

NEW APPLICATION



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BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

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AZ CORP COMMISSION
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ORIGINAL

IN THE MATTER OF THE APPLICATION OF TUCSON ELECTRIC POWER COMPANY FOR (1) APPROVAL OF A NET METERING TARIFF AND (2) PARTIAL WAIVER OF THE NET METERING RULES. DOCKET E-01933A-15-0100

Arizona Corporation Commission

APPLICATION DOCKETED

MAR 25 2015

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Tucson Electric Power Company, ("TEP" or "the Company"), through undersigned counsel, hereby submits its application to the Arizona Corporation Commission ("Commission") for: (1) approval of a new net-metering tariff for future net metered customers that provides monthly bill credits for any excess energy produced from an eligible net metering facility at a "Renewable Credit Rate" and (2) approval of a partial waiver of the Commission's Net Metering Rules (A.A.C. R14-2-2301 et seq.).

I. INTRODUCTION.

TEP is experiencing exponential growth in the number of distributed solar rooftop systems in its service territory due to recent reductions in solar system costs and significant subsidies that users of these distributed generation systems ("DG Customers") receive through the combination of volumetric rate design and net metering.

1 The proposed "Renewable Credit Rate" is the rate equivalent to the most recent utility scale renewable energy purchased power agreement connected to the Company's distribution system. The current Renewable Credit Rate would be 5.84 cents per kWh. The rate would apply to future DG Customers that qualify for the Commission's Net Metering Rules.

1           Although TEP's DG Customers remain connected to the grid and benefit from that  
2 connection, they avoid paying much of the fixed costs of operating and maintaining the grid. This  
3 results in an increasing amount of utility costs that are ultimately shifted to other customers. This  
4 cost shift will continue to rise for the foreseeable future absent some fundamental change in TEP's  
5 rate design, its net-metering tariff or both. Through this application, TEP proposes to *partially*  
6 address this issue by adopting a restructured net metering tariff for customers that install  
7 distributed generation ("DG") in the future.

## 8 9 **II. BACKGROUND.**

### 10           **TEP's Net Metering Tariff Does Not Reflect the Realities of Today's DG Market.**

11           The DG landscape has changed significantly since the Commission's Renewable Energy  
12 Standard ("RES") rules were adopted in 2006.<sup>2</sup> Net Metering rules were adopted in 2008<sup>3</sup> and  
13 TEP's initial net metering tariff was approved in 2009<sup>4</sup>. The RES rules provided significant  
14 customer-funded upfront incentives for installation of DG systems. The net metering tariffs  
15 adopted under the Commission's Net Metering Rules have resulted in substantial ongoing  
16 subsidies for DG Customers. DG installations have been and are further supported by tax credits.

17           Over this same period of time, through the evolution of photovoltaic ("PV") technology  
18 and manufacturing efficiencies, the price of rooftop solar systems has declined by approximately  
19 60%. In 2008, the average price of a rooftop solar system exceeded \$8 per watt. Today, the price  
20 has fallen below \$3 per watt.

