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0000146890

Executive Director

ARIZONA CORPORATION COMMISSION

To: Docket Control

RE: Arizona Public Service

Docket No. E-01345A-13-0248

Please docket the attached 4 customer comments OPPOSING the above filed case.

Customer comments can be reviewed in E-docket under the above docket number.

Filed by: Utilities Division – Consumer Services

Arizona Corporation Commission

DOCKETED

JUL 16 2013

DOCKETED BY	NR
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ARIZONA CORPORATION COMMISSION
DOCKET CONTROL

2013 JUL 16 A 10:44

RECEIVED

ARIZONA CORPORATION COMMISSION
UTILITY COMPLAINT FORM

Investigator: Deb Reagan

Phone:

Fax:

Priority: Respond Within Five Days

Opinion No. 2013 - 111622

Date: 7/15/2013

Complaint Description: 19Y Other - Elec
08A Rate Case Items - Opposed

Complaint By: **First:** **Last:**
Jim Todd

Account Name: Jim Todd

Home:

Street: n/a

Work:

City: n/a

CBR:

State: AZ Zip: n/a

is:

Utility Company: Arizona Public Service Company

Division: Electric

Contact Name: For assignment

Contact Phone:

Nature of Complaint:

***** E-01345A-13-0248 *****

Customer sent the following -

Subject: APS Money Grab

I would like to comment on the recent attempted money grab by APS under the disguise of Rooftop Solar Power costing too much.

First off I would like to say that with all the commentary on global warming I would think it would benefit the ACC to promote solar power not to kill it off which is what the APS proposal would do. Also think of all the jobs and industry in this state that would be lost if rooftop solar was eliminated.

APS has a monopoly on power in my area, my only alternative to their ever increasing power bill was to install solar panels a green energy source.

Now they want to steal what little extra power I produce. If they don't like solar then let some other power companies compete for my business and end APS's monopoly. If their proposal goes through then I will look for ways to get completely off of the grid and they won't get a dime from me.

Do not let APS get away with this, it is only about greed. I will be paying attention to this and how you vote on it. I will then exercise my right to vote against any party that helps do away with solar power in Arizona.

Instead of ending rooftop solar lets end APS's Monopoly in Arizona and allow other companies to bid for our business.

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Thank You.

Jim Todd

Jim Todd
End of Complaint

Utilities' Response:

Investigator's Comments and Disposition:

Comments entered for the record and filed with Docket Control.
End of Comments

Date Completed: 7/15/2013

Opinion No. 2013 - 111622

**ARIZONA CORPORATION COMMISSION
UTILITY COMPLAINT FORM**

Investigator: Deb Reagan

Phone:

Fax:

Priority: Respond Within Five Days

Opinion No. 2013 - 111621

Date: 7/15/2013

Complaint Description: 19Y Other - Elec
08A Rate Case Items - Opposed

First:

Last:

Complaint By: Robert Hutson

Account Name: Robert Hutson

Home:

Street: n/a

Work:

City: Carefree

CBR:

State: AZ Zip: n/a

is:

Utility Company: Arizona Public Service Company

Division: Electric

Contact Name: For assignment

Contact Phone:

Nature of Complaint:

***** E-01345A-13-0248 *****

Customer sent the following -

I am an APS customer, living in Carefree, AZ. I was first shocked that APS would discourage private home solar energy use, if approved by you, by imposing a \$50-\$100 per month charge for use of their grid, as proposed to you on Friday, July 12. I was even more shocked to learn that they are using some of the money, which customers such as I pay for our APS bills, to pay for spurious smear campaigns. I am referring specifically to the 60 Plus ad, which, I have learned, were also funded by the notorious Koch brothers. For the record, I am 66 years old but not senile enough to fall for the logic of the ad. Since APS seems to have sufficient funds to waste on dishonest ad campaigns, I would urge a rate cut rather than a fee for new solar users. I do not now have solar now. However, though there is little financial incentive for me at my age, I have considered installing solar as a benefit to my grandchildren and to my nation, both groups about whom I care deeply.

End of Complaint

Utilities' Response:

Investigator's Comments and Disposition:

Comments entered for the record and filed with Docket Control.

