November 8, 2013

Commissioner Brenda Burns
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

RE: Analysis of RUCO Proposal
Docket No. E-01345A-13-0248

Dear Commissioner Burns:

As you requested, APS assessed the cost shift impact on non-solar customers if the Commission adopted RUCO’s proposed phase-in approach in this proceeding.

APS believes that RUCO’s comments positively contribute to this discussion. For instance, RUCO acknowledges that the current net metering program shifts costs onto non-solar customers. And RUCO recognizes the need for a broader discussion concerning the value of the electric grid and the emergence of new customer technologies. APS agrees with RUCO on both of these conclusions. APS disagrees with RUCO, however, on the topic raised in your letter: the magnitude of the cost-shift impact on non-solar customers that would result from RUCO’s proposal. In particular, APS believes that RUCO significantly underestimates the long term cost-shift resulting from rooftop solar.

As noted in the testimony of Charles Miessner, and demonstrated in the documents attached to his testimony and in APS’s responses to data requests, the cost shift for each rooftop solar system ranges from $810 to approximately $1,000 per year. In assessing RUCO’s proposal for this letter, APS conservatively uses the $810 annual cost shift, which amounts to $67 per month.

Table One below shows the monthly cost shift impact for a single solar participant using RUCO’s proposed charges. The table uses the average APS
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system size of 6.4 kW and the $67/month cost shift. As shown, RUCO’s initial charge of $1 per kW would address $6.40 of the $67 monthly cost shift.

Table Two shows the cost shift resulting from RUCO’s proposal in 20 MW increments over 20 years. Please note that 20 MWs of rooftop solar installations equals 3,125 systems with an average size of 6.4 kW. The total annual cost shift resulting from 100 MW of new solar installations (or 15,625 systems) under RUCO’s proposal is $10M, which accumulates to $203M over 20 years. This cumulative cost shift exemplifies why APS believes that RUCO’s proposal does not go far enough to address the costs being shifted onto non-solar customers.

**Table One: Cost Shift per Solar Participant**  
(Based on 6.4 kW typical solar system)

<table>
<thead>
<tr>
<th>Installed Capacity</th>
<th>RUCO Charge ($ per kW)</th>
<th>Solar System Size</th>
<th>RUCO Charge ($ per month)</th>
<th>Cost Shift Before Charge ($ per month)</th>
<th>Remaining Cost Shift ($ per month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-20 MW</td>
<td>$1.0</td>
<td>6.4 kW</td>
<td>$6.40</td>
<td>$67.00</td>
<td>$60.60</td>
</tr>
<tr>
<td>21-40 MW</td>
<td>$1.5</td>
<td>6.4 kW</td>
<td>$9.60</td>
<td>$67.00</td>
<td>$57.40</td>
</tr>
<tr>
<td>41-60 MW</td>
<td>$2.0</td>
<td>6.4 kW</td>
<td>$12.80</td>
<td>$67.00</td>
<td>$54.20</td>
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<tr>
<td>61-80 MW</td>
<td>$2.5</td>
<td>6.4 kW</td>
<td>$16.00</td>
<td>$67.00</td>
<td>$51.00</td>
</tr>
<tr>
<td>81-100 MW</td>
<td>$3.0</td>
<td>6.4 kW</td>
<td>$19.20</td>
<td>$67.00</td>
<td>$47.80</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Installed Capacity</th>
<th>RUCO Charge ($ per kW)</th>
<th>Cost Shift Before Charge ($ per Year)</th>
<th>Remaining Cost Shift ($ per Year)</th>
<th>Remaining Cost Shift (20 years)</th>
<th>Cumulative Remaining Cost Shift (20 years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-20 MW</td>
<td>$1.0</td>
<td>$2,512,500</td>
<td>$2,272,500</td>
<td>$45,450,000</td>
<td>$45,450,000</td>
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<tr>
<td>21-40 MW</td>
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<td>$2,152,500</td>
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<td>$129,150,000</td>
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<td>61-80 MW</td>
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<td>$1,912,500</td>
<td>$38,250,000</td>
<td>$167,400,000</td>
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<td>$35,850,000</td>
<td>$203,250,000</td>
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<tr>
<td>Total</td>
<td></td>
<td>$12,562,500</td>
<td>$10,162,500</td>
<td>$203,250,000</td>
<td>$203,250,000</td>
</tr>
</tbody>
</table>
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November 8, 2013

Thank you for your letter. Please let me know if you have any further questions.

Sincerely,

[Signature]

Thomas Loquvam

c: Chairman Bob Stump
   Commissioner Gary Pierce
   Commissioner Robert L. Burns
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