	ORIGINAL 0000172396
1	BEFORE THE ARIZONA CORPORATION
2	COMMISSIONERS DOUG LITTLE – CHAIRMAN 2013 MIG −5 ⊃ 4:24
3	BOB STUMP BOB BURNS
4	TOM FORESE ANDY TOBIN
5	
6	
7	IN THE MATTER OF THE COMMISSION'S) DOCKET NO. E-00000J-14-0023 INVESTIGATION OF VALUE AND COST OF)
8	DISTRIBUTED GENERATION
9	
10	Arizona Corporation Commission DOCKETED
11	AUG 0 5 2016
12	BOOKETED DY
13	
14	
15	REPLY BRIEF
16	OF TUCSON ELECTRIC POWER COMPANY
17 18	AND UNS ELECTRIC, INC.
18	
20	
21	
22	August 5, 2016
23	
24	
25	
26	
27	

1		TABLE OF CONTENTS
2		
2	I.	Introduction1
4	II.	The Companies' Value of DG Proposal1
5	III.	Other Proposals2
6		A. Commission Staff2
7		1. Avoiding Cost Methodology2
8		2. Resource Comparison Methodology
9		B. Solar Advocates
-		C. RUCO
10		D. APS5
11	IV.	Conclusion
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
		i

Tucson Electric Power Company ("TEP") and UNS Electric, Inc. ("UNS Electric") (together "Companies"), submit their Reply Brief in this docket.

3

I.

1

2

# Introduction.

The Companies continue to believe that ratepayers should pay only for the true, known and measurable benefits provided by distributed generation ("DG"). Accordingly, the methodologies adopted here should not overvalue DG or value DG based on future, uncertain benefits that are not actual avoided costs because they are not incurred by the utility. Many parties, including Staff, recognize that potential, yet speculative, future benefits are not an appropriate basis for imposing costs on ratepayers today.

However, some parties to this docket press for recovery of future benefits that reflect
resource planning principles and not cost of service principles. In seeking recovery for possible
future benefits, those parties failed to clearly state a methodology to value speculative future
benefits other than resorting to planning principles that could be applied to possible benefits.

14 It is also apparent from the evidentiary record and the briefing that some of the potential 15 methodologies for valuing DG are complicated and resource intensive. Indeed, it is likely that 16 these methodologies could greatly expand rate cases and end up being "the tail wagging the dog" 17 in future rate proceedings.<sup>1</sup> Although the Companies believe that an appropriate short-term 18 avoided cost methodology would be acceptable, the Companies continue to believe that an 19 alternative to the avoided cost determination for DG could be done more simply through a market-20 proxy, which would also comport with PURPA.

21

# II. The Companies' Value of DG Proposal.

The Companies have presented two options for determining the cost and value of DG. As noted in their Initial Brief, both approaches eliminate any "banking" of excess kWh exported into the grid by a DG system. For the most part, other parties did not address the elimination of DG. As

The Companies do not believe that an export rate for excess DG energy necessarily needs to be conducted in a rate case. A separate avoided cost proceeding, however, could require resources similar to a rate case.

banking. Staff did acknowledge that "the concepts of banking and netting need to be reconsidered 1 as part of the overall value proposition."<sup>2</sup> However, Staff believes that such reconsideration 2 should take place in a rate case or a rulemaking.<sup>3</sup> The Companies disagree with Staff's position. 3 As Staff also notes, most parties would limit the value of DG analysis to exported DG energy.<sup>4</sup> 4 The concept of value of DG necessarily requires no banking of DG. If parties believe that 5 exported DG energy is worth more or less than bundled retail rates, that exported energy cannot be 6 netted or banked. In fact, RUCO believes that even self-consumption should be subject to the 7 valuation process. The Commission should make clear in this proceeding that its valuation 8 9 methodologies do not include banking or netting of DG energy at retail rates.

