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ARIZONA CORPORATION COMMISSION
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Arizona Corporation Commission

DOCKETED

OCT 29 2014

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BEFORE THE ARIZONA CORPORATION COMMISSION

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CHAIRMAN

GARY PIERCE
COMMISSIONER

BOB BURNS
COMMISSIONER

SUSAN BITTER SMITH
COMMISSIONER

BRENDA BURNS
COMMISSIONER

11 **IN THE MATTER OF THE**) **DOCKET NO. E-01933A-14-0248**
12 **APPLICATION OF TUCSON**)
13 **ELECTRIC POWER COMPANY**)
14 **FOR APPROVAL OF ITS 2015**) **THE ALLIANCE FOR SOLAR CHOICE**
RENEWABLE ENERGY STANDARD) **(TASC) OPPOSITION**
IMPLEMENTATION PLAN.)

ORIGINAL

**THE ALLIANCE FOR SOLAR CHOICE OPPOSITION TO TUCSON ELECTRIC
POWER'S UTILITY-OWNED DISTRIBUTED GENERATION PROGRAM**

19 The Alliance for Solar Choice ("TASC"), through its undersigned counsel, opposes
20 Tucson Electric Power's ("TEP") proposed Utility-Owned Distributed Generation Program
21 ("UODG Program"), which TEP inappropriately includes in its 2015 Renewable Energy
22 Standard ("REST") Implementation Plan ("Application"). Administrative Law Judge Jane L.
23 Rodda granted TASC's application to intervene in this proceeding on September 26, 2014.
24 TASC was founded by the nation's largest rooftop solar companies and its members include:
25 Demeter Power, SolarCity, Solar Universe, Sungevity, Sunrun, and Verengo. These companies
26 are responsible for thousands of solar installations serving businesses, residents, schools,
27 churches and government facilities in Arizona. TASC's member companies have brought

1 hundreds of jobs to Arizona and invested tens of millions of dollars in Arizona's cities and
2 towns.

3 TEP filed its 2015 REST Implementation Plan with the Commission on July 1, 2014. In
4 its Application, TEP proposes an unsupported UODG Program that would entail a massive
5 extension of TEP's monopoly into markets that are currently being competitively served.¹ The
6 Commission should reject TEP's anti-competitive proposal. TEP's proposed UODG Program is
7 an inappropriate activity for a state-sponsored, regulated monopoly; it lacks support; it shifts
8 investment risk from the competitive market to ratepayers; and it increases costs to TEP
9 ratepayers without providing benefits beyond those that are already provided by a competitive
10 solar industry. TEP's proposal also raises numerous, insurmountable legal problems that TEP
11 fails to address in its Application. At a minimum, evidentiary hearings would be necessary to
12 address the many material issues of contested fact that TEP's UODG Proposal raises. However,
13 the Commission should not require parties to expend resources resolving factual disputes for a
14 UODG Proposal that is so legally defective that it cannot be approved.

15
16 **I. TEP's Proposal To Extend Its State-Sanctioned Monopoly Into a Currently**
17 **Competitive Market Violates The Public Interest In Limiting The Scope Of The**
18 **Regulated Monopoly And Promoting Competitive Markets.**

19
20 TEP proposes a massive expansion of its state-sanctioned monopoly into a market for
21 onsite solar service that is currently competitively served in Arizona. In response to data
22 requests from Staff, TEP indicates its UODG Proposal is merely the first year of an ongoing
23 incursion into the private-sector solar market that would grant TEP ownership of approximately
24 one out of every four solar systems installed in its service territory between now and
25 achievement of full compliance under the REST.² TEP's proposal violates the public's interest

26
27 ¹ The proposed program is described in Section II (D) of the Plan, pages 7-10. The proposed Tariff was filed on
July 18, 2014 as Exhibit 9 to the Plan.

28 ² TEP Response to Staff's First Set of Data Requests (DR), Question 1.10, indicating that, with continued funding
for the program at the requested first-year level, TEP would own 25% of the distributed solar generation in its
service territory needed to meet the 2025 REST compliance target.

1 in placing necessary limits on the scope of regulated monopoly service and promoting
2 competition in markets where there is no benefit to service being provided by a single, state-
3 sanctioned monopoly.

4 TEP proposes to enter a market that is not a natural monopoly. This is evident from the
5 fact that the market is presently competitively provided. Competition in the market for onsite
6 solar services has promoted innovation and significantly driven down the cost of onsite solar for
7 Arizonans over time. By comparison, Arizona's regulated monopolies have not demonstrated an
8 ability to reduce the cost of the regulated monopoly service they provide. Allowing Arizona's
9 regulated monopolies to enter a competitive market for onsite solar service will undermine
10 competition in that market and eliminate the innovation and cost reduction brought about
11 through competition. TEP's UODG Proposal inappropriately invites the Commission to extend
12 the reach of government regulation into a competitive market. Such an extension would
13 transgress free market principles that have defined and limited the scope of public utility
14 regulation for over a century.