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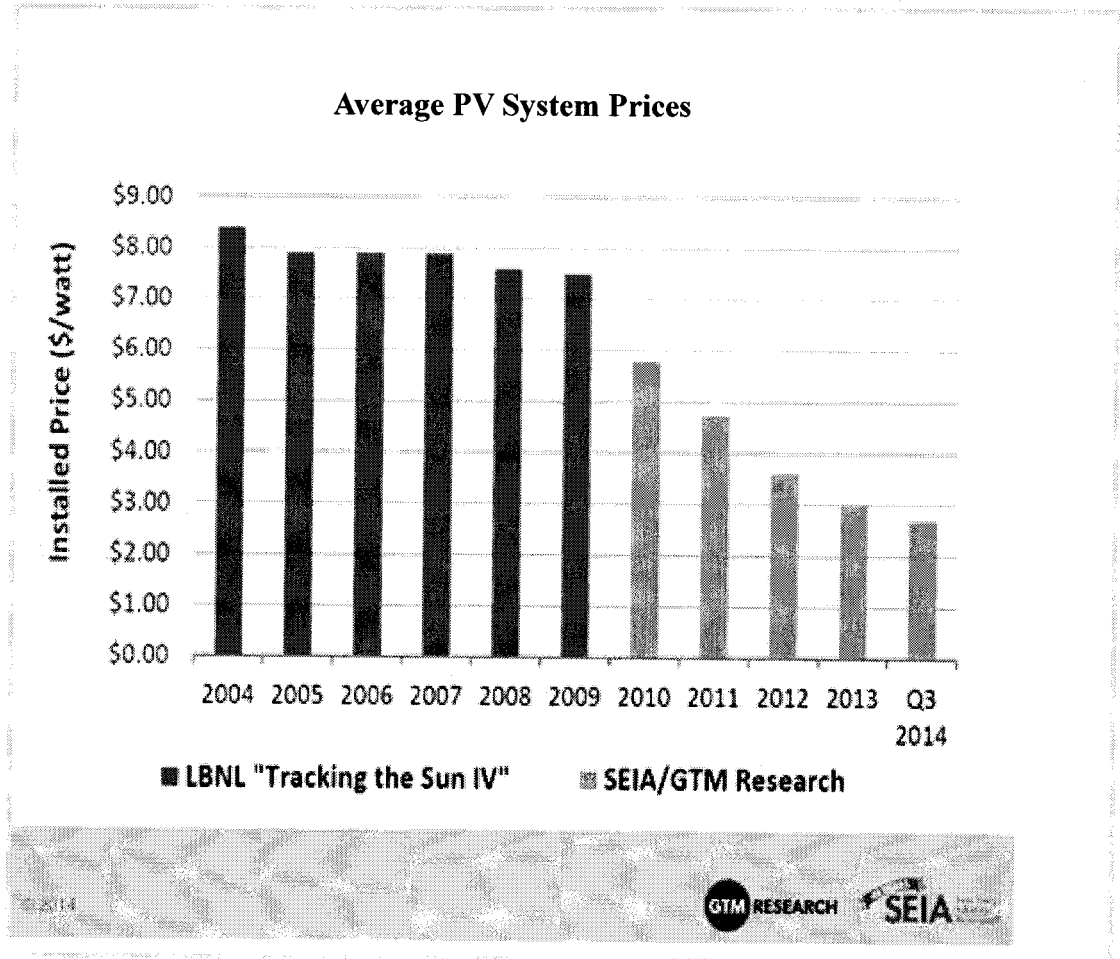
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<sup>2</sup> Decision No. 69127 (November 14, 2006).

26           <sup>3</sup> Decision No. 70567 (October 23, 2008). In Decision No. 69877 (August 28, 2007), the Commission  
27 directed Commission Staff to prepare the Net Metering rules, stating "Net metering provides a financial  
incentive to encourage the installation of DG, especially renewable resources."