### 10 III. Other Proposals.

11 12

#### A. Commission Staff.

The Companies provided some comment on these methodologies in their Initial Brief.

#### 13

## 1. Avoided Cost Methodology.

First, Staff has proposed an avoided cost approach.<sup>5</sup> The Companies support Staff's 14 position not to include a variety of elements in the Value of DG methodology that are not included 15 in rates, such as environmental or economic benefits, fuel hedge values or grid reliability benefits.<sup>6</sup> 16 The Companies also agree with Staff that any long-term avoided costs, such as generation capacity 17 reductions, should only be considered if the DG resource provides real, concrete on-going benefits 18 through proof of "effective load carrying capabilities."<sup>7</sup> DG resources should meet a significant 19 burden of proof before any costs beyond short-term avoided cost savings can be imposed on non-20 21 DG ratepayers.

- 23
- 24
  - $\frac{1}{2}$  Staff Initial Closing Brief at 7-8.
- 25  $\int_{1}^{3}$  Id. at 8.
- $26 \int_{5}^{4} \text{Id. at } 13.$
- $\frac{26}{5}$  Tr. (Broderick) at 2324.
- 27  $\int_{-7}^{6}$  Staff Initial Closing Brief at 18-19.
  - <sup>7</sup> Id. at 16-17.

1 The Companies continue to have reservations about the implementation of Staff's avoided 2 cost methodology. The complexity may provide a challenge to smaller utilities with limited 3 resources. To the extent such a methodology took place in a rate case, it could overwhelm the 4 other important issues in that rate case.

5

## 2. Resource Comparison Methodology.

6 Staff's proposal to use comparable resources continues to cause the Companies some 7 concern. First, the Companies do not agree with the use of utility-owned solar facilities costs as a 8 proxy for DG solar resources. As the Companies have set forth in their testimony, utility-owned 9 solar facilities are operated much differently than rooftop DG facilities.<sup>8</sup> For example, the 10 Companies control the output of the system to provide voltage stabilization or other system 11 benefits. That may reduce the actual kWh produced by the system and skew the per-kWh cost – 12 however, the Companies would be gaining system benefits from the curtailment.

13 Staff's proposal to use both PPAs and utility-owned solar PV facilities as a proxy to determine the value to be paid for exported DG energy appears to be overreaching because it 14 would use a weighted average of *all* such resources for a utility without any limitation on vintage. 15 That approach will clearly lead to overcompensation for exported DG energy and unnecessary 16 costs on non-DG ratepayers because of the steep decline in the cost of solar capacity. New DG 17 customers should not benefit from out-of-date PV pricing or older PPAs that were signed in order 18 to meet a Commission REST requirement. Indeed, at the time the pre-2014 PPAs were signed, 19 residential customers were still receiving upfront incentives to install rooftop PV systems. 20

21

### **B.** Solar Advocates.

The Solar Advocates are proposing to include a levelized value of potential, yet speculative, future benefits in the value of solar. They also oppose the use of a market proxy to set a value for exported DG. Both positions will unnecessarily and improperly increase the costs to non-DG customers and are not in the public interest. The Solar Advocates further fail to

20

<sup>8</sup> See Tr. (Tilghman) at 2226, 2247-48.

acknowledge the impact on value of the intermittent nature of solar energy on and, in the case of residential rooftop DG systems, the "as available" nature of any exported energy.

First, as the Companies testified, the value of DG energy to the utilities – and to the ratepayers – is equivalent to the utilities' short-term avoided cost of energy because there is no contractual or other commitment to provide certain amounts of energy or capacity. This value is similar to value for "as available" energy provided for qualifying facilities under PURPA and related FERC regulations. As a result, there are no long-term avoided costs from rooftop DG systems. And non-DG customers should not pay for any speculative, levelized future benefits.