15 What TEP inappropriately proposes to provide is a private service that is entirely distinct
16 from the public service TEP currently provides as a state-sanctioned monopoly. TEP proposes to
17 own, operate and maintain solar generating facilities on the premises of select residential
18 customers.³ TEP would install an approximately 6 kW-DC solar system on about 500-600
19 homes, at a total cost of \$10 million and an aggregate capacity of about 3.0 to 3.5 MW.⁴ The
20 stated cost would be \$2.85 - \$3.00 per watt-DC.⁵ The utility would then charge the customer a
21 flat \$99 per month, fixed rate, for 25 years, for all of the customer's electricity usage, so long as
22 the customer does not increase usage by more than 15% from pre-solar levels.⁶ With this
23 proposal, TEP seeks to completely untether the rates it proposes to charge residential customers
24 from its cost of serving those customers. Only a regulated monopoly with an ability to shift costs
25 onto captive ratepayers could brazenly propose to separate prices from costs in this manner.
26 Granting TEP the ability to do so would constitute a forced subsidization of a regulated

27 ³ Plan page 9.

28 ⁴ Plan page 8.

⁵ TEP Response to Staff's First DR, Question 1.07.

⁶ Plan page 8.

1 monopoly on the backs of ratepayers so TEP can have a competitive advantage in entering a
2 currently unregulated and competitive market.

3 There can also be no doubt that the service TEP proposes to provide is a ratepayer-
4 subsidized private service, not a public service. TEP proposes to size a solar system to meet
5 100% of a participating customer's onsite energy needs, and to charge a flat fee to the
6 participating customer for 100% of the customer's consumption for a 25-year period, regardless
7 of whether the customer's energy needs are fully satisfied by the onsite solar system and
8 regardless of the utility's actual cost of serving the customer.⁷ With its UODG Proposal, TEP
9 seeks to dedicate public utility assets to private use, not public use. The only "public" aspect of
10 the TEP UODG Proposal is TEP's audacious attempt to leverage its monopoly status and access
11 to captive ratepayers to price a private service in a manner that is completely untethered from the
12 cost of providing service. Asking the public, i.e. TEP's ratepayers, to subsidize its attempt to
13 outcompete competitive suppliers in an adjacent market does not clothe TEP's proposal with the
14 public interest. To the contrary TEP's UODG Proposal denigrates the public interest in an
15 attempt to promote its shareholders' interest in gaining access to new markets.

16 As a regulated monopoly, TEP should not be competing in a competitive market for
17 residential rooftop solar products and services through its regulated business. Belief that utility
18 services are a natural monopoly is the touchstone of why utilities have a state-granted monopoly.
19 Because of the utility's monopoly power, it is subject to Commission oversight to prevent
20 excessive rates, unfair discrimination, overinvestment in and duplication of plant and equipment,
21 and a host of other problems attendant to monopoly status. Unlike that situation, private solar
22 energy vendors operate in a competitive environment and are subject to the discipline imposed
23 by a competitive market place, which TEP's proposed program would displace if approved.
24 When utility monopolies seek to enter competitive markets, as is the case here, the utility can
25 exploit its monopoly status to subsidize its competitive offerings, forcing non-participating
26 ratepayers to bear higher costs so that the utility can compete in the contested market.

27
28

⁷ *Ibid.*, also TEP Response to Staff's First Set of Data Requests, Question 1.13.

1 It is important to establish a clear line between public services and private services;
2 otherwise the Commission risks imposing a monopoly actor on a competitive market. This
3 action could destroy the benefits of competition in a private market place and threaten to increase
4 costs by giving one entity a favored position in the market by reason of its monopoly functions.
5 When utility-owned programs compete with non-utility-owned services, the advantages enjoyed
6 by the incumbent utility threaten to drive competitive services out. The anti-competitive factors
7 include:

- 8 • Ability to compete unfairly by decoupling energy prices from the cost of service
9 by shifting risk and cost onto captive ratepayers. TEP's proposal features a
10 guaranteed monthly rate for participating customers that spans a 25-year period
11 and does not vary by how much energy is consumed or generated onsite. Only a
12 regulated monopoly with captive ratepayers and a guaranteed rate of return can
13 price services in a manner that is completely unrelated to the cost of service.
14
- 15 • Asymmetric access to customer data. TEP has detailed historical customer usage
16 information that can greatly facilitate customer acquisition. This creates an unfair
17 playing field for third-party distributed energy resource companies trying to
18 compete in customer acquisition against utilities.
19
- 20 • Unfair advantage in marketing private services in competition with non-regulated
21 providers. TEP has the ability to market its private services to select customers
22 using ratepayer-funded goodwill and ratepayer-funded mechanisms, including bill
23 inserts, website, local offices, and customer relations representatives.
24
- 25 • Ability to use its role as distribution service provider to gain unfair advantage in
26 marketing private services to customers. TEP has the ability to poach customers
27 who must identify themselves to TEP as part of the interconnection process,
28 which TEP oversees as the regulated provider of distribution service. TEP also

1 has a financial motive to use asymmetric access to customers to disparage its
2 competition and promote its service.