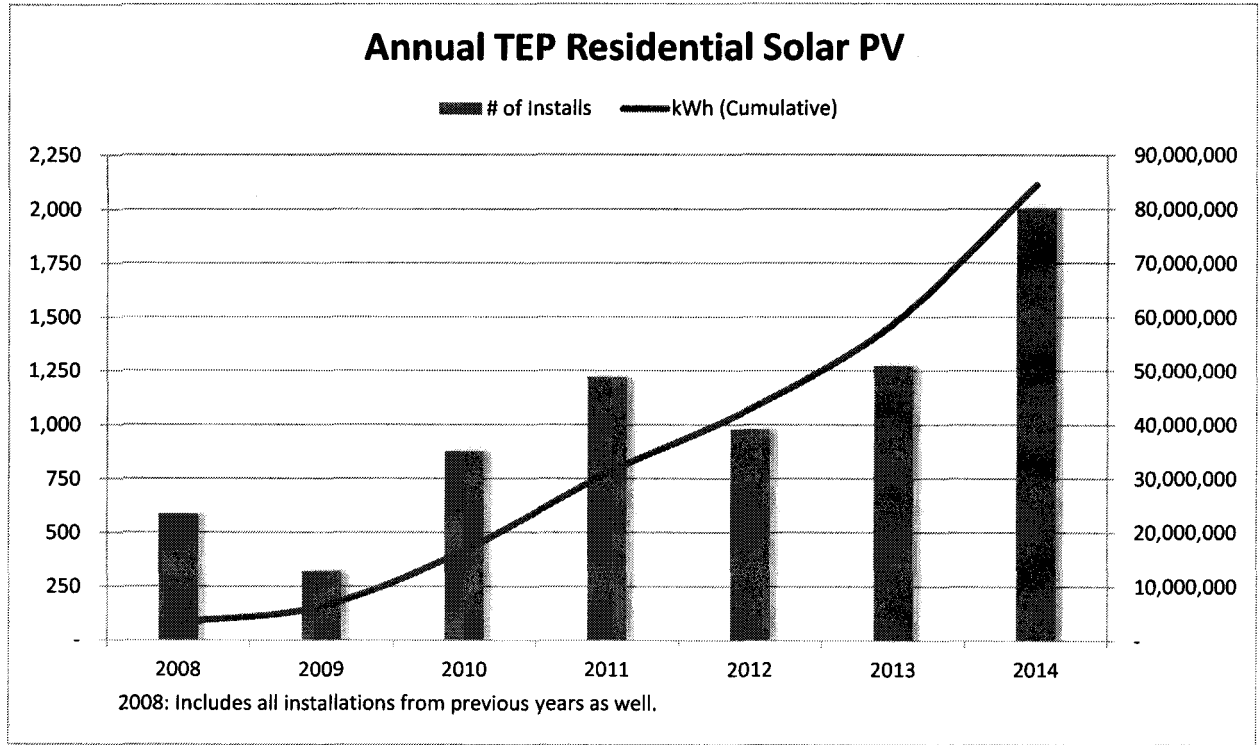
<sup>4</sup> Decision No. 71411 (December 8, 2009).

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The upfront incentives, net metering subsidies and tax credits have been effective to increase the penetration of solar DG systems, particularly when combined with rapidly declining PV panel prices. In 2008, fewer than 600 of TEP's residential customers had solar DG systems. From 2008 to 2014, the number of residential rooftop installations grew by an average of 23% per year. The significant increase was more pronounced in 2013 and 2014 when nearly 3,300 customers installed rooftop solar systems - almost the same amount in the four year period from 2009 to 2012. TEP has received more than 600 applications in the first two and a half months of 2015. Today, approximately 7,900 of TEP's residential customers have rooftop PV systems.

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Most of Arizona’s electric utilities, including TEP, have now reduced or eliminated upfront incentives for solar DG systems. This first step in reducing subsidies for DG installations helped mitigate the RES surcharges paid by TEP’s customers. As shown in the chart above, the number of DG installations in TEP’s service territory continues to increase without upfront incentives. Under its renewable energy strategy, TEP has established and maintained a robust portfolio, including a strong solar DG component. The output from DG systems in TEP’s service area already far exceeds the RES requirement for renewable generation. In 2015, the RES DG requirement for TEP is approximately 138,000 MWh.<sup>5</sup> TEP projects that in 2015 total generation from residential and non-residential DG systems will exceed the RES DG requirement by nearly 70%<sup>6</sup> and will essentially meet the RES DG requirement through 2017.

<sup>5</sup> Decision No. 74884 (December 31, 2014), page 2, line 16

<sup>6</sup> TEP 2015 REST Implementation Plan (Docket No. E-01933A-14-0248, July 1, 2014), Exhibit 5 page 1 shows TEP’s projected 2015 DG output of 229,894 MWh.