End of Comments

Date Completed: 7/15/2013

Opinion No. 2013 - 111621

ARIZONA CORPORATION COMMISSION
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ARIZONA CORPORATION COMMISSION
UTILITY COMPLAINT FORM

Investigator: Deb Reagan

Phone:

Fax:

Priority: Respond Within Five Days

Opinion No. 2013 - 111619

Date: 7/15/2013

Complaint Description: 19Y Other - Elec
08A Rate Case Items - Opposed

First:

Last:

Complaint By: Monica Karels

Account Name: Monica Karels

Home:

Street: n/a

Work:

City: n/a

CBR:

State: AZ Zip: n/a

is:

Utility Company: Arizona Public Service Company

Division: Electric

Contact Name: For assignment

Contact Phone:

Nature of Complaint:

***** E-01345A-13-0248 *****

Customer sent the following -

Subject: Solar

To Whom It May Concern:

As your constituent I am asking you to please consider protecting solar in Arizona. It seems to me that it would be logical in this state of so much sunshine that all roofs should be made up of solar panels. That is how I envision the future. Each building would be mostly self sustaining for its energy needs. That is a much better picture in my mind than to limit people's choice and freedom by requiring them to rely on and pay high amounts for non-selfsustaining sources of energy.

Sincerely,

Monica Karels
End of Complaint

Utilities' Response:

Investigator's Comments and Disposition:

Comments entered for the record and filed with Docket Control.
End of Comments

ARIZONA CORPORATION COMMISSION
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Date Completed: 7/15/2013

Opinion No. 2013 - 111619

ARIZONA CORPORATION COMMISSION
UTILITY COMPLAINT FORM

Investigator: Deb Reagan

Phone:

Fax:

Priority: Respond Within Five Days

Opinion No. 2013 - 111620

Date: 7/15/2013

Complaint Description: 19Y Other - Elec
08A Rate Case Items - Opposed

First:

Last:

Complaint By: Greg Field

Account Name: Greg Field

Home: (

Street: n/a

Work:

City: n/a

CBR:

State: AZ Zip: n/a

is:

Utility Company: Arizona Public Service Company

Division: Electric

Contact Name: For assignment

Contact Phone:

Nature of Complaint:

***** E-01345A-13-0248 *****

Customer sent the following -

Subject: APS Reaps Benefits From Net Metering Not Losses According to Attached In Depth Study

Dear ACC,

In early 2008, Arizona Public Service (APS) commissioned R.W. Beck, Inc., Energized Solutions, LLC, Phasor Energy Company, LLC, and Summit Blue Consulting, LLC to assess the impact of wide-scale deployment of distributed PV along with solar hot water systems and commercial daylighting systems on the APS system.

Among the specific objectives of the study was an assessment of the benefits wide-scale deployment of these technologies could have for the APS system. In this sense, the APS study views the potential benefits of deployment of distributed solar from the utility perspective. The APS study was conducted in an open process with the participation of many stakeholders from within the solar industry, the business community, advocates, and the regulatory community.

In constructing the methodology for reviewing the benefits of the three distributed solar technologies discussed above, the study's authors focused on low, medium, and high penetration scenarios, with generating capacity as a percent of peak demand reaching 0.5%, 6.4%, and 14% respectively by 2025 (Arizona Public Service, 2010, Tables 5-3 and 5-4).

Within these scenarios, the authors made a number of assumptions about PV capital cost reductions, the availability of federal tax credits, and the make-up of APS tariffs. The APS study also developed a target

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scenario that assumed APS would deploy solar technologies to achieve the greatest possible benefits. The target scenario included a general scenario and one in which all commercial PV used single-axis tracking.

The benefits identified in the APS study included reduction in T&D line losses, deferral of T&D capacity upgrades and additions, reduction in necessary equipment size within the distribution system, avoided electric generation capacity costs, avoided fixed operating costs, avoided energy purchases, and avoided fuel purchases. While labeled differently, this is a subset of the list used by the AE study, leaving off environmental benefits and the ability to provide a hedge on natural gas prices, as well as the four factors ultimately left out of the primary AE analysis (disaster recovery, blackout prevention and emergency utility dispatch, managing load uncertainty, retail price hedge, and reactive power control).

After detailed modeling, the APS study found a range of benefits across the various penetration and target scenarios of approximately 7.9¢ to 14.1¢/kWh in 2008 dollars, without reference to a particular scenario (Arizona Public Service, 2010, p. xxii).

Residential rates for APS customers as of December 2010 were just under 9.4¢/kWh, ramping up in stages during summer months to 17.4¢/kWh for higher energy usage. Assuming benefits have increased with inflation, the APS study appears to be inconclusive regarding whether there is a subsidy flowing from residential ratepayers to NEM participants (calculated benefits at the lower end of the reported range are less than costs). For demand-metered customers, it seems that benefits exceed costs substantially.

