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BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

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AZ CORP COMMISSION
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2016 AUG 8 PM 3 20

IN THE MATTER OF THE COMMISSION'S
INVESTIGATION OF VALUE AND COST OF
DISTRIBUTED GENERATION.

DOCKET NO. E-00000J-14-0023

STAFF'S NOTICE OF FILING ERRATA

On August 5, 2016, Staff filed its Reply Brief. Staff has the following corrections that it hereby makes to its Reply Brief:

Page 7, Change Footnote 20 to read "Tr. at 1969 (Beach)." Same Page, Change Footnote 21 to read "Tr. at 2001 (Beach)."

Page 12, Line 11, Add " , namely Vote Solar," after "approach"; Same Page, Line 16, Delete "They, and RUCO," and Replace it with "TASC and Vote Solar"

Page 13, Line 1, Delete "And" and Insert "RUCO" after "Vote Solar". Same Page, Line 2, Delete "and" and Insert " , and RUCO" after "TASC". Same Page, Line 6, Delete "export" and Insert "compensation" in its place.

Replacement pages are attached to this Notice of Filing. Please replace, pages 7, 12 and 13 in Staff's Reply Brief filed on August 5, 2016 with the attached pages. Staff apologizes for any inconvenience.

RESPECTFULLY SUBMITTED this 8th day of August, 2016.

Arizona Corporation Commission

DOCKETED

AUG 08 2016

DOCKETED BY *JA*

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1 On this 8th day of August, 2016, the foregoing document was filed with Docket Control as a Utilities
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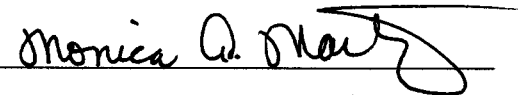
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1 As to the second point, Staff sees no difference between Staff's proposal and TEP/UNSE's
2 proposal. Under either the TEP/UNSE single PPA approach or the Staff Resource Comparison
3 methodology, the rates would be locked in for a period of time. Under Staff's proposal the prices
4 would be locked in until TEP/UNSE's next rate case. Thus, to the extent "economic uncertainty" is
5 created, which Staff disputes, it would occur to the same extent under the Companies' single PPA
6 proposal.

7 Vote Solar and TASC argue that value could vary dramatically depending on which utility-
8 scale PPA is used and the parameters employed, making the result of the methodology "arbitrary."¹⁹
9 They also argue that grid-scale facilities are not interchangeable with rooftop DG and therefore
10 attempting to use them as a proxy for one another is inappropriate. Staff disagrees with both of these
11 points. Staff's Resource Comparison methodology is not "arbitrary." It is based upon the electric
12 utility's actual costs for the last five years (or whatever period the Commission decides to select) and
13 includes the actual PPA prices and revenue requirements of utility owned grid-scale solar facilities.
14 The variables incorporated into the spreadsheet used for this purpose allow for differences in
15 weighting and selection criteria and other variables to ensure that a representative cost per kWh is
16 produced. In the end, the methodology produces an accurate and reliable indication of the utility's
17 costs associated with its solar generation facilities including both PPAs and utility owned facilities.

18 As to Vote Solar and TASC's second point, which would apply to all of the grid-scale
19 alternatives offered in this case, grid-scale solar PPA's or utility owned solar facilities are the cost
20 that would be typically avoided since they are the most likely to be used in place of solar DG. At the
21 hearing, TASC witness Beach in fact stated that an apples to apples comparison was possible if you
22 subtracted the long-run marginal costs associated with transmission since rooftop solar (as opposed to
23 grid-scale) is on-site.²⁰ Mr. Beach stated that the calculation was not "particularly difficult."²¹

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¹⁹ *Id.*

28 ²⁰ Tr. at 1969 (Beach).

²¹ Tr. at 2001 (Beach).