1           **The 2014 Cost Shift Generated by DG Customers was approximately \$7 Million.**

2           As with other electric utilities both in Arizona and around the country, TEP has suffered a  
3 substantial rise in unrecovered fixed costs due to net metering. Under the Company's current rate  
4 design, DG Customers do not pay for all of the fixed costs that TEP incurs to serve them because a  
5 large portion of those costs are recovered through volumetric kWh charges. According to the cost  
6 of service study performed in conjunction with TEP's 2012 rate case, the fixed costs of providing  
7 electric service to a residential customer was \$55 per month. However, the only fixed portion of a  
8 residential customer's bill is the \$10 monthly customer charge, which only recovers about 18% of  
9 the TEP's fixed costs to serve residential customers.<sup>7</sup> As a result, TEP relies on volumetric sales  
10 and its inclining block rate design to recover the remaining 82% of its fixed costs. Although TEP  
11 initially suffers the loss of revenues intended to cover the fixed costs of operating and maintaining  
12 its grid, those costs are eventually recovered from non-DG Customers.

13           The Commission has acknowledged that the current Net Metering rules and traditional rate  
14 design have resulted in a cost shift from DG Customers to non-DG Customers.<sup>8</sup> Under TEP's  
15 current rate design and net metering tariff a significant amount of the fixed costs TEP incurs to  
16 serve DG Customers are already being shifted to other customers, while the remaining fixed costs  
17 will go unrecovered until future rate cases. For TEP, a portion of the lost fixed costs are shifted  
18 to non-DG Customers through its Lost Fixed Cost Recovery Mechanism ("LFCR"), which was  
19 approved in the Company's most recent rate case.<sup>9</sup> The LFCR charge collects some of TEP's  
20 fixed system costs that go unrecovered when energy usage is reduced by Commission-mandated  
21 energy efficiency and DG programs. In 2015, the LFCR is expected to recover approximately  
22 \$2.2 million, or just 40%, of fixed system costs that were not recovered from DG Customers in  
23 2014.<sup>10</sup> However, DG systems added since TEP's last test year through the end of 2014 result in  
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25 <sup>7</sup> TEP 2012 Rate Application, Page 33, line 10 of Direct Testimony of Craig Jones (Docket No. 01933A-  
12-0291, July 2, 2012).

26 <sup>8</sup> See Decision No. 74202 (December 3, 2013), Findings of Fact 49, 50.

27 <sup>9</sup> (Decision No. 73912 (June 27, 2013)).

<sup>10</sup> The LFCR charge is filed on May 15 of each year and includes the lost kWh sales from the prior 12-month period.

1 approximately \$7 million in **annual** subsidies that will ultimately be paid by non-DG customers.  
2 Absent any changes to the Commission's current Net Metering Rules, TEP estimates that the \$7  
3 million subsidy would grow by an additional \$2 million to \$3 million annually.

4  
5 **Existing Levels of Subsidies are Unnecessary.**

6 Maintaining the existing levels of subsidies is unnecessary and inequitable. The number of  
7 DG systems being added to TEP's system each year is growing exponentially and the increasing  
8 amount of fixed costs being shifted to non-DG customers is unfair and is not in the public interest.  
9 TEP believes it is time to make further reductions to the subsidies incentivizing DG installations,  
10 thus reducing the burden on its non-DG customers.

11  
12 **III. PROPOSED NET METERING TARIFF.**

13 TEP is proposing changes to its net metering tariff to partially address the cost shift and  
14 cost recovery issues described above. TEP's present net metering tariff was approved outside of a  
15 general rate case.<sup>11</sup> The current tariff tracks the Net Metering rules that require TEP to  
16 interconnect with customer-owned or leased DG facilities using bi-directional metering, net the  
17 energy generated by the facility up to the customer's usage on an annual twelve-month rolling  
18 basis and credit or pay the customer for excess energy generated above the customer's usage, on  
19 an annual basis, at the utility's avoided cost.

