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ORIGINAL

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS Arizona Corporation Commission
BOB STUMP - CHAIRMAN
GARY PIERCE
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DOCKETED

JUL 1 2014

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DOCKETED BY

IN THE MATTER OF THE APPLICATION OF)
TUCSON ELECTRIC POWER COMPANY FOR)
APPROVAL OF ITS 2015 RENEWABLE)
ENERGY STANDARD IMPLEMENTATION)
PLAN.)

DOCKET NO. E-01933A-14-0248

APPLICATION

Tucson Electric Power Company ("TEP" or the "Company"), through undersigned-counsel, hereby submits its 2015 Renewable Energy Standard and Tariff ("REST") Implementation Plan ("Plan") for Arizona Corporation Commission ("Commission") approval, in compliance with Arizona Administrative Code ("A.A.C.") R14-2-1801 *et seq.*

TEP's Plan is designed to achieve 2015 REST compliance as cost-effectively as possible. The key components of the Plan include new renewable energy resources intended to be added through 2019, proposed and existing Company programs and budgets for those programs, and customer funding and REST tariff. The estimated cost for 2015 related projects and programs is \$40.2 million. TEP proposes to recover \$33.4 million through the REST tariff; \$6.8 million less than the overall budget as a result of applying carryover funds from the 2013 budget. In order to implement this Plan, TEP requests that the Commission approve the continuation of the current 2014 REST surcharge of \$0.008000 per kWh for 2015. TEP also is proposing a new Utility-Owned Distributed Generation program and is requesting Commission approval of the associated tariff. The proposed tariff, set forth in Exhibit 9 of the Plan, will be provided in a supplemental filing.

TEP remains solidly committed to the REST, and its Plan provides for renewable generation to meet the 2015 compliance requirement of five (5) percent of retail sales (or 459,492 megawatt hours ("MWh")). The Company has entered into new agreements with developers for the


1 construction of renewable generation and is moving forward with plans to construct its own
2 renewable generation.

3 TEP believes that its Plan provides a cost-effective strategy for complying with the REST
4 requirements. Therefore, TEP requests that the Commission approve:

- 5 1. TEP's 2015 Renewable Energy Implementation Plan and the associated tariffs prior to
6 December 31, 2014; and
- 7 2. Continuation of the REST surcharge of \$0.008000 per kWh for 2015.

8 RESPECTFULLY SUBMITTED this 1st day of July 2014.

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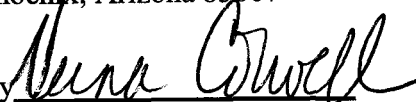
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Tucson Electric Power

**2015 Renewable Energy Standard
Implementation Plan**

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ATTACHED EXHIBITS

- Exhibit 1: Line Item Budget
- Exhibit 2: Definition of Market Cost of Comparable Conventional Generation
- Exhibit 3: Above-Market Cost of Comparable Conventional Generation by Technology (Confidential)
- Exhibit 4: IP New Resources Costs (Competitively Confidential)
- Exhibit 5: IP New Resources
- Exhibit 6: REST Surcharge Summary
- Exhibit 7: Customer Load Percentage Analysis
- Exhibit 8: Renewable Energy Credit Purchase Program ("RECPP")
- Exhibit 9: Utility-Owned Distributed Generation Program Tariff

I. EXECUTIVE SUMMARY

Tucson Electric Power Company (“TEP” or “Company”) hereby submits its 2015 Implementation Plan (“Plan”) in compliance with the Arizona Corporation Commission’s (“Commission’s”) Renewable Energy Standard and Tariff (“REST”) Rules pursuant to Arizona Administrative Code (“A.A.C”) R14-2-1813. The cost-effective strategy set forth in the Plan demonstrates TEP’s commitment to fulfilling the REST requirements for 2015 and beyond. The key components of the Plan include: new renewable energy resources to be added through 2019; proposed and existing Company programs; program budgets; and the customer funding and related REST tariff. TEP requests that the Commission approve the Plan, as well as its associated budget and tariff, prior to December 31, 2014 to be effective January 1, 2015.

Pursuant to A.A.C. R14-2-1804 and R14-2-1805, TEP must obtain five (5.0) percent of its 2015 annual retail sales from renewable resources; and thirty (30) percent of that renewable energy must come from distributed generation (“DG”) resources. TEP plans to satisfy this requirement using existing utility-scale renewable generation and credits; power purchase agreements (“PPA”) with renewable developers; new utility-owned renewable generation; and DG resources.

To fund these efforts, TEP is proposing a \$40.2 million REST budget for 2015. This funding is necessary to cover the cost of utility-scale renewable generation; to make incentive payments for DG resources; to operate the programs; to create education and outreach efforts; and to cover administrative costs. For 2015, TEP proposes to recover approximately \$33.4 million through the REST tariff; this is \$6.8 million less than the overall budget due to the application of carryover funds from 2013 budget (please refer to TEP’s 2013 REST Compliance Report, Docket No. E-01933A-12-0296). Going forward, TEP expects its future REST budgets will total approximately \$182 million from 2015-19 (See Exhibit 1).

TEP’s Plan uses the most cost-effective measures and provides a realistic strategy for REST compliance. Therefore, TEP requests that the Commission approve the Plan and find that it is in the public interest.

II. TEP 2015 IMPLEMENTATION PLAN COMPONENTS

For 2015, TEP's total expected renewable generation requirement is five (5.0) percent of retail sales, a level projected to equal 459,492 megawatt hours ("MWh"). The REST targets two resource categories: utility-scale generation and DG.

A. Utility-Scale Renewable Generation

TEP will satisfy the 2015 utility-scale requirement through the output of solar photovoltaic ("PV") systems with a combined rated capacity of 175 megawatts ("MW") direct current ("DC") and wind and other renewable resources with a combined rated capacity of 100 MW alternating current ("AC"). Of the 275 MW, 218 MW will come from renewable PPAs currently in effect or with anticipated completion dates in 2015. The remaining 55 MW will come from TEP-owned facilities.