9 Second, under PURPA, a market-based proxy can satisfy the avoided cost payment
10 standard. The market-based proxy should be comparable in nature to the energy for which it is a
11 proxy.<sup>9</sup> A distribution grid-tied PPA is *at least equivalent* to rooftop DG and is, in fact, a *superior*12 resource from an operational perspective yet with similar renewable resource characteristics as
13 defined by the REST Rules. Non-DG customers should not pay more for DG energy than a
14 comparable market-proxy rate.

15

1

2

### C. RUCO.

The Companies agree with many of RUCO's statements in its Closing Brief. In particular, RUCO believes that the status quo must change, but that the solar advocates resist any change, insist that DG energy is more valuable than the current retail rate for energy, and simply attack proposals rather than offer meaningful solutions.<sup>10</sup> RUCO also states that the "most important cost assumption the Commission needs to consider in determining the cost [of DG solar], is the change of revenue collected by the utility from the customer before and after the customer installs

- 22
- 23
- 24

Southern California Edison Company, 133 FERC ¶ 61,059 at para. 29 (Issued October 21, 2010) (clarifying that setting a utility's avoided cost under PURPA based on all sources able to sell to the utility means that "where a state requires a utility to procure a certain percentage of energy from generators with certain characteristics, generators with those characteristics constitute the sources that are relevant to the determination of the utility's avoided cost for that procurement requirement."

<sup>&</sup>lt;sup>10</sup> RUCO Closing Brief at 7.

a DG system."<sup>11</sup> This is precisely what the Companies provided in their cost studies in this
 docket.

3 RUCO appears to have settled on its RPS proposal as its primary preference, but would still support other proposals as options for customers. The Companies are concerned about the 4 complexity of the RPS proposal, the challenge of setting initial parameters, the glide path for 5 reducing value of DG, the potential use of levelized values to approximate future benefits, and a 6 variety of other factors that underlie the proposal. It is not clear whether those elements would be 7 determined on a utility-by-utility basis in rate cases (or other proceedings) or whether there would 8 be an additional phase of the Value of DG proceeding to develop a more definitive "template" that 9 would then apply to all utilities. The other challenge in RUCO's proposal is that it intends to 10 provide "a window of time for solar companies to be profitable with the subsidy,"<sup>12</sup> yet there is no 11 evidence in the record regarding the details of solar company business models that could allow 12 13 such an assessment.

### 14

#### D. APS.

APS's proposals are similar to the Companies' proposals because the value of exported DG energy would be based on either short-term avoided cost or on a recent market rate proxy for similar renewable resources. The Companies continue to be able to support APS's proposals.

## 18 IV. <u>Conclusion.</u>

The Commission should adopt one of the Companies' proposed methodologies to value DG. For efficiency sake, the Companies believe that the current PPA Proxy methodology is the most feasible and more objective approach and will be the least controversial to apply. The proxy should reflect recent PPAs that accurately reflect the current cost of PV systems -- not older, costlier systems. The Companies also request that, to the extent the Commission includes societal and forward-looking benefits, those benefits be separately identified from the utility's cost of for the utility's cost of

27 11 Id. at 11. 12 Id. at 8.

1	service, be paid outside of the avoided cost payments and be recovered from ratepayers through a
2	separate charge.
3	
4	RESPECTFULLY SUBMITTED this 5th day of August, 2016.
5	TUCSON ELECTRIC POWER COMPANY UNS ELECTRIC, INC.
6	Watt
7	By Michael W. Patten Snell & Wilmer L.L.P.
8	One Arizona Center
9	400 East Van Buren Street Phoenix, Arizona 85004
10	and
11	Bradley S. Carroll
12	Tucson Electric Power Company 88 East Broadway, MS HQE910
13	P.O. Box 711
14	Tucson, Arizona 85702
15	Attorneys for Tucson Electric Power Company and UNS Electric, Inc.
16	
17	
18	Original and 13 copies of the foregoing
19	filed this <b>5</b> <sup>4</sup> / <sub>6</sub> day of August, 2016, with:
20	Docket Control Arizona Corporation Commission
21	1200 West Washington Street Phoenix, Arizona 85007
22	
23	
24	
25	
26	
27	