20 This application requests approval of a new net metering tariff that will modify how new  
21 DG Customers receive credit for excess energy that is generated by their DG system and delivered  
22 to TEP.<sup>12</sup> The new tariff would apply to DG Customers that submit completed applications for  
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24  
25 <sup>11</sup> Decision No. 71411 (December 8, 2009). The Decision also concluded that it was in the public interest  
26 to approve the proposed Pricing Plan Rider-3 (MCCCG) as applicable to determining the avoided cost for  
purchasing excess energy from net metering facilities. The Commission just recently reset the MCCCG for  
TEP during its March 2, 2015 open meeting and does this annually outside of a rate case. See Decision No.  
74937 (March 16, 2015).

27 <sup>12</sup> The new net metering tariff (showing redline revisions to the existing net metering tariff) will be  
docketed in the near future.

1 interconnection to TEP's grid facilities after June 1, 2015.<sup>13</sup> The proposed tariff will not increase  
2 TEP's revenues above the revenue requirement set forth in its most recent rate case, nor would it  
3 act to increase TEP's rate of return above the authorized rate of return. To the contrary, the  
4 proposal will only act to slow the cost shift and the revenue degradation caused by TEP's current  
5 net metering tariff and rate design.

6 Under the new tariff:

- 7 • New DG Customers would continue to receive a full retail rate offset for the energy  
8 they consume from their DG system.
- 9 • No new charges would be imposed.
- 10 • New DG Customers would pay the currently approved and applicable retail rate for all  
11 energy delivered by TEP.
- 12 • New DG Customers would be compensated for any excess energy their DG system  
13 produces and delivers to TEP with bill credits calculated using the Renewable Credit  
14 Rate. New DG Customers could carry over unused bill credits to future months if they  
15 exceed the amount of their current TEP bill.
- 16 • The Renewable Credit Rate would be reset each calendar year.<sup>14</sup>

17  
18 This proposal will not fully mitigate the DG cost shift. TEP and its non-DG Customers  
19 will still be subsidizing new DG Customers, but the subsidy will be reduced from the current  
20 levels. Overall, TEP believes this proposal meets the public interest by mitigating the amount of  
21 unrecovered fixed costs and the related cost shift from one group of customers to another while  
22 still continuing to provide an incentive for all DG Customers.

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25 <sup>13</sup> Customers who submit a completed application to TEP as of 5:00 p.m. Arizona time on June 1, 2015,  
26 will be subject to TEP's existing net metering tariff, even if those systems have not yet been interconnected  
27 to TEP's distribution grid. A completed application includes a signature acknowledging the disclaimers  
attached hereto in **Exhibit 1**.

<sup>14</sup> The Renewable Credit Rate will not be less than the average fuel cost included in TEP's base rates as  
approved by the Commission.

1           Since February 2014, TEP's net metering customers have been required to sign a  
2 disclaimer acknowledging that the Company's rates and/or Commission rules could change in the  
3 future. That disclaimer is attached as **Exhibit 1** and must be signed as part of the current  
4 application process through June 1, 2015. After June 1, 2015, potential DG customers will be  
5 required to sign new disclaimers that explain the proposed changes in this application. Redlined  
6 versions of those disclaimers are attached as **Exhibit 2**.

#### 7 8           **IV. PARTIAL WAIVER OF THE NET METERING RULES.**

9           Because TEP proposes to provide net metered customers a bill credit equal to the  
10 Renewable Credit Rate for the preceding month's excess generation and will no longer be rolling  
11 over excess generation to offset future usage – which is different than what is set forth in A.A.C.  
12 R14-2-2306 -- TEP requests a partial waiver of the Net Metering Rules to the extent necessary.  
13 TEP believes such a waiver reflects the realities of the DG market in Arizona and is in the public  
14 interest.

15           The linkage between fixed cost recovery and net metering is not a new or unprecedented  
16 problem exclusive to TEP. In Decision No. 74202 (December 3, 2013) involving Arizona Public  
17 Service Company ("APS"), the Commission found that the growth of DG systems in APS's  
18 service territory "results in a cost shift from APS's DG Customers to APS's non DG residential  
19 Customers absent significant changes to APS's rate design."<sup>15</sup>

20           In February 2015, Trico Electric Cooperative, a non-profit electric distribution cooperative,  
21 filed a similar application with the Commission (Docket No. E-01461A-15-0057) which seeks a  
22 modification to its net metering tariff and partial waiver of the Net Metering Rules, in order to  
23 partially mitigate the DG cost shift. That application is currently pending.