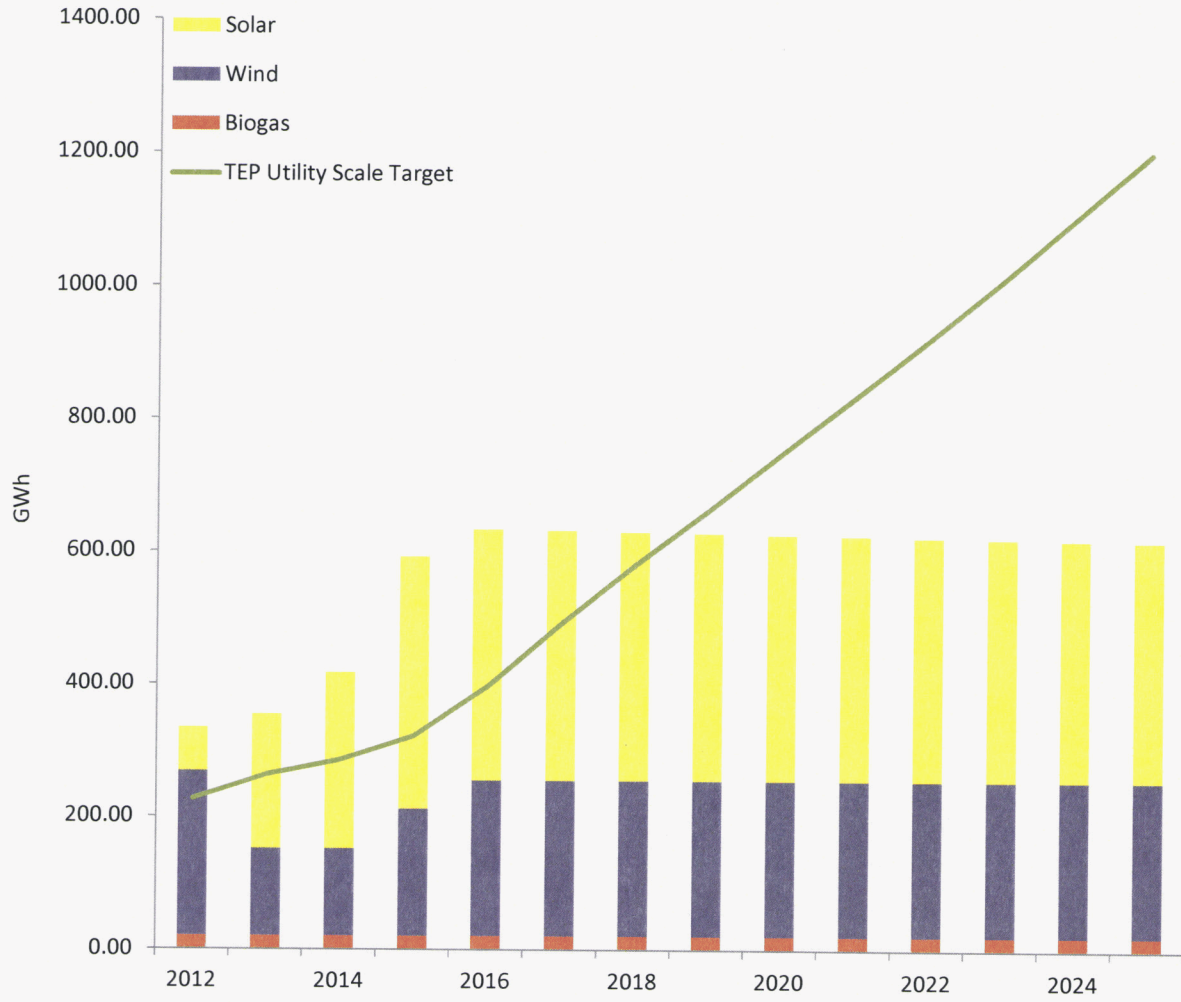
The combination of TEP-owned generation facilities and PPAs should allow the Company to continue to meet and exceed its renewable energy requirements for the next five years. Graph 1 below shows how TEP's current and planned resources will allow the Company to satisfy its utility-scale requirement through approximately 2019.

Table 1 below details TEP's utility-scale projects, including existing systems and planned resources.

Table 1. Utility Scale Generation

Project	Capacity MW (DC)	Annual MWh	Technology	Expected In- Service Date	TEP Owned
Existing Renewable Generation					
Sundt –Los Reales	5	12,439	Biogas	Operational	Yes
SGS (Combined)	6.4	7,540	Fixed PV	Operational	Yes
UASTP I - Solon	1.6	3,040	SAT PV	Operational	Yes
UASTP II – Solon	5	7,870	Fixed PV	Operational	No
Amonix	2	4,090	CPV	Operational	Yes
Duke/AstroSol	6	10,360	Fixed PV	Operational	No
HQ & Warehouse OH	0.62	2,120	Fixed PV	Operational	Yes
Prairie Fire - Solon	5.6	7,910	Fixed PV	Operational	Yes
NRG Solar/Avra Valley	35	77,620	SAT PV	Operational	No
SunEdison/Picture Rock	25	57,660	SAT PV	Operational	No
E.ON (UASTP)	6.2	14,450	SAT PV	Operational	No
E.ON (Valencia)	13.2	26,770	SAT PV	Operational	No
Macho Springs	50.4	130,240	Wind	Operational	No
Total Existing	162	362,109			
Bright Tucson Solar Buildout Plan					
Springerville 10 MW Expansion (SSGS III)	10	19,850	SAT/LCPV	Dec-14	Yes
Areva	5	14,240	PV/Thermal	Sep-14	Yes
Fort Huachuca	22	48,050	Fixed PV	Dec-14	Yes
Total Future – BTSBP	37	82,140			
Future Renewable Generation					
Cogenra	1	1,960	LCPV	Aug-15	No
Avalon Solar	35	83,400	SAT PV	Nov-14	No
Red Horse Wind	40	60,300	Wind	Jun-15	No
Total Future – Pending (Contracts)	76	145,660			
Total Planned Generation (Contracts)	275	589,909			
Total Planned Generation thru 2015	275	589,909			

Graph 1. Renewable Energy Standard Targets



Note: Graph 1 does not include carryover credits

B. Bright Tucson Solar Buildout Plan

TEP's solar ownership plan (the "Bright Tucson Solar Buildout Plan" or "Buildout Plan") has accounted for a small portion of the Company's compliance with the REST utility-scale requirement. TEP's 2011 proposed investment of \$28 million in the buildout plan was approved by the Commission in Decision No. 72033 and subsequently affirmed in Decision No. 72736. TEP subsequently received Commission approval in Decision No. 74165 to invest an additional \$28 million in the Bright Tucson Solar Buildout Plan in 2014 and another \$12 million in 2015. The combined \$40 million was designated for the development of a solar array at the U.S. Army's Fort Huachuca.

While the Bright Tucson Solar Buildout Plan has been an essential component of the Company's renewable energy strategy, going forward the Company will no longer request recovery of new expenditures through the REST, other than those previously approved. TEP will continue to invest in renewable technologies in the future as the Company transitions to a more sustainable resource portfolio but will recover those costs through traditional methods. Through the Bright Tucson Solar Buildout Plan and previously built projects, TEP expects to own approximately 22 percent of its renewable energy portfolio by the end of 2015.

Table 2. Revenue Requirement for the Bright Tucson Solar Buildout Plan

Revenue Requirement	2015	2016	2017	2018	2019
Carrying Costs	\$ 3,826,682	\$ 4,832,385	\$4,519,820	\$ -	\$ -
Book Depreciation	3,550,407	4,438,532	4,438,532	-	-
Property Tax Expense	208,871	392,960	451,492	-	-
O&M	436,570	517,167	532,682	-	-
Lease Expense	-	-	-	-	-
Gross Revenue Requirement	\$ 8,022,529	\$ 10,181,044	\$ 9,942,526	\$ -	\$ -

Table 3. Estimated Annual REST Budget for the Bright Tucson Solar Buildout Plan

Utility Owned Solar Projects by Year	2015	2016	2017	2018	2019
2012 - HQ Rooftop 0.05 MW	\$ 31,957	\$ 31,657	\$ 31,400	\$ -	\$ -
2014 - Springerville Expansion 10 MW	4,270,451	4,178,417	4,179,549	-	-
2014 - Ft. Huachuca 17.5 MW	3,372,985	3,315,088	3,229,603	-	-
2015 - AREVA 5 MW	322,137	1,254,175	1,124,352	-	-
2015 - Ft. Huachuca 4.5 MW	25,000	1,401,708	1,377,622	-	-
Annual Revenue Requirement	\$ 8,022,529	\$ 10,181,044	\$ 9,942,526	\$ -	\$ -

C. Energy Storage Solicitation

TEP plans to issue a solicitation in 2015 for utility-scale energy storage. The solicitation would be to multiple vendors for up to 10 MW of storage capacity. The goal of the solicitation is to review the cost effectiveness of available technologies and product offerings. The Company expects to issue the solicitation at the beginning of 2015 and complete the process in time for potential inclusion in the 2016 Implementation Plan filing.