An APS review of this report stated that benefits identified in the APS study were based on locating facilities optimally and maintaining utility ownership and control of the installations, although the benefits of optimal siting are not broken out separately in the APS study. The most likely benefit of selective siting would be for individual distribution circuits. Most transmission and generation benefits would accrue regardless of the location of NEM systems. Reported distribution system benefits are only 0 to 0.31¢/kWh, implying that the impact of selective siting is relatively modest.

Two important aspects of the APS study directly affect the extent of the benefits it found, and explain the substantial difference from the AE study results.

First, virtually no capacity benefits were identified for the years prior to 2025 and even then, the capacity benefits were only significant in the high penetration case. The study notes that capacity pricing is rolled into energy prices used to calculate the energy benefit, and in that sense, there is a capacity value. However, by "capacity benefit" we are only referring to deferral or avoidance of new utility-built generation and T&D. The APS study's rationale for not attributing capacity benefits was that T&D and utility generation investments are "lumpy" so it would take a great deal of DG to have an impact on those investment decisions. (Arizona Public Service, 2010, p. 6-9).

This view takes a primary advantage of PV—the ability to be installed incrementally—and gives it no value until output from the PV installation fully displaces a new utility generator. APS notes that its Integrated Resource Plan calls for no new construction for the next seven to eight years because it has sufficient capacity at present, but the PV installed over the next eight years could push the need for new construction out further and should be attributed some value. APS expects that peak demand will grow by 4,170 MW from 2010 to 2025. (Arizona Public Service, 2010, Table 5-6) and it is reasonable to assume that even a modest level of DG would defer some quantity of system level utility investments by a year or more, thereby saving ratepayers money by deferring investment in these lumpy assets.

In conjunction with modest levels of demand response, as discussed later in this report, installed solar facilities could also provide APS with firm power, eliminating the need for at least some portion of its contemplated generation and T&D investments.

The APS study makes a jump from modest penetration levels in 2015 to high penetration in 2025 without

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analyzing impacts in between. Even the high scenario assumes only 63 MW of DG by 2015 (Arizona Public Service, 2010, Table 5-3), or roughly 0.7% of anticipated peak demand for APS in 2015 (Arizona Public Service, 2010, Table 5-4). By comparison, DG capacity in PG&E's service territory in California is more than 2% of PG&E's peak demand as of early 2011. While the APS study looks at 6.4% and 14% penetrations in 2025, it would have been interesting to present capacity benefits in the 2% to 5% range that are likely in earlier years.

The second significant deficiency in the APS study is that it does not consider the benefits at the optimal penetration level using the optimal orientation. Because the study is "forward looking" in so far as it is not assessing the impacts of a program as currently implemented, it would seem logical to have performed this analysis. Indeed, the study acknowledges that southwest facing modules or solar tracking will increase production per MW in the late afternoon, when APS experiences peak demand, and have a greater capacity benefit than a south facing array of the same size. However, the scenarios describing the benefits of DG under the low and medium penetrations do not appear to take the capacity benefits of deploying these optimally oriented arrays into consideration.

Interestingly, in the high penetration case, a solar tracking sensitivity analysis concludes that in 2025, tracking would shift the APS peak to a later hour, at which time the capacity benefit would be little more than it would be with a fixed array pointed south. However, this case envisions generating capacity of 1,677 MW (Arizona Public Service, 2010, Table 5-3), which would be 14.6% of peak demand. The analysis has thus skipped from a modest penetration of 0.7% (63 MW) in 2015 to a penetration of 14.6% in 2025 without looking at the optimal penetration that would occur in between. To its credit, the APS study does acknowledge that energy storage would increase the capacity value of solar energy systems, but it does not attempt to quantify the benefit.

Finally, the APS study did not attribute any environmental benefits to the utility or quantify natural gas hedging benefits as the AE study did. Inclusion of these benefits would have contributed to an overall valuation of the benefits to utility ratepayers from the solar resources modeled in the study. And like the AE study, the APS study did not attribute any value to the ability of solar generation to provide voltage and reactive power support or to provide disaster recovery benefits.

Respectfully,

Greg Field
End of Complaint

Utilities' Response:

Investigator's Comments and Disposition:

Comments entered for the record and filed with Docket Control.
End of Comments

Date Completed: 7/15/2013

Opinion No. 2013 - 111620