24           The impact of the partial waiver is likely to be minimal on DG customers that choose to  
25 install smaller rooftop solar systems that better match their basic usage pattern over the course of a  
26 year. Those customers will likely see a subsidy similar to what they would have enjoyed under

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<sup>15</sup> See Decision No. 74202, Finding of Fact 49.



1 the current net metering tariff. For those DG Customers who install larger systems that generate  
2 far more energy than the customer typically uses, TEP anticipates some reduction in the subsidy  
3 over what that customer would realize under the current tariff.<sup>16</sup>

4 The proposed tariff will not affect TEP's most recently approved revenue requirement nor  
5 would it act to increase TEP's rate of return above the authorized fair value rate of return. The  
6 proposal will only act to slow the revenue and rate of return degradation that TEP is suffering by  
7 operation of the Net Metering Rules and TEP's current net metering tariff.

8 TEP submits that it is in the public interest for the Commission to grant TEP a waiver from  
9 A.A.C. R14-2-2301 *et seq.* and allow it to implement a new net-metering tariff that continues to  
10 provide benefits to TEP's DG Customers while moderating the level of fixed system costs shifted  
11 to non-DG customers under the current Net Metering tariff.

12  
13 **V. REQUEST FOR HEARING.**

14 TEP requests that the Commission set this matter for a hearing and issue a procedural  
15 schedule that will allow the Commission to consider and approve this application at an open  
16 meeting before December 31, 2015.<sup>17</sup> A prompt resolution of the issues raised by this application  
17 is in the public interest.

18 Finally, to the extent that a 30-day time clock may apply to this application, TEP is willing  
19 to waive that time clock.

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24 <sup>16</sup> The actual impact on the level of subsidy provided by the current net metering tariff is heavily  
dependent on the size of the DG system and the usage patterns of the customer.

25 <sup>17</sup> TEP's affiliate, UNS Electric, Inc. ("UNSE"), is filing an identical application contemporaneously with  
26 TEP's application. TEP requests that the hearing in this docket be conducted in conjunction with the  
UNSE hearing as the issues and witnesses will be the same. However, TEP requests that its docket not be  
27 formally consolidated with the UNSE docket. TEP further requests that its application not be heard or  
formally consolidated with any other similar application by any other utility.

1 VI. CONCLUSION.


2 WHEREFORE, TEP requests that the Commission take the following actions:

- 3
- Approve TEP's proposed new net metering tariff.
  - Approve an effective date for TEP's new net metering tariff whereby all customers  
4 that have not submitted a completed application for their DG system to TEP by  
5 5:00 p.m. Arizona time on June 1, 2015 would be subject to the new net metering  
6 tariff.  
7
  - Grandfather all existing net metered customers and customers that have submitted  
8 to TEP a completed application for their DG system by 5:00 p.m. Arizona time on  
9 June 1, 2015, such that they would continue to be subject to TEP's existing net  
10 metering tariff.  
11
  - Grant TEP a partial waiver of A.A.C. R14-2-2301 *et seq.* as necessary.
  - Issue a procedural order setting a procedural schedule that would allow the  
12 Commission to consider this matter at open meeting before December 31, 2015.  
13
  - Grant TEP whatever other relief the Commission deems necessary and appropriate.  
14  
15

16 RESPECTFULLY SUBMITTED this 25th day of March, 2015.

17  
18 Tucson Electric Power Company

19 By

  
\_\_\_\_\_  
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Original and thirteen copies of the foregoing  
filed this 25th day of March, 2015, with:

Docket Control  
Arizona Corporation Commission  
1200 West Washington Street  
Phoenix, Arizona 85007

Copy of the foregoing hand-delivered  
this 25th day of March, 2015, to:

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Arizona Corporation Commission  
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By *Jacqueline Howard*

**Exhibit 1**

# ATTACHMENT A

## DISCLAIMER

### POSSIBLE FUTURE RULES and/or RATE CHANGES AFFECTING YOUR PHOTOVOLTAIC (PV) SYSTEM

The following is a supplement to the Grid-Tied Residential Solar Electric PV Application you signed with Tucson Electric Power Company (TEP).