Although the Company is not requesting any specific action or approval by the Commission, the Company is informing the Commission of the proposed solicitation for several reasons. First and foremost, as higher penetration levels of intermittent and variable renewable generation are integrated into the grid, utilities will need additional, more flexible resources to manage these intermittent resources while providing additional ancillary services such as operating capacity, voltage control and VAR support, and frequency control.

Second, these new storage technologies and resources create cost recovery issues that will have an impact on all ratepayers. Although these new storage technologies will be used to mitigate the impacts of the variable generation, there is no clear guidance on how their costs should be recovered. Cost recovery mechanisms could depend on the nature of the storage resource (contractual, plant or other). Determining the appropriate cost recovery mechanisms will be important in deciding how to procure storage resources in a way that is fair and equitable to the Company’s customers.

Presently, recovery of any contractual expenses likely would not fall under any of the

current allowable FERC accounts through the Company's Purchased Power and Fuel Adjustor Clause (PPFAC). These allowed recoverable costs are limited to fuel costs associated with steam and other production, purchased power, and transmission wheeling charges. However, storage resources could have attributes that match other costs that are recovered through the PPFAC. The REST does not specifically address storage technologies, which do not directly satisfy the renewable energy requirement. However, it could be argued that storage is necessary to allow utilities to meet the standard without compromising reliability.

The Company simply requests that Staff and Commission consider the issue of future cost recovery and provide some guidance as to a preferred mechanism for such recovery. This guidance will help the Company make better decisions about procuring storage resources and will allow the Company to take necessary steps to recover such costs (such as modifying its PPFAC and related Plan of Administration to include those costs).

D. Utility-Owned Distributed Generation Program

The Company requests Commission approval of a tariff for a new Utility-Owned DG Program for residential customers. This program is innovative and unique, providing numerous benefits to customers.

Historically, the Commission has approved a mechanism which allowed the utility to invest in renewable energy and recover certain carrying costs between rate cases. In the Bright Tucson Buildout program discussion above, the Company stated that we were no longer seeking the utility investment incentive and that the Company would look to treat future utility-scale renewable energy investment through traditional rate design mechanisms. The Company feels it is appropriate, at this time, to remove the "utility incentive" and move ahead with a sustained renewable energy development plan to facilitate our planned resource portfolio changes, as outlined in the Company's Integrated Resource Plan.

However, the Company also recognizes the need to address customer-sited DG and our customers' desire for choice. As such, TEP has developed a new program through which the

Company will own and operate solar facilities at the homes of customers who would receive electric service at an energy rate that would be fixed for the projected useful life of the system.

The Company plans to invest approximately \$10 million in the program, which, at current prices, would cover the cost of approximately 3.5 MW of DG capacity. Participating customers would enter into a contract with TEP that grants the Company permission to install a residential solar facility on the customer's premises in exchange for the customer's use of a fixed energy rate roughly equivalent to their historical monthly average energy consumption. The Company will then install a solar facility with a capacity that approximates the customers' average annual energy consumption, allowing for system design considerations.

As an example, a typical customer who spends approximately \$90-\$100 per month on electric service would need a 6 kW solar facility to achieve "net-zero" status under the current net-metering rules if a third party installed the system. Under TEP's proposal and tariff, the Company would charge the customer a fixed monthly energy rate of \$99 – an amount based on a value of \$16.50 per kW. This \$99 rate would remain fixed for the life of the system, up to 25 years, and would not vary with usage unless customers increase their average annual consumption by more than 15 percent after joining the program. In that case, a participating customer's fixed energy rate would be reset to match their new average consumption.

This tariff would address many of the issues raised in ongoing discussions about net metering rules and the value of solar DG. Customers' monthly payments would cover costs typically recovered through the fixed monthly service fee as well as their share of fixed system costs that, under current rates and net metering rules, would be shifted to customers without DG through the Lost Fixed Cost Recovery (LFCR) mechanism and other means. The tariff also would recover the capital cost of the solar facilities, eliminating the need to recover such costs from other customers.

Because TEP is not a solar installer, the Company plans to conduct a competitive contractor bid solicitation to identify qualified local companies to install the DG systems. In this way, the program will support the continued success of local solar energy installers while

ensuring cost-effective installations.

As the program initially will be limited to approximately 3.5 MW, there will be a limited number of customers who will be able to participate.

The program provides many benefits:

1. TEP would own, operate, and maintain the systems, providing customers with consumer protections and confidence afforded by doing business with a regulated public service corporation under the Commission's jurisdiction.
2. The program expands consumer choice by providing an alternative to the cash purchase and third-party lease models for customers seeking DG systems.
3. The fixed fee allows the Company to recover capital expenses and fixed system costs without shifting costs to other customers.
4. Pending capacity availability, the program will be open to all TEP customers in good standing, regardless of their credit scores.
5. TEP would contract with local companies to install the systems, supporting the local solar community and promoting job creation.
6. Local companies also would be contracted to maintain the systems, providing ongoing support for local industry and job creation.
7. As part of the fixed rate, participating customers would be paying costs ordinarily shifted to other customers through the LFCR charge along with covering the capital costs of the solar DG system at their home.
8. Because TEP would own and operate the systems, it can employ a distribution management program to control the inverters, providing voltage and frequency control to benefit the grid and all customers.
9. The Company can direct systems to areas of the local grid where DG benefits can be maximized and negative impacts can be minimized.

10. The program provides a planned, managed process that greatly enhances the ability of residential DG to provide system benefits not currently achieved through third-party or customer-owned systems.

A copy of the proposed tariff for the Utility-Owned DG program is attached as Exhibit 9.

E. Distributed Generation Incentive Program

TEP is not proposing any new incentives for residential or non-residential solar DG. The Company recognizes that DG installations are occurring at a rapid pace despite the lack of utility incentives. While many issues may affect future adoption rates for solar DG – including changes to tax incentives, net metering rates or other Commission policies – the Company does not believe new incentives will be required to maintain an adequate pace for solar DG installations in 2015.

TEP is proposing the continuation of the residential/non-residential solar water heating program at \$0.40 per kWh, up to a budget of \$60,000. The Plan also includes funds for performance-based incentives (“PBI”) awarded in prior years, before those incentive programs were discontinued. To fund these programs, the budget for the proposed incentive program is \$7,274,196.

The residential and/or non-residential UFI and existing PBI allocations are shown in Table 4. Also included are the relative MWh and MW achieved.

Table 4. UFI/PBI Budget and Forecast

Customer Segment	2015 Budget	Annual MWh	Annual MW
Residential/Non-Residential UFI - SWH	\$ 60,000	150	-
Non-Residential UFI	-	-	-
Existing PBIs	7,214,196	83,062	41
Total	\$ 7,274,196	83,212	

F. Market Cost of Comparable Conventional Generation.

Consistent with the REST Rules, TEP calculates program expenses using the Market Cost of Comparable Conventional Generation (“MCCCG”). Details on the methodology for the MCCCG calculation are included in Exhibit 2 attached hereto. The annual MCCCG rates are calculated in advance and stated as a single dollar per MWh value by technology type. The expenses are based on the PPA pricing after subtracting the corresponding MCCCG based on projected hourly energy profiles and are included in Exhibits 3 (AMCCG) and 4 (IP New Resource Costs) (both confidential).¹ Exhibit 5 (IP New Resources) shows associated energy production. The profiles are determined by TEP’s production cost model. The MCCCG will be included for wind, PV systems, concentrated solar with storage, and bio-fueled renewable resources.

G. Metering Costs

The Company has received higher than anticipated demand for residential DG, even with the elimination of incentives. The Company plans to continue providing DG production meters, as well as the associated metering sockets and safety equipment for each of these residential installations. The costs of these necessary components are shown in Table 5. Because the Company anticipates 1,700 DG installations in 2015 – the same number anticipated for 2014 – the Plan budgets \$501,687 for these metering costs in 2015.

