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Arizona Corporation Commission

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BEFORE THE ARIZONA CORPORATION COMMISSION

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GARY PIERCE  
COMMISSIONER

BOB BURNS  
COMMISSIONER

SUSAN BITTER SMITH  
COMMISSIONER

BRENDA BURNS  
COMMISSIONER

11 IN THE MATTER OF THE )  
12 APPLICATION OF ARIZONA )  
13 PUBLIC SERVICE COMPANY FOR )  
14 APPROVAL OF ITS 2015 )  
15 RENEWABLE ENERGY STANDARD )  
16 IMPLEMENTATION FOR RESET )  
17 OF RENEWABLE ENERGY )  
18 ADJUSTER. )

DOCKET NO.'s E-01345A-14-0250  
E-01345A-13-0140

ORIGINAL

RESPONSE TO STAFF

THE ALLIANCE FOR SOLAR CHOICE RESPONSE TO  
STAFF'S NOVEMBER 3, 2014 OPEN MEETING MEMORANDUM AND APS'S  
NOVEMBER 10, 2014 EXCEPTIONS TO STAFF'S PROPOSED ORDER

Staff's analysis of Arizona Public Service Company's ("APS" or "Company") various proposals in this proceeding is well reasoned. Therefore, TASC supports Staff's general recommendations because 1) there is no clear need for any additional solar capacity to meet the Renewable Energy Standard & Tariff ("REST") requirements or the 2009 Settlement; 2) that even if there was a need, the APS distributed generation ("DG") option is not designed to meet that need because its DG program will not provide solar electricity in the relevant timeframe; 3) that APS's DG proposal is both more expensive and inferior to reasonable alternatives, and 4) APS's claim that utility ownership carries certain unique benefits is without merit. While TASC supports implementation of many of APS's goals, including strategic solar deployment and grid modernization, each component deserves a thorough analysis to determine if APS's vertically

1 integrated approach is in the best interest of its customers. These non-economic benefits can be  
2 achieved without utility ownership and likely at a lower cost to ratepayers by utilizing an open  
3 architecture approach.

4 TASC also responds to APS's Exceptions to Staff's Proposed Order ("Exceptions"), filed  
5 on October 10, 2014. APS's Exceptions entirely miss the point – the Company still fails to  
6 demonstrate any need for additional renewable capacity. If the Company wishes to offer  
7 customers on-site solar equipment so that customers can achieve the true benefits of self-  
8 generation, it should form an unregulated subsidiary and compete fairly in the open market.

9 In November of 2012, APS declared that, "[f]or the long term, Arizona needs solar  
10 energy that is sustainable, not subsidized."<sup>1</sup> Nevertheless, APS's proposal seeks to force  
11 ratepayers to fully subsidize the capital costs of APS-owned rooftop solar. When the  
12 competitive market installs rooftop solar today, APS ratepayers do not pay a dime of that  
13 installation cost. There are no incentives for solar installation remaining. Further, this  
14 Commission has indicated it intends to further address any cost shift that may be caused by net  
15 metering in the next APS rate case. The message to the public from the Commission and from  
16 APS has been that rooftop solar should stand on its own. APS's proposal is the exact opposite.  
17 After years of the Commission weaning the industry off incentives, APS seeks to have 100% of  
18 the costs rooftop solar that it owns paid for by its customers. This massive subsidy should be  
19 rejected.

## 20 21 **BACKGROUND**

22 APS originally requested authorization to complete a 50 MW phase of its AZ Sun  
23 Program, including 30 MW of utility-owned solar adjacent to APS's RedHawk Power Station.<sup>2</sup>  
24 APS claimed it needed these 50 MW to comply with its REST and its 2009 Settlement  
25 obligations.<sup>3</sup> However, in its December 2013 decision the Commission stated that it did not  
26 believe that "approval of the final 30 MW of the AZ Sun Program (currently proposed to be

27 <sup>1</sup> DOCKET NO. E-01345A-10-0394 and DOCKET NO. E-01345A-12-0290, APS's Comments to Staff's  
Recommended Opinion and Order at at p. 2, line 1.