1	Copies of the foregoing hand-delivered/mailed this $\underline{\leq}$ day of August, 2016, to the following:
2 3	Teena Jibilian Administrative Law Judge
4	Hearing Division Arizona Corporation Commission
5	1200 West Washington Street Phoenix, Arizona 85007
6	Maureen Scott
7	Matthew Laudone Legal Division
8	Arizona Corporation Commission 1200 West Washington Street
9	Phoenix, Arizona 85007 tford@azcc.gov
10	rlloyd@azcc.gov tbroderick@azcc.gov
11	mlaudone@azcc.gov mscott@azcc.gov
12	Consented to Service by Email Thomas Broderick
13	Utilities Division Arizona Corporation Commission
14	1200 West Washington Street Phoenix, Arizona 85007
15	C. Webb Crockett
16	Patrick Black Fennemore Craig PC
17	2394 E. Camelback Road, Suite 600 Phoenix, Arizona 85016
18	wcrockett@fclaw.com pblack@fclaw.com
19	Consented to Service by Email
20	Dillon Holmes Clean Power Arizona
21	9635 N. 7 <sup>th</sup> Street, #47520 Phoenix, AZ 85068
22	Dillon@cleanpoweraz.org Consented to Service by Email
23	Court S. Rich
24	Rose Law Group, PC 7144 E. Stetson Drive, Suite 300
25 26	Scottsdale, AZ 85251 crich@roselawgroup.com
26 27	<u>Consented to Service by Email</u>
27	

 $\|$ 

_	
1	
1	

1	Daniel W. Pozefsky
2	Chief Counsel Residential Utility Consumer Office
3	1110 West Washington, Suite 220 Phoenix, AZ 85007
4	dpozefsky@azruco.gov
	Consented to Service by Email
5	Jeffrey W. Crockett, Esq. Crockett Law Group PLLC
6	2198 E. Camelback Road, Suite 305 Phoenix, AZ 85016
7	jeff@crockettlaw.com Consented to Service by Email
8	
9	Kirby Chapman, CPA Chief Financial and Administrative Officer
10	Sulphur Springs Valley Electric Cooperative, Inc. 311 E. Wilcox
11	Sierra Vista, Arizona 85650 kchapman@ssvec.com
12	jblair@ssvec.com Consented to Service by Email
13	Meghan H. Grabel
14	Osborn Maledon, PA 2929 North Central Avenue
15	Phoenix, Arizona 85012 mgrabel@omlaw.com
16	gyaquinto@arizonaic.org Consented to Service by Email
17	Craig A. Marks
18	Craig A. Marks, PLC 10645 N. Tatum Blvd., Suite 200-676
19	Phoenix, Arizona 85028 craig.marks@azbar.org
20	Consented to Service by Email
20	Thomas A. Loquvam
	Melissa M. Krueger Thomas L. Mumaw
22	Pinnacle West Capital Corporation P.O. Box 53999, MS 8695
23	Phoenix, Arizona 85072-3999 thomas.loquvam@pinnaclewest.com
24	Consented to Service by Email
25	Kerri A. Carnes
26	Arizona Public Service Company P.O. Box 53999. MS 9712
27	Phoenix, Arizona 85072-3999