Table 5. Metering Costs

Component	Cost
Net Meter	\$ 118.40
Production Meter	38.92
AC Disconnect	85.85
Labels	14.38
Meter Sockets	37.56
Total Material Per Install	\$ 295.11
Total Estimated Res. DG Installs	1,700
Total Meter Material Budget	\$ 501,687

¹ Exhibits 3 and 4 will be provided to Commission Staff upon execution of a Protective Agreement.

III. THE PLAN BUDGET

As stated previously, the cost to implement TEP's 2015 Plan is \$40.2 million. The Plan's detailed budget is attached as Exhibit 1, which includes a breakdown of the costs for utility-scale energy, residential and non-residential DG programs, research and development, outside services support and reporting, technology, and education and outreach. Table 6 includes a high level Plan budget.

Table 6. Plan Budget by Category

Category	Budget
Utility Scale	\$ 30,994,303
Residential/Non-Residential SWH UFIs	60,000
Existing Large Commercial PBIs	7,214,196
Associated Costs (Education & Outreach, Technical Training, I.T., Metering, Labor, and R&D)	1,909,885
2015 Program Cost	\$ 40,178,384
Carryover Funds	6,826,416
Total 2015 Plan	\$ 33,351,968

IV. THE 2015 REST TARIFF

A summary of the Company's current REST surcharge and caps are presented in Exhibit 6.² TEP's 2015 Plan calls for maintaining the tariff charge at \$0.008000/kWh – its 2014 level – with customer caps by class. The caps were developed using the proportional cap allocation method previously approved by the Commission. Under this methodology, the caps for all customer classes should decrease in 2015. Table 7 details the Company's 2013 actual tariff collection and proposed budget for 2015, delineated by rate class. Table 8 shows the currently approved surcharge caps by rate class and the caps proposed for the 2015 Plan.

² Customer Load Percentage Analysis is set forth in the attached Exhibit 7.

Table 7. 2015 Budget by Rate Class

Rate Class	2013 Actuals	2015 Proposed Budget
Residential	\$ 14,290,818	\$ 14,779,396
Small General Service	11,299,210	10,244,784
Large General Service	5,651,068	5,727,369
Industrial & Mining	2,697,553	2,496,000
Lighting (PSHL)	252,597	256,281
Total	\$ 34,191,246	\$ 33,503,830

Table 8. 2014/2015 Surcharge Caps by Rate Class

Rate Class	2014 Approved Caps	2015 Proposed Caps
Residential	\$ 3.83	\$ 3.83
Small General Service	100.00	100.00
Large General Service	1,015.00	1,015.00
Industrial & Mining	8,000.00	8,000.00
Lighting (PSHL)	100.00	100.00
Public Authority	N/A	N/A
Per kWh to All Classes	\$ 0.008	\$ 0.008

V. RENEWABLE ENERGY BALANCING, INTEGRATION, AND FIELD TESTING

TEP typically commits a portion of its REST budget to provide technical support for the adoption of renewable energy. Table 8 outlines TEP's proposed budget for this work in 2015. TEP plans to continue its commitment to furthering the integration of renewable energy on its system by participating in the following projects.

Table 8. TEP’s Integration Initiatives by Project

Renewable Integration Initiatives	
Energy Storage and Grid Operations Study	\$ 38,000
Solar Test Yard Maintenance and Equipment	50,000
Field and Lab PV Component Degradation Analysis	50,000
Solar and Wind Forecast Integration Portal	100,000
UWIG, SEPA, AWEA Membership Dues	15,000
Total	\$ 253,000

A. PV Panel Lab Degradation Testing

In order for TEP to adequately maintain its existing and future portfolio of photovoltaic generation, degradation problems that are specific to the Tucson environment need to be identified early in order to prepare for failures in the field. TEP plans to use the University of Arizona’s (“UA’s”) state-of-the-art PV panel degradation laboratory to test panels either currently in use or proposed for use in TEP facilities. This testing is designed to reduce the long-term operations and maintenance cost of these facilities. The proposed budget for such research and testing is \$50,000.

B. Solar Test Yard Maintenance

TEP regularly performs technical analysis on existing and developing PV technologies in its widely regarded test yard facility. Data collected from the test yard helps the Company solicit partners to provide funding for research projects. This collaboration and grant funding allows TEP to optimize investments in appropriate technology for the long-term benefit of customers. The proposed budget for maintaining this existing technology and managing the many interconnections in the yard, including labor, is \$50,000.

C. Solar and Wind Forecast Integration Portal

In 2013 and 2014, TEP established a multi-year partnership with the UA's Departments of Physics and Atmospheric Sciences to create a Solar and Wind Integration Forecasting Portal. This portal will provide forecasting tools to help utilities better integrate renewable resources with their operations, especially given the reliability issues of solar and wind integration. In 2015, the second year of a two-year program to develop these tools, the Company expects the integration to be fully operational. The proposed budget for this program is \$100,000.

D. Energy Storage and Grid Operations Study

As part of the 2015 Plan, the Company is requesting funding to conduct an Energy Storage and Grid Operations Study. TEP continues to experience a very high penetration of DG, and the long-term effects of these systems on the grid are not fully understood. This proposed study will help the Company identify how energy storage, combined with updates to grid operations, might mitigate any negative impacts of DG. The proposed budget for this study is \$38,000.

E. UVIG, SEPA, AWEA Dues

To facilitate its compliance with the REST, TEP actively participates in three renewable industry associations: the Utility Variable (Energy) Integration Group (UVIG), the Solar Electric Power Association (SEPA), and the American Wind Energy Association (AWEA). High penetrations of solar and wind make UVIG (a variable generation group) relevant, while SEPA and AWEA provide resources and expertise that help the Company manage renewable programs and stay informed on issues facing the industry. The proposed budget for these groups' fees is \$15,000.

VI. ADDITIONAL COMPLIANCE ISSUES AND INFORMATION

A. Request for Approval of Utility-Owned DG Program Tariff

The Company is requesting that the Commission approve the tariff for the Utility-Owned DG Program as part of its Utility-Owned DG program.

B. Request for Approval of Company Solicitation for Energy Storage

The Company is requesting that the Commission approve the request to issue a solicitation for utility-scale energy storage for up to 10 MW. The Company acknowledges that no contracts would be finalized without approval from the Commission.

VII. CONCLUSION

The proposed 2015 Implementation Plan filed by TEP was developed to allow the Company to effectively comply with the REST mandate. The Company feels that the proposed Plan is prudent and in the public interest. TEP respectfully requests that the Commission adopt the TEP 2015 REST Implementation Plan as submitted.