28 <sup>2</sup> Decision No. 74237 at p. 2, lines 9-12 (January 7, 2014).

<sup>3</sup> Decision No. 71448.

1 located at the RedHawk Facility) is warranted at this time.”<sup>4</sup> The Commission therefore ordered  
2 the Company and other interested parties to submit information to the docket by April 15, 2014  
3 specifically addressing whether APS has a need for *any* additional capacity to meet the  
4 requirements of the 2009 Settlement.<sup>5</sup>

5 On April 15, 2014, APS again requested authorization to construct the utility-owned  
6 RedHawk project. However, after acknowledging that 30 MW is not needed to meet the  
7 requirements of the 2009 Settlement, APS proposed a scaled-down 20 MW project.<sup>6</sup> Then, on its  
8 own initiative, the Company filed a Supplemental Application on July 28, 2014 requesting  
9 permission to construct 20 MW of utility-owned residential DG. Unfortunately, neither the  
10 Company’s April 15, 2014 filing or its July 28, 2014 submission adequately address the primary  
11 issue of whether it needs *any* additional capacity.

12  
13 **TASC SUPPORTS STAFF’S RECOMMENDATIONS**

14 On November 3, 2014, consistent with the Commission’s previous Order, Staff issued  
15 its recommendations on APS’s proposal to build additional AZ Sun capacity, including a specific  
16 analysis of whether or not APS needs to install any portion of the final 30 MW phase of AZ Sun  
17 in order to comply with the REST rules and/or the 2009 Settlement agreement.<sup>7</sup> Staff concluded  
18 that APS failed to establish an absolute need for *any* additional solar generation.<sup>8</sup> Staff reached  
19 this conclusion in part based on its finding that 20 MW of customer-sited capacity is likely to  
20 come online in 2015 at a considerably lower cost than either of the APS proposals. Staff found  
21 this to be true *even if* APS was to introduce an upfront incentive of \$0.10 per watt for customer  
22 and third-party-owned systems (“Staff’s Customer DG Proposal”).<sup>9</sup> By denying APS’s utility-  
23 owned DG proposal and relying on expected customer and third-party-owned DG, Staff expects  
24 customers will avoid \$94.5 - \$114 million in additional revenue requirements.<sup>10</sup>

25 \_\_\_\_\_  
26 <sup>4</sup> Decision No. 74237 at p. 11, lines 1-2.

27 <sup>5</sup> *Id.* at p. 15, lines 11-16.

28 <sup>6</sup> Application and Response to Commission Inquiry in Decision No. 74237 (April 15, 2014).

<sup>7</sup> Decision No. 74237 at p. 11, lines 15-18.

<sup>8</sup> Staff Open Meeting Memorandum at p. 10 (Nov. 3, 2014).

<sup>9</sup> *Id.* at p. 8, Table 6.

<sup>10</sup> *Id.*

1 Even if there was a need for an additional 20 MW of solar, Staff found that APS's utility-  
2 owned DG program would not be sufficient.<sup>11</sup> Furthermore, the APS DG option would be more  
3 expensive than the RedHawk proposal, and substantially more expensive than Staff's Customer  
4 DG proposal.<sup>12</sup> Therefore Staff recommends that APS submit additional information in its next  
5 REST Implementation Plan due on July 1, 2015.<sup>13</sup> Alternatively, if the Commission believes  
6 that 20 MW of AZ Sun is required, Staff recommends that the Commission implement Staff's  
7 significantly less expensive Customer DG Proposal.<sup>14</sup>

8 **1. APS Fails To Demonstrate a Need for Any Additional Capacity.**

9 In its April 2014 filing, APS notes that during the first quarter of 2014, APS received  
10 applications for customer solar facilities, which if installed would comprise approximately  
11 7.5MW.<sup>15</sup> Nevertheless, the Company claims without proof that it cannot rely on this trend to  
12 continue because of "known risks" to third-party developers.<sup>16</sup> APS offers absolutely no  
13 evidence of any such "known risks" or proof that the pace of third-party solar installations is  
14 declining or expected to decline. APS merely asserts that because the US Treasury Department  
15 and the Internal Revenue Service are conducting investigations of the largest third-party rooftop  
16 installer in Arizona, it would be inappropriate for APS to assume that third-party installations  
17 will achieve current projections.<sup>17</sup> The Company offers no proof or details, and fails to  
18 acknowledge that IRS audits and governmental investigations can be common among big  
19 businesses.<sup>18</sup>