1. Your PV system is subject to the current rates, rules and regulations established by the Arizona Corporation Commission (Commission). The Commission may alter its rules and regulations and/or change rates in the future. If this occurs, your PV system is subject to those changes and you will be responsible for paying any future increases to electricity rates, charges or service fees from TEP.
2. TEP's electricity rates, charges and service fees are determined by the Commission and are subject to change based upon the decision of the Commission. These future adjustments may positively or negatively impact any potential savings or the value of your PV system.
3. Any future electricity rate projections which may be presented to you are not produced, analyzed or approved by TEP or the Commission. They are based on projections formulated by external third parties not affiliated with TEP or the Commission.

By signing below, you acknowledge that you have read and understand the above disclaimer. Please return to TEP.

\_\_\_\_\_  
Customer's Printed Name

\_\_\_\_\_  
Customer's Signature

\_\_\_\_\_  
Installation Address

\_\_\_\_\_  
Date

\_\_\_\_\_  
Project Number

## ATTACHMENT B

### System Qualifications, Electric Service Requirements and Interconnection Requirements

The installed PV system must at all times meet the system qualification requirements for residential and grid-connected PV systems as set forth in the current "Electric Service Requirements", "Distributed Generation Interconnection Requirements" (DGIRs), and TEP's "Rules and Regulations", as amended from time to time, the terms of which are fully incorporated herein by reference (PV systems are defined as "Generating Facility" in the DGIRs). Complete copies of the "Electric Service Requirements" and "Distributed Generation Interconnection Requirements" conformed to ACC Docket No. E-00000A-99-0431 are located at <https://www.tep.com/customer/construction/esr/> under the "Customer Care" - "Construction Services" tab. TEP's "Rules and Regulations" dated July 1, 2013 are located at <https://www.tep.com/customer/rates/> under the "Rules and Regulations" tab. Customer acknowledges that it has adequate notice of and access to these online documents, has read the documentation, and waives any objection thereto. Hard copies will be provided upon request.

\_\_\_\_\_  
Customer's Printed Name

\_\_\_\_\_  
Customer's Signature

\_\_\_\_\_  
Installation Address

\_\_\_\_\_  
Date

\_\_\_\_\_  
Project Number

## **Exhibit 2**

**ATTACHMENT A**

**DISCLAIMER**

**POSSIBLE FUTURE RULES and/or RATE CHANGES  
AFFECTING YOUR PHOTOVOLTAIC (PV) SYSTEM**

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2. TEP's electricity rates, charges and service fees are determined by the Commission and are subject to change based upon the decision of the Commission. These future adjustments may positively or negatively impact any potential savings or the value of your PV system.
3. Any future electricity rate projections which may be presented to you are not produced, analyzed or approved by TEP or the Commission. They are based on projections formulated by external third parties not affiliated with TEP or the Commission.

Initials \_\_\_\_\_

**Please be advised that on March 25, 2014, TEP filed an application with the Commission in Docket No. E-01933A-15-xxxx requesting approval of a new net metering tariff that would be applicable to all customers who submit a completed net metering interconnection application after June 1, 2015. The application requests several changes to the current net metering tariff, including changes to the retail credit customers receive for all excess energy placed on the grid and elimination of the monthly energy carryover (banked credits). For more information, visit tep.com.**

Initials \_\_\_\_\_

By signing below, you acknowledge that you have read and understand the above disclaimer. Please return to TEP.

\_\_\_\_\_  
Customer's Printed Name

\_\_\_\_\_  
Customer's Signature

\_\_\_\_\_  
Installation Address

\_\_\_\_\_  
Date

\_\_\_\_\_  
Project Number