Exhibit 1

Exhibit 1 – TEP Line Item Budget

Exhibit 1						
TEP Renewable Energy Standard Tariff						
Line Item Budget						
Total REST Budget & Tariff Collection:						
	2014 Approved	2015	2016	2017	2018	2019
Utility Scale Energy	\$ 30,711,330	\$ 33,351,968	\$ 45,260,634	\$ 39,279,698	\$ 33,026,749	\$ 31,488,872
Above Market Cost of Conventional Generation calculated annually on hourly data per MCOCCG Matrix						
TEP owned	\$ 25,481,208	\$ 22,971,774	\$ 25,789,803	\$ 24,903,628	\$ 23,496,736	\$ 21,822,515
Total	\$ 5,230,122	\$ 8,022,529	\$ 10,181,044	\$ 4,971,263	\$ -	\$ -
	\$ 30,711,330	\$ 30,994,303	\$ 35,970,847	\$ 29,874,891	\$ 23,496,736	\$ 21,822,515
Customer Sited Distributed Renewable Energy:						
Residential PV Up-Front Incentive (UFI)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Non-Residential UFI	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Annual Performance-Based Incentive (PBI)	\$ 7,944,363	\$ 7,214,196	\$ 7,214,196	\$ 7,214,196	\$ 7,214,196	\$ 7,214,196
Residential/Non-Residential Solar Water Heating UFI	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000
Annual meter reading cost	\$ 35,363	\$ 35,363	\$ 38,899	\$ 42,789	\$ 47,068	\$ 51,775
Consumer Education and Outreach	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Total	\$ 8,139,726	\$ 7,409,559	\$ 7,413,095	\$ 7,416,985	\$ 7,421,264	\$ 7,425,971
TEP internal and contractor training costs	\$ 75,000	\$ 85,000	\$ 85,000	\$ 85,000	\$ 85,000	\$ 85,000
Information Systems Integration Costs	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
Metering: Direct material cost for DG production meters, cables, disconnects, meter panels, BTU meters	\$ 118,204	\$ 501,680	\$ 526,764	\$ 553,102	\$ 580,758	\$ 609,795
Program Labor and Administration						
Internal Labor	\$ 339,103	\$ 468,442	\$ 515,286	\$ 566,815	\$ 623,496	\$ 685,846
External Labor	\$ 300,710	\$ 302,401	\$ 332,641	\$ 365,905	\$ 402,495	\$ 442,745
Materials, Fees and Supplies	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000
AZ Solar website	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000	\$ 4,000
Total	\$ 703,813	\$ 834,843	\$ 911,927	\$ 996,720	\$ 1,089,992	\$ 1,192,591
Renewable Energy Balancing, Integration, and Field Testing						
Energy Storage and Grid Operations Study	\$ -	\$ 38,000	\$ 38,000	\$ 38,000	\$ 38,000	\$ 38,000
Solar and Wind Forecast Integration Portal	\$ 182,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000
AZRISE - forecasting model, test yard monitoring, production analysis, maintenance equipment, other	\$ 25,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
Field AND Lab Degradation Analysis	\$ 53,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000
UWIG, SEPA, AWEA membership dues	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000	\$ 15,000
Total	\$ 275,000	\$ 253,000	\$ 253,000	\$ 253,000	\$ 253,000	\$ 253,000
2015 Program Cost (Total Budget)	\$ 40,123,073	\$ 40,178,385	\$ 45,260,634	\$ 39,279,698	\$ 33,026,749	\$ 31,488,872
Carryover of REST Funds	\$ 6,521,430	\$ 6,826,416	\$ -	\$ -	\$ -	\$ -
Grand Total (to be collected in 2014 tariff)	\$ 33,601,643	\$ 33,351,969	\$ 45,260,634	\$ 39,279,698	\$ 33,026,749	\$ 31,488,872

Exhibit 2

TEP Exhibit 2 – Definition Market Cost of Comparable Conventional Generation

Market Cost of Comparable Conventional Generation 2015 Renewable Energy Standard and Tariff

OVERVIEW

Consistent with the Renewable Energy Standard Tariff (“REST”) Rules passed by the Arizona Corporation Commission (“Commission”), Tucson Electric Power Company’s (“TEP”) Renewable Energy Standard and Tariff Implementation Plan contemplates recovery of expenses in excess of the Market Cost of Comparable Conventional Generation (“MCCCG”).” The Commission provided guidance on defining MCCCG in the context of its REST Rules and identified the MCCCG as “the Affected Utility’s energy and capacity cost of producing or procuring the incremental electricity that would be avoided by the resources used to meet the Annual Renewable Energy Requirement, taking into account hourly supply and demand circumstances. Avoided costs should include any avoided transmission, distribution, and environmental compliance costs.” This exhibit defines the methodology for developing the MCCCG rate for the Company.

METHODOLOGY

Annual MCCCG rates shall be calculated in advance and stated as a single \$/MWh value by renewable technology type. The renewable technology types will be based on projected hourly energy profiles for each type of renewable resource. Annual MCCCG rates will include renewable resources such as wind resources, fixed photovoltaic systems, concentrated solar with storage, single-axis tracking photovoltaic systems, and bio-fueled resources. Specific MCCCG rates would be developed as needed when new renewable technologies or new purchase power agreements are added to the Company’s renewable portfolio. Annual MCCCG rates will capture the value of the seasonality and time of day delivery by deriving an average of on and off peak dispatch costs weighted by on and off peak renewable generation. MCCCG rates shall be calculated each year using the companies production cost simulation software ‘Planning & Risk’. The hourly MCCCG rate determination criteria are shown in Table 1 below by comparing the types of renewable generation with the resource dispatch type. All projected MCCCG hourly rates are based on a ‘Planning & Risk’ production cost simulation that forecasts adequate

TEP Exhibit 2 – Definition Market Cost of Comparable Conventional Generation

generation and transmission capacity to meet all firm load obligations including system reserve requirements. Finally, the cost of renewable generation above the annual MCCCCG rates will be recovered through the REST Adjustor Mechanism and REST Tariff.

Table 1 - MCCCCG Hourly Rate Determination Matrix

		Types of Renewable Generation Resources			
		Dispatchable Renewable Generation	Firm Renewable Generation	Non-Firm Renewable Generation	Curtable Non Firm Renewable Generation
Resource Dispatch Type	Wholesale sales transaction served from existing resource portfolio	The MCCCCG rate will be based on projected incremental production costs to serve firm load and wholesale sales opportunities for that hour. Costs will include any projected transmission, distribution and environmental compliance costs.			
	No market transactions. Generation available from thermal resource portfolio.				
	Day, week or month ahead purchase transaction to serve firm load requirements.	The MCCCCG rate will be based on the projected day, week or month-ahead firm purchase power transactions committed for that hour. Costs will include any projected transmission, distribution and environmental compliance costs.			
	Spot market transaction to serve firm load requirements.	The MCCCCG rate will be based on the projected Palo Verde spot market price for that hour. Costs will include any projected transmission, distribution and environmental compliance costs.			

TEP Exhibit 2 – Definition Market Cost of Comparable Conventional Generation

CALCULATION

$$MCCCG_{on} = \text{Annual Average On Peak MCCCCG Rate} = \frac{\sum_{i=1}^{8760} PR_i * G_i * X_i}{\sum_{i=1}^{8760} G_i * X_i}$$

$$MCCCG_{off} = \text{Annual Average Off Peak MCCCCG Rate} = \frac{\sum_{i=1}^{8760} PR_i * G_i * (1 - X_i)}{\sum_{i=1}^{8760} G_i * (1 - X_i)}$$

$MCCCG_{Annual Rate}$ = Average of on and off peak MCCCCG rate weighted by projected on and off peak renewable generation.

It is assumed that there is a specific MCCCCG rate for each renewable technology type.

Where

PR_i = Projected Planning & Risk dispatch cost (\$/MWh) for hour $i=1,2,\dots,8760$.

G_i = Projected energy generation in renewable technology resource profile for hour $i=1,2,\dots,8760$.