20 The reality of the market paints an entirely different picture. For many years, APS's  
21 customers have steadily and consistently been installing solar at their own expense, either  
22 through direct purchases or financing arrangements with third parties. In fact, Staff notes that  
23 over 18 MW of third-party and customer-owned solar capacity was installed in the first three

24 <sup>11</sup> *Id.* at p. 2-3.

25 <sup>12</sup> *Id.* at p. 6, Table 4.

26 <sup>13</sup> *Id.* at p. 10.

27 <sup>14</sup> *Id.*

28 <sup>15</sup> Application and Response to Commission Inquiry in Decision No. 74237 at p. 3.

<sup>16</sup> APS Supplemental Application – 2014 RES Implementation Plan at p. 1.

<sup>17</sup> *Id.*

<sup>18</sup> For example, should the Commission conclude that APS is not a reliable supplier of electricity because of its acknowledged role in the September 11, 2011 major power outage in the Southwestern U.S. and its subsequent settlement with federal agencies? See <http://www.nerc.com/news/Headlines%20DL/APS%2007JUL14.pdf>.

1 quarters of 2014.<sup>19</sup> At that pace, Staff projects that over 20 MW of additional solar will be  
2 installed during 2015.<sup>20</sup> As such, Staff concludes that APS has not demonstrated that APS needs  
3 an additional 20 MW of AZ Sun capacity and recommends that the Commission allow APS to  
4 submit information that demonstrates an actual need in its next REST Implementation Plan, if  
5 such a need exists. TASC agrees that this is the most prudent course of action to protect APS's  
6 customers from unnecessary increases to the utility's rate base and to its customer's rates.

7 In its Exceptions APS reaffirms that it "cannot guarantee that AZ Sun DG is needed for  
8 compliance with the 2009 settlement requirement."<sup>21</sup> Nevertheless, APS proposes to install and  
9 rate base additional capacity that it does not need because it thinks it can do so with lower  
10 subsidies than those that it claims are implicit with net metering. Not only is this not the relevant  
11 standard in determining whether a utility can, or should, install new capacity, APS is also wrong.  
12 Its proposed 100% customer subsidized solar is not less expensive than the alleged cost shift  
13 from net metering. Further, in its Application in this Docket filed on July 1, 2014, APS notes  
14 that if it is permitted to count the RECs for residential installations installed in its service  
15 territory it is actually in compliance with its RES requirements through 2019.<sup>22</sup> It is abundantly  
16 clear that this capacity is not needed at this time.

17 **2. APS's Utility-Owned Solar DG Option is not Designed to Meet its Purported Need.**

18 Even if the Commission were to find that APS has a need for an additional 20 MW of  
19 solar capacity, its utility-owned DG proposal is not designed to meet that purported need. As  
20 recently noted by this Commission in its October 22 Procedural Order, APS will not acquire  
21 energy from its DG proposal in the relevant timeframe. In her Order, the ALJ noted,

22 APS stated that without a Commission determination on the AZ Sun DG Program  
23 Application in September 2014, APS would not commence its procurement  
24 process and incur costs, and therefore would not get the systems installed in time  
25 for all the energy produced to apply to APS's 2015 renewable requirements  
pursuant to the REST Rules and the 2009 Settlement Agreement approved by  
Decision No. 71448 (December 30, 2009).<sup>23</sup>

26 <sup>19</sup> Staff Open Meeting Memorandum at p. 3.

27 <sup>20</sup> *Id.*

28 <sup>21</sup> APS Exceptions at p. 2., ln. 1-2.

<sup>22</sup> APS Application for Approval of its 2015 RES Implementation Plan, p. 2, ln. 28, FN1.