3
4 • Preferential access to and knowledge of essential facilities under utility control.

5 TEP has knowledge of where interconnection opportunities exist through its
6 understanding of locations with spare capacity on the system. In fact, TEP's
7 proposal touts its ability to "direct systems to areas of the local grid where DG
8 benefits can be maximized and negative impacts can be minimized."⁸

9 Interconnection costs can break the economics of an installation, and TEP's
10 knowledge of where generators can be interconnected at lower cost is a
11 competitive advantage that is not available to private solar companies.

12
13 • Unfair advantage in ability to combine regulated and private service. TEP has the
14 ability to bill a customer on its electric bill for private services, which is not an
15 option available to competitive providers.

16
17 The Residential Utility Consumer Office ("RUCO") submitted comments on the TEP
18 UODG Proposal on October 17, 2014. RUCO stresses the importance of establishing a
19 "balanced and level playing field" between third-party owned business models and the utility.⁹
20 TASC believes it is naïve to think third-party owned business models can be placed on the same
21 footing as a regulated monopoly, or that a state-sanctioned monopoly can be introduced into a
22 competitive market without undermining competition in that market. Even if the Commission
23 were to devise protections to prevent TEP from subsidizing or otherwise advantaging the
24 provision of rooftop solar services by the utility, TASC believes protections would be very
25 difficult to monitor and enforce and would duplicate affiliate transaction rules, which are
26 designed to address the precise concerns raised herein.

27 The Commission should require TEP to enter the market through an affiliate subject to

28 ⁸ Plan page 9.
⁹ RUCO page 1.

1 affiliate transaction rules and any other necessary conditions to prevent inappropriate leveraging
2 of TEP's monopoly. However, that is not what TEP has proposed. TEP instead proposes a
3 massive expansion of its state-sanctioned monopoly into a market for onsite solar service that is
4 currently competitively served in Arizona. TEP's proposal is contrary to the public's interest in
5 limiting the scope of monopoly service to the natural monopoly and promoting competitive
6 markets when there is no natural monopoly, which is the case for onsite solar service.

7
8 **II. TEP Fails To Appropriately Explain Or Support Its UODG Proposal, Which Is**
9 **Sufficient Reason By Itself For The Commission To Reject It.**

10
11 TEP's UODG Proposal is remarkable in its brevity given the unprecedented expansion
12 TEP seeks in its state-sanctioned monopoly. The proposal itself fills barely three double-spaced
13 pages,¹⁰ and the associated tariff that TEP took two additional weeks to prepare provides little
14 additional detail and barely extends beyond a single page.¹¹ TEP claims its proposal will provide
15 many benefits.¹² However, TEP provides no support for any of its claimed benefits, some of
16 which are contradicted by TEP's own proposal. TEP also fails to explain its proposed pricing or
17 support its assertions that its proposal will not shift costs onto and be subsidized by non-
18 participating ratepayers.

19 ***A. TEP provides no explanation or support for its proposed pricing.***

20 TEP proposes to charge participating customers a fixed rate of \$16.50 per kW of solar
21 capacity installed.¹³ However, TEP provides no explanation for how this fixed rate was derived
22 or whether it is designed to recover the full cost of the program.¹⁴ As the Commission is aware,
23 Arizona's Constitution requires that rates be set on the value of property dedicated to public
24 service in the state with the opportunity for the utility to earn a Commission-established rate of

25 ¹⁰ Plan pages 7-10.

26 ¹¹ TEP, Notice of Filing, July 18, 2014, Exhibit 9.

27 ¹² Plan page 9.

28 ¹³ Plan page 8.

¹⁴ TEP has refused to provide the analyses that it used to develop its proposal, which might shed some light on why the utility believes that it can recover the costs of this program without burdening non-participating ratepayers, on the grounds that such analyses are "competitively-sensitive-confidential." TEP Response to TASC's First DR, Question TASC 1.02.

1 return on investment.¹⁵ In the absence of a determination of the value of assets and associated
2 costs of the program, or a determination that the price proposed is based on that cost, the
3 Commission has no basis to determine whether TEP's proposed rate is just and reasonable. The
4 Commission also has no basis to determine whether the proposed rate would result in
5 overearning by the utility. TEP's failure to explain the derivation of its rate is a fatal defect in
6 TEP's Application.

7 **B. TEP incorrectly asserts that its proposal will not shift costs onto non-participating**
8 **ratepayers.**

9 TEP proposes to charge participating customers a fixed fee of \$16.50 per kW, which
10 means a customer's energy payment to TEP will be based on the solar system size TEP installs
11 without regard to the cost of serving the customer. TEP claims its proposed fixed fee "allows the
12 Company to recover capital expenses and fixed system costs without shifting costs to other
13 customers."¹⁶ However, the numbers TEP provides to the Commission simply do not add up.