$X_i = \begin{cases} 1 & \text{if hour } i \text{ is an on peak market hour} \\ 0 & \text{Otherwise} \end{cases}$ for $i = 1, 2, \dots, 8760$

Table 2 – TEP’s 2015 MCCCCG Annual Rates

Renewable Technology	MCCCCG Annual Rates	\$/MWh
	Solar PV	
AZ Wind		\$50.90
Biomass		\$51.37
NM Wind		\$50.43
Solar CSP		\$57.94

Exhibit 3

REDACTED

Exhibit 4

REDACTED

Exhibit 5

TEP Exhibit 5 – Implementation Plan New Resources

IMPLEMENTATION PLAN

Table 1 - Targeted Resources

Line No.	Targeted Generation Resources:	Ownership ¹	Targeted Completion	2008-2014 Total MW	Targeted Energy Production (MWh or Equivalent)					Total
					2015	2016	2017	2018	2019	
1	UASTP III - Aminox	PPA	COMPLETE	2.0	4,070	4,049	4,029	4,009	4,009	20,248
2	SunEdison FRV	PPA	COMPLETE	25.0	57,661	57,372	56,800	56,516	56,516	285,435
3	NRG	PPA	COMPLETE	35.0	71,012	77,232	76,846	76,462	76,079	377,631
4	Avalon	PPA	12/1/2014	35.0	69,599	81,740	81,331	80,924	80,520	394,114
5	Duke (Astrolon)	PPA	COMPLETE	6.0	10,352	10,303	10,252	10,201	10,150	51,260
6	Cogema	PPA	7/1/2014	1.0	1,958	1,949	1,939	1,929	1,920	9,695
7	E.ON (UASTP)	PPA	COMPLETE	6.2	13,979	13,909	13,840	13,771	13,702	69,201
8	E.ON (Valencia)	PPA	COMPLETE	13.2	26,768	26,634	26,501	26,368	26,237	132,508
9	Springville	TEP	COMPLETE	6.4	7,618	7,607	7,596	7,586	7,576	37,983
10	UASTP I - SOLON	TEP	COMPLETE	1.6	2,996	2,981	2,966	2,951	2,937	14,831
11	UASTP II - SOLON	TEP	COMPLETE	5.0	7,874	7,835	7,796	7,757	7,718	38,979
12	(HQ & OH Rooftop) SUNPOWER	TEP	COMPLETE	0.62	2,087	2,076	2,066	2,055	2,045	10,329
13	Prairie Fire - Solon	TEP	COMPLETE	5.0	7,914	7,874	7,835	7,796	7,757	39,175
14	SSGSS III (Springville Expansion)	TEP	12/1/2014	10.0	19,847	19,748	19,649	19,551	19,453	98,249
15	Fort Huachuca - EON	TEP	12/30/2014	22.0	49,170	48,924	48,679	48,436	48,193	243,401
16	Areva	TEP	11/15/2015	5.0	14,238	14,167	14,096	14,026	13,956	70,483
19	Wind:									
20	Macho Springs	PPA	COMPLETE	50.4	130,244	130,244	130,244	130,244	130,244	651,218
21	Red Horse	PPA	6/15/2015	40.0	60,298	103,368	103,368	103,368	103,368	473,770
26	Biomass/Biogas:									
27	Sundt - Los Reales	PPA	COMPLETE	4.0	21,000	21,000	21,000	21,000	21,000	105,000
28										
29										
30	Total Targeted Generation			273.4	578,707	639,033	637,139	635,254	633,378	3,129,511
31										
32	Targeted Distributed Energy Resources:									
33										
34	Residential:									
35	Solar Water Heating	UFI		N/A	150	150	150	150	150	750
36	Solar PV	UFI		32.4	57,268	57,268	57,268	57,268	57,268	286,340
37	Subtotal Residential			32.4	57,418	57,418	57,418	57,418	57,418	287,090
38										
39	Solar PV Non-Incentive			2.4	10,556	10,556	10,556	10,556	10,556	52,790
40										
41	Non-Residential:									
42	Solar PV	UFI		5.7	9,982	9,982	9,982	14,982	22,982	67,910
43	Solar PV	PBI		41.3	83,062	83,062	83,062	83,062	83,062	416,390
44	Solar H2O	UFI		N/A	4,671	4,671	4,671	4,671	4,671	23,355
45	Solar Chilling	PBI		N/A	189	189	189	189	189	945
46	Daylighting	UFI		N/A						
47	Subtotal Non-Residential			47.0	97,904	97,904	97,904	103,444	111,444	508,600
48										
49	Solar PV Non-Incentive			5.9	64,016	64,016	64,016	64,016	64,016	320,080
50										
51	Total Targeted DE Without Non-Incentived			79.4	155,322	155,322	155,322	160,862	160,862	795,690
52	Total Targeted DE With Non-Incentived			87.7	229,894	229,894	229,894	235,434	243,444	1,168,560

Notes: ¹All utility-owned and Third Party generation projects are developed through a competitive RFP process, and all DE systems are built independently by Third Party developers and installers.

Exhibit 6

Exhibit 6 – TEP REST Surcharge Summary

Rider R-6 –

Renewable Energy Standard and Tariff Surcharge
 REST-TS1 Renewable Energy Program Expense Recovery

<p>Per kWh Rate and monthly cap:</p> <p><u>Monthly Cap</u> For Residential Customers: For Small General Service Customers: For Large General Service Customers: For Large Light & Power Customers: For Lighting Customers:</p>	<p>\$0.008000 per kWh</p> <p><u>Monthly Cap</u> \$ 3.83 per month \$ 100.00 per month \$1,015.00 per month \$8,000.00 per month \$ 100.00 per month</p>
<p>Monthly Cap Rate for Customers who pay the average price by class:</p> <p><u>Monthly Cap</u> For Residential Customers: For Small General Service Customers: For Large General Service Customers: For Large Light & Power Customers: For Lighting Customers:</p>	<p><u>Monthly Cap</u> \$ 3.22 per month \$ 18.94 per month \$ 778.98 per month \$8,000.00 per month \$ 15.49 per month</p>

Exhibit 7

TEP Exhibit 7 - Customer Load Percentage Analysis

2015 Company Proposed		Percent of Revenue	Average Bill	Monthly Cap	Percent of Customers at Cap	Percentage to Total Load
Customer Class	Total Revenue					
Residential	\$14,779,396	44.1%	\$3.22	\$3.83	64.2%	42.2%
Small Commercial	\$10,244,784	30.6%	\$20.77	\$100.00	6.5%	23.4%
Large Commercial	\$5,727,369	17.1%	\$779.66	\$1,015.00	45.0%	12.4%
Industrial & Mining	\$2,496,000	7.4%	\$8,000	\$8,000.00	99.01%	21.68%
Lighting (PSHL)	\$256,281	0.8%	\$11.71	\$100.00	0.45%	0.36%
Total	\$33,503,830	100.0%				

Exhibit 8

Exhibit 8

Tucson Electric Power Company

Renewable Energy Credit Purchase Program

2015

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I. Frequently Asked Questions

What is Distributed Generation?

Distributed Generation (DG) is defined as electric generation sited at a customer premise, providing electric energy to the customer load on that site or providing wholesale capacity and energy to the local Utility Distribution Company for use by multiple customers in contiguous distribution substation service areas. The generator size and transmission needs shall be such that the plant or associated transmission lines do not require a Certificate of Environmental Compatibility from the Arizona Corporation Commission (ACC).

What are Distributed Renewable Energy Resources?

Distributed Renewable Energy Resources are applications of appropriate technologies that are located at a customer's premise that displace conventional energy resources that would otherwise be used to provide electricity to Arizona customers.

Tucson Electric Power Company (TEP or Company) provides programs consistent with these definitions and generally refers to these programs as DG programs. For more information on these and other definitions, please visit the ACC's Renewable Energy Standard and Tariff webpage at <http://www.cc.state.az.us/divisions/utilities/electric/environmental.asp>

What is Net Metering?