<sup>23</sup> Procedural Order at p. 3, ln.8 – ln. 13 (October 22, 2014).

1           Therefore, APS has not designed its utility DG ownership proposal for the purpose of  
2 meeting its Settlement obligations. Rather, APS's proposal appears to be designed only to meet  
3 its own self-interest in entering into the competitive DG market. But instead of competing on a  
4 level playing field with existing providers through an unregulated affiliate, APS's proposed  
5 program would allow it to leverage its monopoly status to the detriment of competitive DG  
6 suppliers.

7           **3. APS's Solar DG Proposal is More Expensive and Inferior to Other Options.**

8           If the Commission nevertheless finds that APS has a need for 20 MW of Solar, and that  
9 the Company's DG ownership proposal would meet that need, it should still reject the utility-  
10 owned DG proposal because it is the most expensive option and fails to deliver substantial  
11 benefits that would not otherwise be provided by wholesale or free market solar. Staff's analysis  
12 concludes that if the Commission feels compelled to order APS to acquire additional solar to  
13 ensure compliance with its 2009 Settlement, despite the fact that additional capacity is not  
14 needed, the lowest cost means of ensuring compliance is not through utility ownership.

15           Staff's cost analysis clearly shows that the APS Solar DG proposal is more expensive  
16 than the RedHawk facility and substantially more costly than Staff's Customer DG proposal.<sup>24</sup>  
17 Furthermore, in response to one of Staff's data requests, APS admits that "[c]ompared to a fixed  
18 roof mount system, the capacity value derived from the single axis tracking system contemplated  
19 in the RedHawk proposal may be better for APS's system and will produce more energy  
20 overall."<sup>25</sup> Thus there is no basis for approval of APS's Solar DG proposal.

21           In its Exceptions, APS sharply disputes Staff's cost comparison between utility-owned  
22 DG and customer-owned DG, but completely ignores Staff's conclusions regarding the  
23 RedHawk proposal. Staff's report clearly demonstrates that RedHawk is better suited to meet  
24 the 2009 Settlement requirements than the APS DG proposal, and it is a more cost effective  
25 option as a *system resource*. Again, the Commission must decide if and why it wants APS to  
26 acquire more solar. If the Commission finds that APS needs additional solar as a system  
27 resource, then it is the Commission's duty to ensure that APS makes the most cost-effective use

28 <sup>24</sup> *Id.* at p. 8, Table 6.

<sup>25</sup> See Attachment A, Response to Data Request Staff 3.5.

1 of ratepayer funds to meet this public service obligation. If the Commission believes that it is a  
2 good idea for APS to compete in the rooftop solar market, then the Commission should require  
3 APS to do so on the same basis as all of the other participants in that market – through an  
4 unregulated affiliate.

5 Furthermore, APS incorrectly states in its Exceptions that “[i]n the Net Metering Cost  
6 Shift Solutions docket, the Commission Staff concluded that third-party owned DG is not the  
7 least cost means for APS to acquire renewable energy.”<sup>26</sup> However, the issue of the cost of  
8 utility-owned solar was not before the Commission in that proceeding. Moreover, the  
9 Commission’s final order in that proceeding concludes that addressing the net metering cost shift  
10 issue would require a detailed analysis of both the costs and benefits of distributed generation  
11 systems, and should be addressed through APS’s next general rate case.<sup>27</sup> However, APS  
12 recently petitioned to delay its next rate case beyond the date originally required in the final  
13 decision in that docket.<sup>28</sup> If APS remains concerned about this issue, it should file its next rate  
14 case and address these issues through rate design. Proposing an expensive utility-owned DG  
15 program that is not needed does nothing to address the cost shift issue – it merely seeks to  
16 increase the Company’s profits through a fully subsidized solar program.