1	Jennifer A. Cranston Gallagher & Kennedy, PA
2	2575 E. Camelback Road, 11 <sup>th</sup> Floor Phoenix, Arizona 85016
3	jennifer.cranston@gknet.com Consented to Service by Email
4	Garry D. Hays
5	Law Offices of Garry D. Hays, PC 2198 East Camelback Road, Suite 305 Phoenix, Arizona 85016
6	
7	Timothy M. Hogan Arizona Center for Law in the Public Interest 514 W. Roosevelt Street
8	Phoenix, Arizona 85003
9	thogan@aclpi.org <u>Consented to Service by Email</u>
10	Michael Alan Hiatt
11	Earthjustice 633 17 <sup>th</sup> Street, Suite 1600 Denver, CO 80202
12	mhiatt@earthjustice.org
13	cosuala@earthjustice.org Consented to Service by Email
14	Rick Gilliam
15	Director of Research and Analysis The Vote Solar Initiative
16	1120 Pearl Street, Suite 200 Boulder, Colorado 80302
17	rick@votesolar.com Consented to Service by Email
18	Briana Kobor, Program Director
19	Vote Solar 360 22 <sup>nd</sup> Street, Suite 730
20	Oakland, CA 94612hai briana@votesolar.com
21	Consented to Service by Email
22	Ken Wilson Western Resource Advocates
23	2260 Baseline Road, Suite 200 Boulder, Colorado 80302
24	ken.wilson@westernresources.org Consented to Service by Email
25	Tom Harris, Chairman
26	AriSEIA 2122 W. Lone Cactus Dr., Suite 2
27	Phoenix, AZ 85027 Tom.harris@ariseia.org <u>Consented to Service by Email</u>

>

I	
1	Greg Patterson
2	Munger Chadwick 916 West Adams, Suite 3
3	Phoenix, Arizona 85007
4	Gary Pierson
5	Arizona Electric Power Cooperative, Inc. P.O. Box 670
	1000 S. Highway 80 Benson, Arizona 85602
6	Charles C. Kretek
7	Columbus Electric Cooperative, Inc. P.O. Box 631
8	Deming, New Mexico 88031
9	LaDel Laub Dixie Escalante Rural Electric Association
10	71 E. Highway 56 Beryl, Utah 84714
11	Steven Lunt
12	Duncan Valley Electric Cooperative, Inc. 379597 AZ 75
13	P.O. Box 440 Duncan, Arizona 85534
14	Dan McClendon
15	Garkane Energy Cooperative P.O. Box 465
16	Loa, Utah 84747
17	William P. Sullivan Curtis, Goodwin, Sullivan, Udall & Schwab, PLC
18	501 E. Thomas Road Phoenix, Arizona 85012
19	
20	Than W. Ashby Graham County Electric Cooperative, Inc.
21	9 W. Center Street P.O. Drawer B
22	Pima, Arizona 85543
23	Tyler Carlson Peggy Gillman
24	Mohave Electric Cooperative, Inc. P.O. Box 1045
25	Bullhead City, Arizona 86430
26	Richard C. Adkerson Michael J. Arnold
27	Morenci Water and Electric Company 333 N. Central Ave.
	Phoenix, Arizona 85004

. 1	Roy Archer Morenci Water and Electric Company &
2	Ajo Improvement Company P.O. Box 68
3	Morenci, AZ 85540
4	Charles R. Moore Paul O'Dair
5	Navopache Electric Cooperative, Inc.
6	1878 W. White Mountain Blvd. Lakeside, Arizona 85929
7	Albert Gervenack
8	Sun City West Property Owners & Residents Association 13815 Camino Del Sol
9	Sun City West, Arizona 85375
10	Patricia Ferre P.O. Box 433 Deven A 7 85547
11	Payson, AZ 85547
12	Nancy Baer 245 San Patricio Drive Sedona, AZ 86336
13	
14	Nicholas J. Enoch Lubin & Enoch, P.C.
15	349 North Forth Avenue Phoenix, AZ 85003
16	Lewis M. Levenson 1308 East Cedar Lane
17	Payson, AZ 85541
18	Susan H. Pitcairn, MS Bishard H. Bitagirn, DKD, DVM
19	Richard H. Pitcairn, PhD, DVM 1865 Gun Fury Road Sedona, AZ 86336
20	Scuola, AZ 80350
21	
22	By Jaclyn Howard
23	By 1 phelipuloward
24	
25	
26	
27	
	11