14 Given TEP's costs for rate-base treatment of the program costs, the utility's proposed \$99
15 per month charge to residential customers for this program will not be adequate (1) to cover the
16 costs of the program without shifting costs to other, non-participating ratepayers, and (2) to make
17 the contribution to TEP's "fixed" costs that the utility touts. Instead, the likely result of the TEP
18 UODG Proposal would be either (1) a significant cost shift to non-participating ratepayers to
19 collect the additional costs of the program that TEP would not collect from program participants
20 at the stated \$99 per month price, or (2) a subsidy of this program by TEP shareholders. In either
21 event, such subsidies are a competitive concern given that the program will unfairly compete
22 with private solar companies, including TASC members.

23 TEP's proposal to install solar systems with an average size of 6 kW-DC appears
24 designed to supply 100% of the electric use of a residential customer whose annual electric use is
25 about 10,700 kWh per year.¹⁷ Under both the TEP proposal and standard net energy metering
26

27 ¹⁵ *Scates v. Ariz. Corp. Comm'n*, 118 Ariz. 531 (AZ Court App. 1978).

28 ¹⁶ Plan page 9.

¹⁷ Based on PVWATTS solar production data for a south-facing system in Tuscon and the stated average AC output of the systems in TEP's program.

1 (“NEM”), the utility will lose the retail rate revenues associated with this amount of power. For
2 NEM customers, these lost revenues are the only costs for the utility.

3 However, the lost revenues are not the only cost for TEP and its ratepayers if the solar
4 systems are utility-owned. TEP proposes to own the solar system and would charge the
5 customer a fixed monthly fee for all electric service, based on a price of \$16.50 per month per
6 kW of solar capacity installed (and thus \$99 per month for a 6 kW system). TEP will seek
7 recovery through its rate base of the \$10 million in capital costs for the utility-owned solar, and
8 presumably for ongoing operation and maintenance (“O&M”) costs as well.¹⁸ These costs will
9 need to be offset by the \$99 per month that TEP proposes to recover from each solar customer.
10 However, TEP states that only a portion of the \$99 per month will be used to offset the costs of
11 the solar, as follows:¹⁹

- 12 • \$10.00 – monthly customer charge
- 13 • \$30.80 – fixed cost contribution
- 14 • \$58.20 – payment for solar system

15 The obvious problem with this proposal is that \$58.20 per month is clearly inadequate to cover
16 the costs of the solar facilities. The present value of 25 years of payments of \$58.20 per month
17 at a 6.12% discount rate (TEP’s after-tax WACC) is \$8,827, which is just \$1.47 per watt, just
18 one-half of TEP’s stated solar costs of \$2.85 to \$3.00 per watt (which, as discussed further
19 below, TASC believes are unrealistically low).

20 Another way to see how TEP has low-balled the solar costs is to calculate the costs of the
21 solar power -- \$58.20 per month for 890 kWh per month, or 6.5 cents per kWh. This would be
22 an excellent price for the latest utility-scale, wholesale solar power, but is far below any
23 reasonable price for small-scale, distributed, residential solar. It is simply not credible that TEP
24 will be able to obtain residential solar at this price. In fact, as discussed below, even the full \$99
25 per month will not cover TEP’s solar costs if those costs are recovered through the utility’s rate
26 base. Further, TASC notes that TEP’s solar customers would have the option to increase their

27 ¹⁸ TEP indicates that it will seek recovery of these costs in its next rate case (TEP response to Staff DR, Question
28 1.06), and will place the undepreciated book value of the solar facilities into its rate base (TEP response to
TASC’s First DR, Question TASC 1.05). TEP has not stated what its ongoing O&M costs will be.

¹⁹ TEP Response to Staff’s First Set of Data Requests, Question 1.02.

1 usage over time by up to 15%, at no additional charge, and TEP will also cover the cost of
2 supplying power to make up for the degradation of solar output over time, typically a drop of 5%
3 every decade.²⁰ The value of this future option to obtain additional free electricity from TEP is
4 significant (in the range of \$20 to \$30 per month if exercised²¹), could come from other
5 resources than the utility-owned solar system, and does not appear to be considered in the
6 utility's analysis. In contrast, TASC notes that, under standard NEM, a solar customer pays the
7 utility's full retail rate for power consumed beyond the amount produced by the solar system.
8 Finally, as yet another benefit for the participating customers, if the customer's usage increases
9 by more than 15%, TEP is willing to serve the additional usage at the original \$16.50 per kW
10 fixed price, regardless of TEP's actual costs at that time for the additional power and without
11 expanding the customer's solar system.²²

12 TASC has used a model of utility rate-based cost recovery of renewable generation
13 technologies, developed by the consulting firm Energy and Environmental Economics (E3) for
14 the Western Electricity Coordinating Council (WECC),²³ to calculate TEP's 25-year revenue
15 requirements for \$10 million of utility-owned rooftop solar projects. This is the same model
16 used by RUCO. The only significant changes that TASC made to this model were to use TEP's
17 financial parameters (an after-tax WACC of 6.12%) and to reduce the assumed annual O&M
18 costs from \$65 to \$35 per kW-year.²⁴ Assuming the mid-point of TEP's stated PV costs of \$2.85
19 to \$3.00 per watt-DC, TEP's revenue requirement per system is \$1,496 per year or \$125 per
20 month (levelized over 25 years at the WACC). With a more realistic PV cost of \$4.00 per watt-
21 DC (discussed below), TEP's costs are \$1,949 per year or \$162 per month (levelized over 25
22 years at the WACC). These rate-base costs are far higher than the \$99 per month (\$1,188 per
23 year) that TEP proposes to charge each customer of this program, indicating that each system

24
25 ²⁰ TEP Response to TASC's First DR, Question TASC 1.10.