17 **4. The Company Erroneously Claims that Non-Economic Benefits are Unique to**  
18 **Utility-Owned Solar DG.**

19 In its analysis, Staff also addresses APS’ claimed non-economic benefits of its utility-  
20 owned DG proposal.<sup>29</sup> Staff agrees that some of APS’s stated benefits have value, but the Staff’s  
21 recommendation implicitly concludes that these non-economic benefits are not sufficient to  
22 justify the higher cost of the APS DG proposal. While TASC agrees that some of APS’s stated  
23 non-economic benefits could have value, these benefits can be achieved through customer and  
24 third-party-owned solar installations and are not unique to utility ownership, as APS continues to  
25 claim in its Exceptions.<sup>30</sup>

26 APS Exceptions, p. 2,

27 Decision No. 74202, p. 28, ln. 13-17.

28 See Decision No. 74702.

29 Staff Memo at p. 8-9.

30 APS Exceptions, p. 5, ln. 1-16.

1 First, there is a fundamental difference in value propositions between customer-side of  
2 the meter DG and utility-side of the meter DG. When a customer installs solar panels (either  
3 through a direct purchase, or through third-party financing), the customer enjoys the benefit of  
4 not having to purchase some of their electricity from the monopoly provider and of hedging  
5 against increasing electricity costs. In contrast, APS's DG proposal does not offer customers the  
6 option of reducing or offsetting their consumption or provide any of the long-term hedging  
7 benefits of self-generation. APS is merely offering customers the option to lease their roof space  
8 to APS for its benefit and use.

9 The Company proposes a \$30 monthly bill credit as a rental payment for customers that  
10 host solar panels.<sup>31</sup> However, the Company offers absolutely no evidence that a \$30 a month  
11 payment for roof space is a good economic alternative to leasing or buying other properties.  
12 Furthermore, APS offers no explanation as to why \$30 is a fair market price for the use of a  
13 customer's roof space, or whether a fixed monthly payment for a real estate lease with a term of  
14 20 years is reasonable.

15 Second, APS can achieve almost all of its claimed "unique benefits of utility ownership"  
16 by partnering with solar installers and customers. For example, APS claims that under its  
17 program APS has the unique opportunity to better understand the full impact of DG on its grid  
18 and maximize system benefits by pairing PV systems with advanced technologies for grid  
19 management.<sup>32</sup> However, there is no reason why APS cannot work with Commissioners and  
20 stakeholders, including other utilities to test and deploy advanced inverters for the benefit of the  
21 entire system.

22 TASC believes that if the Commission, Staff and APS were to examine these issues in  
23 detail, they would find that distribution management platforms should be designed using an open  
24 architecture to stimulate innovation. This would mean that distribution systems would be  
25 segmented into modular designs with three architectural components: 1) utility control system, 2)  
26 physical communications systems, and 3) customer controls and devices. In such an open  
27 architecture model, the utilities own and manage the utility management system while leaving

28 <sup>31</sup> APS Project Description at p. 2.

<sup>32</sup> *Id.* at p. 2.

1 the communications and customer controls and devices to the market so as to encourage  
2 utilization of existing infrastructure and future innovation.

3 This open architecture also provides superior flexibility for future needs, as investment is  
4 channeled into an adaptable platform that can integrate a variety of industry and customer assets  
5 including advanced inverters. Conversely, the vertically integrated approach risks the utility  
6 ending up with a stranded asset once the communications infrastructure and customer-sited  
7 assets become obsolete. Prior to pursuing a vertically integrated approach as APS requests,  
8 TASC encourages the Commission to investigate this issue in more detail. TASC would  
9 welcome the opportunity to work with stakeholders and to share TASC's experiences in other  
10 areas of the country. Such a dialogue would help to ensure that the Commission makes an  
11 informed decision for Arizona. In short, through an open architecture, these goals can be  
12 achieved regardless of who owns the PV systems.

13 Similarly, both staff and APS discuss the benefits of orienting solar panels toward the  
14 west or southwest to better match output with the APS peak demand.<sup>33</sup> As Staff notes, the loss  
15 of overall production may not outweigh this benefit.<sup>34</sup> For the sake of argument, TASC assumes  
16 that westerly or southwesterly orientation provides some system benefits, including the potential  
17 to avoid costly future capacity additions. But rather than owning the systems as rate base, APS  
18 could encourage free-market installations that maximize production during peak periods through  
19 creative rate design mechanisms, such as time-of-use pricing, and do so at a far lower cost to  
20 ratepayers than installing systems themselves. It is also important to keep in mind that APS  
21 historically has encouraged south-facing solar systems to maximize energy production.  
22 Originally, APS required specific southern orientation to maximize energy production when  
23 applying for its solar program. Rather than work with the market to encourage its customers to  
24 install systems to maximize what they have predetermined to be beneficial to the grid, APS has  
25 decided to take the most costly route for its ratepayers and to own the systems itself.