Net Metering refers to the production of electricity from a qualifying renewable energy electric generator, such as photovoltaic (PV) panels, used to offset electricity provided by TEP. Customers deemed eligible for participation in TEP's Net Metering Tariff will be required to install a bi-directional meter capable of measuring the flow of electricity to and from the customer's premises. Net Metering customers may buy and sell electricity to and from TEP under the applicable terms and tariff rate. In the event that a Net Metering customer carries a negative balance due to the over-production of electricity for the time period specified in the Net Metering Tariff, the customer's remaining credits will be transitioned to a payment at the applicable wholesale rate. This will occur once per year, in October. The customer's balance will then be reset to zero.

No system may exceed 125% of connected load for that meter, where connected load is defined as the maximum demand divided by 0.6. For more information on Net Metering, please visit <https://www.tep.com/customer/rates/>.

Why is TEP involved with DG?

The ACC, which regulates TEP and utilities like it in Arizona, enacted the Renewable Energy Standard and Tariff (REST) Rules in 2008. These rules require TEP to replace a substantial portion of its retail sales with renewable energy by investing in a variety of projects, including both utility-scale and DG projects. In order to comply with a portion of the REST Rules governing DG projects, TEP may purchase Renewable Energy Credits (REC) from eligible customers through their incentive programs. Under these programs, TEP does not own or build the systems that generate these credits, but rather incents them by purchasing the resulting RECs. Pursuant to the REST Rules, one REC is equivalent to 1 kilowatt hour (kWh). For more information on the ACC's REST Rules, please visit the ACC's REST Rules webpage at <http://www.cc.state.az.us/divisions/utilities/electric/environmental.asp>

How does TEP get involved with DG?

One way in which TEP supports DG projects is by providing residential and non-residential programs for customers with qualifying renewable energy generators to participate in. These programs include a variety of

ACC approved up-front and performance-based incentive payments by technology. These incentives are the method by which TEP actually purchases a REC. For details, terms, and conditions regarding for each qualifying technology, please see the appropriate sections of this document. Please note that TEP issues incentive payments for RECs; these payments are NOT REBATES. It should also be noted that not every renewable technology system is eligible to receive an incentive. TEP will only incent technologies specifically outlined herein.

Who is eligible for the incentive and how do I apply?

Any residential or non-residential customer currently connected to TEP's electric service system that installs a qualifying renewable facility, in compliance with the terms and conditions described herein, may apply to participate in one of TEP's DG programs. Alternatively, any TEP-qualified installer may submit the required DG program application on behalf of a qualifying TEP customer.

What is a TEP-qualified installer?

A TEP-qualified installer is an installer that has been evaluated by TEP personnel and deemed to have met the prerequisites for qualification. In order to become TEP-qualified, each installer must meet certain TEP requirements, including but not limited to annual submittal of the necessary paperwork contained within the "Installer's Packet". Each submittal must include, but is not limited to the following: an Installer's Agreement, a current and valid Arizona Registrar of Contractor's (AZROC) license appropriate for the solar technology being installed, Arizona business license in good standing, and similar information regarding any sub-contractor(s), if applicable. TEP will not, under any circumstances, issue or assign incentive payment(s) to an installer who is not TEP-qualified.

Where can I find more information?

For the terms and conditions of participation in any of TEP's DG programs, please consult TEP's Renewable Energy Credit Purchase Program (RECPP), which can be found online at www.tep.com/Renewable/. Questions may be directed to (520) 917-3673.

What else do I need to know?

Each of the programs described herein, including incentive amounts and all terms and conditions, are subject to change as dictated by program need and any and all regulatory authorities. Nothing included in TEP's RECPP is intended as a guarantee of funds or qualification for purposes of program participation.

TEP's RECPP does not accommodate non-customer sited projects for any reason. "Solar Farms" or other utility-scale generation projects do not qualify under TEP's RECPP. These projects may participate in TEP's next request for proposals (RFP) for renewable energy. Information regarding TEP's upcoming RFP may be found at www.tep.com.

TEP's RECPP does not allow for any aggregated or virtual net metering of a customer's loads under any circumstance. The incentives described herein must meet the definitions of DG and Renewable Energy Resource as defined by the ACC and contained within the Frequently Asked Questions portion of this document.

II. Project Funding

TEP will allocate funds to all qualifying technologies applying for residential and non-residential incentives. Non-PV categories may be protected from over-spending in PV at the discretion of TEP Program Managers. This may result in a 10% carve out for technologies other than PV for both classes of projects. No more than 25% of a single budget may be reserved for any single project.

Funding for the following is detailed below:

1. Residential/Non-Residential Solar Water Heating.

Funds will be made available for reservations on a first-come, first-served basis, until annual funding is exhausted. If the incentive level has changed from the date of the original reservation to the date when the reservation is approved, the new incentive level shall be applied.

II. Installer Qualifications

All systems receiving incentives under the RECPP must be installed by an installer properly licensed by the state of Arizona and qualified to install solar projects. TEP will verify that the installer meets the following minimum qualifications prior to confirming a reservation request:

1. The installer must possess a valid license on file with the Arizona Registrar of Contractors (AZROC) with a license classification appropriate for the solar technology being installed. Alternatively, the installer must identify use of any sub-contractor(s) and ensure the subcontractor(s) maintain an appropriate license(s) on file with the AZROC for the solar technology being installed. Installers may not sub contract outside their scope of work per the AZROC rules; and
2. The installer must possess an Arizona business license that is active and in good standing.

Installers must have completed the TEP Installer's Packet and have provided the above information to be retained on file with TEP. The installer must certify that the information on file remains current with the submission of each reservation request. Information on file must be renewed by the end of the calendar year and resubmitted for participation in the upcoming program year.

IV. Net Metering

RECPP incentives can be applied to systems designed to serve only the typical load of the customer with whom the incentive agreement has been established. The assessment of that typical load does not preclude the periodic production of electricity in excess of the customer's demand. All projects must comply with ACC Net Metering rules.

V. Prohibition of System Removal

Neither the Qualifying System nor any component thereof may be removed by any party, including but not limited to the applicant or future owners or occupants of the property until expiration of the Renewable Energy Credit Agreement or the last day of the final month of the final full calendar year of the applicable incentive payment term. If the Qualifying System or any component thereof is removed by any party in violation of this provision, the customer party to the Renewable Energy Credit Agreement shall immediately reimburse TEP a

prorated amount of the incentive amount paid by TEP to customer or on behalf of customer to an authorized third party.

In addition, if a Qualified System is removed, TEP shall monitor that specific customer site to ensure that an additional incentive is not provided for any new distributed renewable energy resource system on that site until the original Renewable Energy Credit Agreement's contracted operational life of the original system has expired.

TEP shall attempt to monitor the number of missing or non-working distributed generation systems and shall summarize its observations in its annual Compliance Report.

VI. Community Solar

For customers who do not wish to operate a DG system, TEP offers the Bright Tucson Community Solar Program. The Bright Tucson Community Solar Program offers an easy and affordable way for TEP customers to meet their electric needs with locally generated solar power by purchasing solar power in "blocks" of 150 kWh per month. A customer may buy some or all of their power through the program. For more information, please see TEP's Bright Tucson Community Solar webpage at www.tep.com/renewable/home/bright/.

VII. Up-Front Incentives

Up-Front Incentive (UFI) programs are limited to Residential/Non-Residential Solar Water Heating Projects only.

a. Qualifications

Qualifying Technology	Size Limit
Residential/Non-Residential Solar Water Heating	

b. Application Process

TEP's UFI application process appears below. TEP requires strict adherence to this process. Any deviation from the requirements below may result in your application being denied. If you are working with an installer or contractor, please ensure that they follow the required processes explained below. TEP will assign payment under its UFI application process to the party that appears on the assignment of payment form or as designated by the UFI REC Purchase Agreement. Please work with your installer or contractor prior to beginning the process below to determine who payment should go to. **Once assignment of payment is decided and submitted to TEP, modifications will not be allowed under any circumstances.**

1st Step: Submittal of the Properly Completed TEP Online Application.