26 ²¹ Given that the marginal costs for the customer of this additional power are zero, this attractive option is likely to
27 be exercised. The \$20 per month value is based on 15% of the cost of 10,700 kWh per year of power from TEP
28 for 25 years, based on today's rates, annual rate escalation of 2.5%, and a discount rate of TEP's WACC. The
higher \$30 value adds power to cover the 10% degradation in solar output over 20 years.

²² TEP Response to TASC's First DR, Question TASC 1.11.

²³ This model is available at https://ethree.com/public_projects/renewable_energy_costing_tool.php.

²⁴ This O&M cost is based on a national survey of such costs reported in the new Mississippi NEM Study
referenced in footnote 26 below, plus typical costs for inverter replacement.

1 will shift to other ratepayers \$308 to \$761 per year more than any purported NEM cost shift. In
 2 essence, TEP has underpriced this service by \$26 to \$63 per month, and will have to recover
 3 these lost revenues by shifting costs to other, non-participating ratepayers. These figures do not
 4 include the \$20 to \$30 per month value of TEP's offer to provide an additional 15% free
 5 electricity and to make up for solar degradation at no cost to the customer, which will add further
 6 to the burden on non-participating ratepayers. As a result, TEP's proposal would increase cost
 7 shifts compared to the cost shifts (if any) from customer-owned or third-party-owned systems
 8 developed under NEM.

9 Alternatively, TEP's shareholders could absorb the additional revenue requirement
 10 necessary to subsidize this below-cost service thereby dumping product on the market while
 11 intentionally taking a significant loss to intentionally harm competitors. With either result, there
 12 are significant competitive concerns with TEP's use of its position as the monopoly utility to
 13 harm the competitive solar market in AZ.

14 TEP's assumed PV cost of \$2.85 - \$3.00 per watt-DC also appears to be well below
 15 recently published market costs for residential PV in the U.S., as shown in the table below.

16 **Table 1: Recently Published Residential PV Costs**

| 17 Source | 18 State | 19 Year(s) | 20 Residential PV Costs (\$/W-DC) |
|---|----------|--------------|--------------------------------------|
| 21 CSI Database ²⁵ (October 2014) | 22 CA | 23 2013-2014 | 24 \$5.00 |
| 25 LBNL, <i>Tracking the Sun</i> (September 2014) | 26 CA | 27 2013 | 28 \$4.90 |
| LBNL, <i>Tracking the Sun</i> ²⁶ (September 2014) | AZ | 2013 | \$4.10 |
| PUCN NEM Study ²⁷ | NV | 2013-2016 | \$3.40 - \$3.80 |

25 See <http://www.californiasolarstatistics.ca.gov/>.

26 See pages 22-24 and Figure 16. Available at http://eetd.lbl.gov/sites/all/files/tracking_the_sun_vii_report.pdf.

27 Public Utilities Commission of Nevada, *Nevada Net Energy Metering Impacts Evaluation* (July 2014), at 66-67. Available at http://puc.nv.gov/About/Media_Outreach/Announcements/Announcements/7/2014_-_Net_Metering_Study/.

| | | | | |
|---|--------------------------------|----|------|----------------|
| 1 | (July 2014) | | | |
| 2 | Mississippi PSC NEM Study | MS | 2015 | \$4.00 |
| 3 | (September 2014) ²⁸ | | | |
| 4 | TEP Solar Proposal | AZ | 2015 | \$2.85 -\$3.00 |
| 5 | (July 2014) | | | |

6

7 Unless TEP shareholders agree to bear the risk that program costs will be above the
8 stated \$2.85 to \$3.00 per watt-DC, cost overruns would be shifted to other ratepayers. Based on
9 this data, we believe that \$4.00 per watt-DC is a more reasonable and contemporary estimate for
10 residential solar costs in TEP's territory.

11 TEP also claims that “[a]s part of the fixed rate, participating customers would be paying
12 costs ordinarily shifted to other customers through the LFCR charge along with covering the
13 capital costs of the solar DG system at their home.”²⁹ TASC disputes this assertion, which is not
14 supported with testimony, studies, analysis or even simple back-of-the-envelope calculations.
15 TEP also fails to provide any accounting for proposed capital expenses. All the Commission has
16 to go on are TEP's roundabout statements that it plans to invest “approximately \$10 million” to
17 acquire “approximately 3.5 MW of DG capacity” and that the ratemaking will be handled in
18 TEP's next rate case.³⁰ TEP also provides no proposed rate of return, estimated installation
19 costs, estimated interconnection costs, estimated O&M and inverter replacement costs over a 25-
20 year term, or any other estimate of costs necessary to verify TEP's bald assertions that there can
21 be no cost shifting under its proposal. Finally, TASC finds TEP's claim that its proposal avoids
22 cost shifting through the Lost Fixed Cost Recovery mechanism (“LFCR”) particularly
23 questionable given that TEP proposes to exempt participants from contributing to the LFCR.