26 APS could also encourage private market investment in solar installations in strategic  
27 areas to maximize benefits by transparently providing locational customer incentives and

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28 <sup>33</sup> Staff Memo at p. 9.

<sup>34</sup> Id. at p. 10, ln. 9-14.

1 information through GIS mapping or other accessible methods. It makes sense that there are  
2 locational benefits to siting solar in certain areas. However, APS does not need to burden its  
3 customers with the high and unnecessary costs of utility ownership when it could very likely  
4 encourage private investment in these areas at far lower costs. The Staff report also does not  
5 appear to consider that there are less expensive ways to realize these locational benefits. TASC  
6 again encourages the Commission and Staff to complete full due diligence prior to determining  
7 that these benefits can only be secured through utility ownership.

8 Finally, the Commission should reject APS's contention that its program is justified  
9 because it provides some of its customers a chance to acquire solar who otherwise could not  
10 afford it. In its supplemental filing dated October 7, 2014, APS explained that, "Combining both  
11 the low income and targeted location preferences, APS will directly place no more than one-third  
12 of the total number of systems to be installed under the project."<sup>35</sup> First, this provides no  
13 guarantee that a single low-income or low credit customer will receive installations nor qualify.  
14 Second, this is not the primary purpose of a public utility. Approving a program based on this  
15 policy objective leads the Commission down a slippery slope where the monopoly is soon  
16 providing goods and services in an otherwise competitive market under the guise of a public  
17 welfare program. If part of APS's charter is to bring goods and services that are normally  
18 provided by the private sector into the hands of its customers who, for whatever reason, are not  
19 in a position to acquire them on their own, then what is to stop the utility from owning and  
20 leasing Energy Star appliances, electric cars, NEST systems, and many other energy-related  
21 systems and devices that the public desires? APS is charged with providing an essential public  
22 service, not with assuring that all its customers have access to the latest technology at below-  
23 market prices.

24 Lastly, TASC members work day-in and day-out to deliver solar to all. When national  
25 solar companies started attracting private investment several years ago, they had to prove out the  
26 risk to investors. In the beginning, as with many technology products, costs were high and  
27 therefore investors only felt comfortable with customers with very high FICO scores. Now, less

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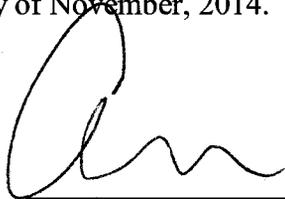
<sup>35</sup> APS Project Description, p. 4.

1 than five years later, the majority of customers are near or below the median income level for the  
2 state and proving of risk has made investors comfortable with credit scores over 100 points lower  
3 than they originally had. The service of customers with lower credit continues as the market  
4 matures.

5  
6 **CONCLUSION**

7 For all of the reasons stated herein, TASC recommends that the Commission adopt  
8 Staff's recommendations to allow APS to submit information in its next REST Implementation  
9 Plan filing, discussing whether APS will meet its Settlement obligations.<sup>36</sup> However, if the  
10 Commission believes that 20MW of AZ Sun is needed at this time, it should order the Company  
11 to implement Staff's Customer DG proposal because it is the lowest cost option presented.<sup>37</sup> If  
12 the Company wishes to offer customers on-site solar equipment so that customers can achieve  
13 the true benefits of self-generation it should form an unregulated subsidiary and compete fairly in  
14 the open market.

15  
16 Respectfully submitted this 12<sup>th</sup> day of November, 2014.

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28 <sup>36</sup> Staff Memo at p. 10.

<sup>37</sup> *Id.*

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