1 TEP/UNSE's short-term avoided cost methodology utilizes several models recently adopted
2 by the Utah Public Service Commission.⁴⁴ Both are short-term cost methodologies; but according to
3 the TEP/UNSE witness Tilghman, one can incorporate long benefits associated with a VOS
4 analysis.⁴⁵

5 Significant debate continues on the issue of whether to utilize a long-term or short-term
6 analysis for purposes of a VOS analysis. RUCO, TASC and Vote Solar propose a long-term analyses
7 which would utilize the economic life of the solar system (20-30 years). APS and TEP/UNSE
8 recommend that the VOS determination be based upon a short-term analysis. The long-term analysis
9 would incorporate forecasts and planning horizons comparable to an Integrated Resource Plan
10 ("IRP"). A short-term analysis is more consistent with the historic test year concept. The proponents
11 of the long-term approach, namely Vote Solar, suggest that it is the only appropriate way to
12 determine the value of solar. They also argue that the purpose of the VOS methodology is not to set
13 actual rates. The purpose of the VOS calculation is to guide the Commission's policy determinations
14 regarding appropriate rate design change for rooftop solar. TASC and Vote Solar argue that a short-
15 term methodology is but a snapshot of costs and benefits and does not account for the long-term
16 benefits of resource supply options like DG export. TASC and Vote Solar argue that only through a
17 long-term avoided costing methodology can one actually determine the "value of solar." Anything
18 short of this will not be reflective of what the value of solar actually is, and will therefore not be
19 useful to the Commission when making changes rates and rate design affecting solar customers.

20 While Staff prefers a more limited forecasting period, (i.e., no longer than the time between
21 rates or approximately 5 years) it also acknowledged that if the Commission desires to utilize a long-
22 term forecast to determine the value of solar, there are ways to address to some extent the inherent
23 risk associated with longer term forecasts. First, limiting the analysis to those costs and benefits that
24 more easily quantified as suggested by RUCO may be appropriate. Second, more frequent updates of
25 the forecasted data could be another mechanism to address the risk that the forecast will likely
26 change.

28 ⁴⁴ Vote Solar Initial Br. at 26.

⁴⁵ Staff's Initial Br. at 25.

1 **C. Criticisms Of The TASC, Vote Solar And RUCO Long-Term Avoided Cost Methodologies.**

2 Vote Solar, TASC, and RUCO advocate the use of long-term avoided cost methodologies that
3 would extend out to encompass the economic life of a typical solar PV system (approximately 20-30
4 years). Their various approaches are set forth in the testimonies of RUCO witness Huber, Vote Solar
5 witnesses Kobor and Volkman and TASC witness Beach.

6 RUCO's long-term methodology would also incorporate a step down in the compensation
7 rate, the timing and amount of which would be at the discretion of the Commission. Staff's concerns
8 regarding RUCO's step down approach were discussed in its Initial Brief.

9 APS argues that a long-term avoided cost approach is likely to rely on the forecasts that turn
10 out to be wrong and will likely result in non-DG customers overpaying for the service they receive.
11 APS argues that there are important differences between rooftop solar and utility resources that a
12 utility procures as part of the long-term resource planning process.⁴⁶ A utility can exercise control
13 over its long-term resources and can call on them when needed. There are penalties involved if a
14 third-party fails to perform.⁴⁷ This is not the case with rooftop solar. Rooftop solar is not designed to
15 fulfill a specific need by the utility and the utility cannot rely upon rooftop solar to remain available
16 and capable of producing power over the life of its system.⁴⁸

17 Staff's position on these issues was discussed in the section on APS's short-term avoided
18 costing methodology. In addition, Staff witness Solganick addressed two issues with Vote Solar's
19 proposals in this Docket. First, Vote Solar proposes using a current rooftop solar penetration level
20 for an analysis that spans twenty to thirty years.⁴⁹ Staff opposes this and believes the penetration rate
21 should be synchronized with the study period. Finally with respect to an appropriate discount rate,
22 Staff witness Solganick agreed with the utilities that the Commission should use the Companies
23 weighted average cost of capital rather than the inflation rate suggested by witness Kobor.

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27 ⁴⁶ Albert Direct Test., Ex. APS-5 at 19.

28 ⁴⁷ *Id.*

⁴⁸ *Id.*

⁴⁹ *See* Solganick Rebuttal Test. Staff Ex. 3, at 15 citing to Kobor Direct Test. at 23).