24 Solar companies understand that every installation carries a risk that the price charged
25 under a 25-year contract may be insufficient to cover the cost of an onsite system over that time.

26

27 ²⁸ Synapse Energy Economics for the Public Service Commission of Mississippi, *Net Metering in Mississippi: Costs, Benefits, and Policy Considerations* (September 19, 2014), at page 32 (Table 5).

28 ²⁹ Plan page 9.

³⁰ Plan page 8, and TEP Response to Staff's First Set of Data Requests, Question 1.06.

1 If revenue proves insufficient to cover cost, shareholders bear the risk in a competitive market.
2 TEP, by comparison, can shift that risk to its ratepayers, and in fact has a built-in mechanism to
3 do so under its proposal, which untethers the rate TEP proposes to charge from either the cost of
4 onsite generation or the cost of serving a participating customer for a 25-year term. We believe
5 this is only possible by leveraging TEP's captive ratepayers and exposing them to cost shifts.

6 **C. TEP asserts several highly suspect benefits that are not well explained.**

7 TEP claims "it can employ a distribution management program to control the inverters,
8 providing voltage and frequency control to benefit the grid and all customers."³¹ However, TEP
9 provides no details on what the "distribution management program" entails or its cost to
10 ratepayers.³² TASC believes TEP could achieve these same objectives by working
11 collaboratively with private solar companies and NEM system owners to incorporate advanced
12 inverters and controls into their systems in ways that will benefit ratepayers. For example, with
13 the development of appropriate compensation mechanisms, solar energy customers could invest
14 in advanced inverter technologies that meet agreed-upon operational requirements and thereby
15 begin providing benefits to the grid and ratepayers for far cheaper than the cost of TEP's UODG
16 proposal. This course of action would serve to support customer investment in the grid without
17 adversely impacting competitive markets for rooftop solar systems and putting ratepayers at risk.

18 TEP also claims its proposed program "provides a planned, management process that
19 greatly enhances the ability of residential DG to provide system benefits not currently achieved
20 through third-party or customer-owned systems."³³ As with the "distribution management
21 program," the "planned, management process" is not explained in TEP's proposal. Nor is there
22 any identification, explanation or support for the supposed system benefits that TEP claims it
23 cannot currently achieve through third-party or customer-owned systems. In the absence of
24 support or even a simple explanation, these claims should not be taken seriously.

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³¹ Plan page 9.

³² TASC has an outstanding data request seeking this cost information.

³³ Plan page 10.

1 **D. TEP incorrectly claims its program “will be open to all TEP customers.”**

2 TEP contradicts itself regarding eligibility for its proposed program. On the one hand, TEP
3 states “the program will be open to all TEP customers in good standing, regardless of their credit
4 scores.”³⁴ On other hand, TEP claims “[t]he Company can direct systems to areas of the local
5 grid where DG benefits can be maximized and negative impacts can be minimized.”³⁵ TEP
6 cannot have it both ways; either customers choose the locations or TEP chooses the locations.
7 TEP’s proposed tariff states service will be available “throughout the Company’s entire electric
8 service area where the facilities of the Company are of adequate capacity and configuration and
9 are adjacent to the premises.”³⁶ No other restrictions are mentioned in the tariff that suggest TEP
10 intends to direct systems to areas of the local grid where DG benefits can be maximized and
11 negative impacts can be minimized. This suggests, contrary to TEP’s assertions, that TEP will
12 *not* in fact be directing systems to areas of the local grid where DG benefits can be maximized
13 and negative impacts can be minimized.

14 Assuming TEP intends, as it claims, to open eligibility to all residential customers
15 without regard to site-specific considerations, TASC believes TEP’s proposal is a misuse of
16 ratepayer funds. Companies that are in the business of installing residential solar systems
17 understand that each installation is unique. Solar companies develop customer-specific price
18 quotes that take into account roof size, orientation, shading, and other factors to determine
19 whether a solar installation can provide a customer with energy cost savings sufficient to justify
20 an installation. The financial pressure to install systems in locations that generate cost savings
21 ensures that systems are installed in responsible locations. In the absence of competitive
22 pressures, TEP has proposed a program that would allow solar systems to be installed without
23 regard to shading, orientation or other important factors that impact system output. This removes
24 any financial incentive for TEP to install solar in appropriate locations and raises the likelihood
25 of misuse of ratepayer funds to install systems that could have absurdly high costs of generation
26 that would be unlikely to move forward in a competitive market, or if they did, the cost would be

27
28 ³⁴ Plan page 9.

³⁵ Plan page 9.

³⁶ Tariff page 1.

