c. 2012

- \$28,965,864 Federal Investment Tax Credit
- \$49,846,839 Federal Tax Depreciation Deduction

For ratemaking purposes, consistent with the Company's normalization method of accounting, federal investment tax credits and accumulated deferred income tax liabilities created by accelerated tax depreciation are treated as a reduction to rate base in base rates or the RES adjustor, as applicable.

ARIZONA SOLAR DEPLOYMENT ASSOCIATION
FIRST SET OF DATA REQUESTS REGARDING
ARIZONA PUBLIC SERVICE COMPANY
2014 RES IMPLEMENTATION PLAN
DOCKET NO. E-01345A-13-0140
AUGUST 30, 2013

ASDA 1.10: For the AZSUN program, please identify the value and type of State of Arizona Tax Incentives claimed by APS and/or its parent corporation, Pinnacle West, for the following tax years:

- a. 2010
- b. 2011
- c. 2012

Response: Following are the Arizona Tax Incentives claimed by APS for 2010, 2011 and 2012:

a. 2010

- There were no Arizona Tax Incentives claimed for the AZSUN Program during 2010.

b. 2011

- \$1,073,160 Arizona Renewable Energy Production Tax Credit
- \$40,760,795 Arizona Tax Depreciation Deduction

c. 2012

- \$3,821,920 Arizona Renewable Energy Production Tax Credit
- \$84,845,367 Arizona Tax Depreciation Deduction

For ratemaking purposes, consistent with the Company's normalization method of accounting, the accumulated deferred income tax liabilities created by accelerated tax depreciation are treated as a reduction to rate base in base rates or the RES adjustor, as applicable. The Arizona renewable energy production tax credits are likewise reflected in the cost of service calculation in base rates or the RES adjustor, as applicable.

ARIZONA SOLAR DEPLOYMENT ASSOCIATION
FIRST SET OF DATA REQUESTS REGARDING
ARIZONA PUBLIC SERVICE COMPANY
2014 RES IMPLEMENTATION PLAN
DOCKET NO. E-01345A-13-0140
AUGUST 30, 2013

ASDA 1.11: Please identify any Treasury Grants (1603 Program) APS expects to obtain for future AZSUN projects.

Response: None at this time.

ARIZONA SOLAR DEPLOYMENT ASSOCIATION
FIRST SET OF DATA REQUESTS REGARDING
ARIZONA PUBLIC SERVICE COMPANY
2014 RES IMPLEMENTATION PLAN
DOCKET NO. E-01345A-13-0140
AUGUST 30, 2013

ASDA 1.12: Please provide the blended average kilowatt hour rate for all solar projects identified in Exhibit 3B of the 2014 Implementation Plan.

Response: APS interprets this question as asking for a 2014-2018 average of the RES-attributable budget costs per kilowatt hour for all known solar projects identified in Exhibit 3B of the 2014 Implementation Plan. The blended projected RES costs and energy forecasts in the Implementation Plan is in the range of \$40-45/MWh. This number cannot serve as a valid comparison of costs and energy production and should not be used for any project or program cost comparisons.

ARIZONA SOLAR DEPLOYMENT ASSOCIATION
FIRST SET OF DATA REQUESTS REGARDING
ARIZONA PUBLIC SERVICE COMPANY
2014 RES IMPLEMENTATION PLAN
DOCKET NO. E-01345A-13-0140
AUGUST 30, 2013

ASDA 1.13: Please provide information detailing the capacity value assigned all solar projects identified in Exhibit 38 of the 2014 Implementation Plan.

Response: Please see the attached document APS15261.

ASDA 1.13 SOLAR CAPACITY VALUES

Sourced from 2nd Quarter 2013 data

Line No.	Targeted Generation Resources:	MWac (current or under development)	Fixed/Tracking	Year for Capacity Value ¹	Single Year Capacity Value ²	Line No.
1						1
2						2
3						3
4						4
5						5
6						6
7						7
8						8
9						9
10						10
11						11
12						12
13						13
14						14
15						15
16						16
17						17
18						18
19						19
20						20
21						21
22						22
23						23
24						24
25						25
	Solar:					
	Ajo	4.5	Tracking	2014	68%	
	Prescott	10	Tracking	2014	49%	
	Tonopah	15	Tracking	2014	66% ³	
	Maricopa County	15	Tracking	2014	66% ³	
	Saddle Mountain	15	Tracking	2014	63%	
	Solana CSP	250	Tracking	2014	100% ³	
	Small Solar Sites	4.6	Tracking	2014	60%	
	Paloma	17	Fixed	2014	54%	
	Hyder I	16	Tracking	2014	67%	
	Cotton Center	17	Tracking	2014	64%	
	Chino Valley	19	Tracking	2014	49%	
	Foothills I/II	35	Tracking	2014	76%	
	Hyder II	14	Tracking	2014	80% ³	
	Gila Bend	32	Tracking	2015	67% ³	
	Luke AFB	10	Tracking	2015	66% ³	
	City of Phoenix	10	Tracking	2016	64% ³	
	Redhawk Solar	30	Tracking	2016	64% ³	
	Targeted Distributed Energy Resources:					
	Other Distributed Solar	15	Tracking	2014	48%	
	Bagdad		Fixed	2014	49% ³	

Notes:

- ¹ Shows next calendar year if project is in operation or first year of operation for projects under development.
- ² Single year values only. Capacity values represent what fraction of a resource's nameplate capacity can contribute to APS's system peak. Values change annually as a function of total installed solar nameplate capacity and forecasted system peak load. Higher solar penetration results in lower capacity values over time.
- ³ Project under development, estimation is for first year of operation.