1 passed through to the customer receiving service instead of to a monopoly's captive ratepayers.
2 A customer who receives a solar system from TEP would have no incentive to ensure that its
3 system continues producing power, so long as TEP honors its \$99 per month price for full
4 electric service, nor will TEP have a strong incentive to maintain systems so long as it has rate-
5 based cost recovery and the revenue it receives from participating customers is unrelated to
6 system output.³⁷

7 TEP also falsely claims that its proposed program expands consumer choice by providing
8 an alternative to cash purchase or third-party lease models.³⁸ In fact, TEP's program would *not*
9 increase customer choice. Multiple non-utility solar service providers are active in TEP's service
10 territory and have installed thousands of systems. Choices in solar energy systems are readily
11 accessible to electric power customers in TEP's service territory. At best, TEP's proposal aims
12 to crowd out installations that would be provided by competitive suppliers. At worst, TEP's
13 proposal would install solar systems in marginal locations that would likely not be installed if
14 market forces were at work. Either way, the public interest will be harmed.

15 Further, TEP's contention that its program is justified because it is giving some of its
16 customers a chance to acquire solar that otherwise could not afford it leads the Commission
17 down a slippery slope where the monopoly is soon providing goods and services under the guise
18 of a public welfare program. If part of TEP's charter is to bring goods and services that are
19 normally provided by the private sector into the hands of its customers who, for whatever reason,
20 are not in a position to acquire those on their own, then what is to stop the utility from owning
21 and leasing Energy Star appliances, electric cars, NEST systems, and many other energy-related
22 systems and devices that the public desires? TEP is charged with providing an essential public
23 service, not with assuring that all its customers have access to the latest technology at below-
24 market prices.

25 **E. TEP has failed to provide the contract that would govern many key terms of the service**
26 **it proposes to provide.**

27
28 ³⁷ TEP admits that it is current ahead of compliance for the DG portion of REST without this program. TEP
Response to Staff's First Set of Data Requests, Question 1.09.

³⁸ Plan page 9.

1 TEP's proposal and associated tariff state that a participating customer will enter into a
2 contract with TEP and the customer "will be subject to the terms and conditions as set forth in
3 the contract."³⁹ The tariff states that the contract will contain a fixed charge rate for a
4 customer's total net monthly bill, a contractually established historical annual usage, termination
5 rights, system purchase options, and other terms and conditions.⁴⁰ Despite the importance of
6 these contractual provisions in establishing the terms of TEP's proposed service, the contract is
7 suspiciously absent from TEP's proposal.

8 Without the contract, it is not possible to determine how TEP proposes to deal with issues
9 that are customarily addressed in an on-site solar services agreement. For example, how does
10 TEP propose to deal with a change in the identity of the real property owner that hosts a TEP-
11 owned solar system? Would a new owner have the option or be required to assume the rights,
12 benefits, and obligations of the prior owner's \$99 per month deal? What rights will TEP propose
13 to enter onto a residential customer's roof to perform maintenance and repairs or respond to any
14 emergencies over a 25-year term? What recourse will TEP seek if a new homeowner refuses to
15 assume the contract that TEP entered with the prior homeowner? Who is liable for any damage
16 done to the customer's property? How will a system be removed at the end of the contract term?
17 Who will be responsible for repairing any damage to the customer's property during the removal
18 process? Who is liable if the solar system is damaged? How will TEP shut off or remove an
19 onsite system if a participating customer refuses to pay or defaults on a contract? Will non-
20 participating ratepayers be responsible for any defaults or will TEP take that risk entirely? How
21 will the value of a system be determined in connection with the purchase provision TEP says will
22 be included in its contract?

23 The manner in which these issues are addressed has real consequences for both
24 participating and non-participating ratepayers. Considering this, it is remarkable that TEP has
25 asked the Commission to approve its proposal in the absence of the proposed contract. On-site
26 solar services agreements also typically address dispute resolution, and the Commission would
27 need to determine who would resolve disputes regarding matters such as access to customer

28 ³⁹ Plan page 8; Tariff page 1.

⁴⁰ Tariff page 1.

1 private property or liability for damages to either a customer's premises or TEP's on-site solar
2 systems. TEP states that one of the benefits of its proposal is that "TEP will own, operate, and
3 maintain the systems, providing customers with customer protections and confidence afforded by
4 doing business with a regulated public service corporation under the Commission's
5 jurisdiction."⁴¹ In the absence of any clarity regarding the Commission's role in resolving
6 disputes, TEP can hardly claim this as an actual benefit.

7
8 **III. TEP's UODG Proposal Raises Numerous, Insurmountable Legal Problems.**

9
10 TEP's UODG Proposal raises a large number of threshold legal problems. *First, this*
11 *Commission cannot bind future Commissions regarding residential rates for a 25-year period.*
12 TEP proposes to enter into a contact with residential customers and charge a fixed rate for a 25-
13 year period. This would bind future Commissions with regard to rates charged for a very
14 extended period of time without the ability for future Commissions to review the rate in
15 subsequent TEP general rate cases. This is inconsistent with long standing practice that "The
16 Commission ... cannot bind future Commissions with regard to rates."⁴²

17 *Second, the Commission cannot approve TEP's proposed fixed rate outside a general*
18 *rate case.* TEP proposes a new residential rate outside a general rate case, without a fair value
19 determination or any showing as to whether the rate TEP proposes reflects TEP's cost of serving
20 participating customers or the cost of generation under the program. The Commission cannot
21 approve the proposed rate outside a rate case, particularly when the proposed rate is completely
22 untethered from TEP's cost of service, yet offers the customer the ability to increase his
23 consumption by up to 15% at no additional charge.⁴³

24 *Third, the Commission cannot determine whether TEP's proposed fixed charge is just*
25 *and reasonable given the absence of any explanation as to how the rate was determined.* The

26
27 ⁴¹ Plan page 9.

28 ⁴² See In The Matter Of Arizona Public Service Company's Application For Approval Of Net Metering Cost Shift Solution, Docket No. E-01345A-13-0248, Decision No. 74202, 310 P.U.R.4th 121, A.C.C. 2013, December 03, 2013.

⁴³ *Scates*, 118 Ariz. 531.

1 Commission must consider whether TEP's proposal complies with the Arizona Constitution that
2 prices must be based on the value of the assets deployed.⁴⁴ In the absence of any explanation as
3 to how TEP established its rate, there is no basis for determining whether the rate is just and
4 reasonable.

5 Fourth, TEP's proposal unreasonably discriminates in the treatment of residential
6 customers. TEP proposes to allow a select number of customers to receive 100% of their
7 requirements for a 25-year period at a fixed rate without regard to the customer's precise level of
8 electricity consumption or the cost of serving that customer, including a no-cost option to expand
9 consumption by 15%. TEP offers no evidence that the cost of service to participating customers
10 would be distinguishable from non-participating customers such that differences in the rates
11 charged to participating and non-participating customers is justified. TEP also provides no basis
12 for waiving the LFCR and other charges that TEP proposes to waive for participating
13 customers.⁴⁵

14 Fifth, TEP cannot include assets that are dedicated to private use in utility rate base.
15 TEP proposes to dedicate rooftop solar systems to a private use, serving only a single customer,
16 and therefore its program does not qualify as a public service function. If the program is not a
17 public service function, TEP should not engage in the proposed transactions. Regulated utilities
18 were created for the purpose of providing a public service through shared infrastructure, the costs
19 of which are spread across a customer base. By contrast, TEP's proposed program involves no
20 shared infrastructure. Accordingly, TASC does not believe the costs of the proposed assets can
21 be approved for inclusion in rate base.

22 Finally, TEP's proposal to use local installers places unconstitutional geographic
23 restrictions on trade. TEP proposes to use local companies to install UODG systems and to
24 contract with local companies to maintain the systems.⁴⁶ The U.S. Constitution prohibits states

27 ⁴⁴ *Id.*

28 ⁴⁵ Tariff page 1 (proposing to exempt participating customers from the LFCR, the Environmental Compliance
Adjustor charge and the Purchased Power and Fuel Adjustment clause charge)

⁴⁶ Plan page 9.

1 and their agencies from sanctioning geographic preferences that act as a restraint of trade.⁴⁷
2 TEP's proposal, if approved, would violate such prohibitions.

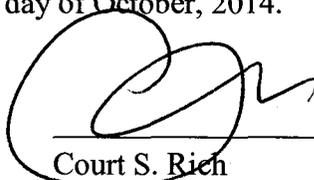
3
4 **IV. Conclusion**

5
6 The public interest is advanced by introducing competition, where possible, to create new
7 markets for energy products and services and promote innovation, efficiency and cost reductions
8 that ultimately benefit consumers. The public interest is maximized when regulation confines
9 the reach of a utility's monopoly power to the natural monopoly, providing customers with
10 essential services while allowing consumer access to innovative products and services that can
11 best be served by competitive markets.

12 The Commission should maintain consumer access to competitive markets and ensure
13 utilities do not inappropriately extend their monopoly into these competitive markets. TEP
14 proposes to leverage its monopoly status to compete unfairly in a market that is currently being
15 supplied competitively. Arizona law, the U.S. Constitution, general ratemaking principles, and
16 the public interest all militate in favor of Commission rejection of TEP's UODG Proposal.

17
18 WHEREFORE, The Alliance for Solar Choice requests that the Commission reject
19 Tucson Electric's Utility-Owned Distributed Generation program.

20
21 Respectfully submitted this 29th day of October, 2014.

22
23 

24 _____
25 Court S. Rieh
26 Rose Law Group pc
27 Attorney for TASC

28 ⁴⁷ See, e.g., *New Energy Company of Indiana v. Limbach*, 486 U.S. 269 (1988); *Hughes v. Oklahoma*, 441 U.S. 322 (1979); *H.P. Hood & Sons, Inc. v. DuMond*, 336 U.S. 525 (1949); *Welton v. Missouri*, 91 U.S. 275 (1876).

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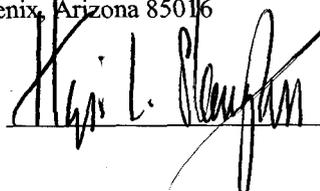
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