*Please visit www.tep.com/renewable for online application submission.

2nd Step: Submittal of the Properly Completed Reservation Packet* to TEP.

The RECPP Reservation Packet includes the following items:

1. RECPP Reservation Packet Cover Sheet
2. Assignment of Payment Form (AOP) if applicable
3. IRS Form W-9, required from the TEP main customer. Current UFI Renewable Energy Credit Purchase Agreement, signed by the TEP main customer.
4. For Solar Water Heating Applications:
 - A recent copy of the Solar Rating and Certification Corporation (SRCC) OG300 schematic obtained from the SRCC website that includes in the printed view the annual kWh savings estimated.
 - In the event of a collector substitution both collectors must be SRCC OG100 rated. A recent copy of the SRCC OG100 Certification and Rating is required for both the collector named on the OG300 system and the substituting collector.

*** All Reservation paperwork must contain the associated project number that is provided upon successful completion of online application**

3rd Step: Required program documents & other associated paperwork can be forwarded as follows:

Mail may be forwarded to the following address regardless of program:

Tucson Electric Power
Mail Stop HQE502
P.O. Box 711
Tucson, AZ 85702-0711

Emails may be sent to the following based on program:

Residential PV: sunshare@tep.com
Residential Water Heating: solarwaterheating@tep.com
Non-Residential Projects: commrenewables@tep.com

Paperwork sent directly to any specific employee Company email address may not be processed.

4th Step: Confirmation or Denial of Reservation.

- Once received, TEP will match the online application with the submitted Reservation Packet. It is the customer's and/or installer's responsibility to ensure that all forms are filled out completely and correctly. **Forms with missing and/or incorrect information will be placed in a "Missing information" status and will not be approved until corrected. Outdated forms will be rejected.**
- TEP will evaluate each application for completeness and confirm whether or not reservation funds are available. **All applications are subject to the availability of program funds.** TEP will also verify, where an installer is used, that the installer is a TEP-qualified installer. Provided that the application meets TEP's requirements, and that the installer, if any, is TEP-qualified, and that program funds sufficient to fund the application are available, TEP will issue the customer and installer a reservation confirmation letter and provisionally approve the application. **If no funds are available at the time TEP processes the reservation, TEP will notify the installer and customer and the application will be denied.**

5th Step: Submittal of Jurisdictional Final Inspection.

1. Within 120 days from the date of the reservation confirmation letter, customer or installer must submit an application to the appropriate jurisdictional entity (e.g., City of Tucson or Pima County) for a final inspection of the qualifying system. Failure to obtain a jurisdictional final inspection within 180 days of the date of the reservation confirmation letter will result in the revocation of a customer's incentive reservation. If this occurs, the customer or installer must reapply to participate in the program subject to available funding and incentive levels in effect at time of reapplication.
2. In the event that a jurisdictional final inspection is not completed within the required timelines and the customer or installer provides proof to TEP that a correctly completed application for a jurisdictional final inspection was made within the timeline required. TEP will neither process nor revoke the customer's reservation for 30 days to allow customer time to confirm with the inspecting jurisdiction when the inspection will occur. Provided that the customer provides TEP with an inspection date within those 30 days, the customer's reservation will be honored. If 30 days elapses with no information from the customer, the reservation will be revoked and customer must reapply to participate in the program subject to available funding and incentive levels in effect at time of reapplication.

3. For solar water heating systems and other non-PV systems, the installer or customer must submit proof of a passed final inspection directly to TEP that includes the installation address, scope of work, and inspection status.

6th Step: Submittal of Certificate of Completion (COC) Form.

For all program applications: once the jurisdictional final inspection has been approved, the installer or customer must submit the COC for Solar Water Heating systems, please submit the COC to solarwaterheating@tep.com along with the copy of the corresponding approved jurisdictional final. It is the responsibility of the installer to be sure that the COC contains the reservation Project Number, any COC's without a project number are considered incomplete and **will not be accepted**.

7th Step: TEP will confirm installation of system.

8th Step: TEP process of incentive payment.

Upon receipt of the COC and the system passing inspection, TEP will process the payment to the party indicated on the Assignment of Payment form or as designated by the UFI REC Purchase Agreement. Assignment of Payment forms may only be submitted once as part of the RECPP Reservation Packet. TEP will not accept changes to the AOP. TEP will not pay incentives without complete and accurate receipt of the required documents.

c. Restrictions/Important Notes:

1. TEP reserves the right to modify the business process to better serve customers or to increase efficiency. Please refer to www.tep.com/renewable for the most up-to-date information.
2. With the exception of minor system modifications during the procurement process, any material changes to a system made after the application is processed will result in cancellation of the existing application and will require a new online application to be submitted. The reservation request may be denied because the request is not in compliance with program requirements (see specific technical sections below).
3. Project extensions will not be granted except as outline herein.
4. Receipt of the application is not valid until a properly completed RECPP Reservation Packet and the installer's New Supplier Fact Sheet has been received by TEP. Once the Reservation Packet is received and deemed complete, the application is validated and the reservation retained at the incentive level in place at time of validation. Any reservation packets submitted incorrectly will be cancelled as will their corresponding online application. Reapplication may result in a reduction of incentive or unavailable funding.
5. TEP will not purchase RECs from retroactive systems. "Retroactive" is defined as a renewable energy system installed before an application for incentive was received and approved by TEP. TEP must receive the required program documents; RECPP Reservation Packet and approve the application, and reserve the funds prior to the system being installed to receive the incentive ("installed" is defined as the date of the final clearance from the appropriate jurisdiction).
6. Incentives are not guaranteed.

7. No more than 25% of a single budget may be reserved for any single project.
8. In order to participate in the RECPP, installers must have on file with TEP a completed Installer's Packet, including a New Supplier Fact Sheet. This document is available in the Installer's Corner at www.tep.com/renewable.

A. Residential/Non-Residential Solar Water Heating

Solar Water Heating in residential applications is eligible for up-front incentives (UFI). UFIs are those incentives where the customer receives a one-time payment based on the system's designed capacity.

Table 1. UFIs for Residential Solar Water Heating

Year	Residential Incentive Level*	Non-Residential Incentive Level
2015	\$0.40/kWh (max \$1,750)	\$0.40/kWh (up to 25% of available budget)
*Indicates estimated annual kWh production in first year.		

a. Terms & Restrictions

- Energy savings rating is based on the Solar Rating and Certification Corporation (SRCC) OG-300 published rating or International Association of Plumbing and Mechanical Officials (IAPMO) rating to the OG-300 standard, Engineering Report or reputable Energy Modeling and Performance simulation Report. The rate applies to forecast/measured first year energy savings only.
- The UFI may not exceed 50% of total System Cost.
- The customer must pay at least 15% of the project cost, after other government incentives (e.g., tax credits) are considered. (See explanation of incentive calculation below.)
- Systems may not be eligible to receive RECPP incentives if other utility incentives are applied.
- The incentive amount will be calculated at the time the application is approved for reservation. If federal or state incentives change after the reservation has been approved, the incentive amount reserved will not change as long as the reservation is not cancelled.
- In return for TEP's payment of a UFI, TEP will be given complete and irrevocable ownership of the Renewable Energy Credits until December 31st of the 20th full calendar year after completion of installation of the system. Operational life during that time frame must be supported by system warranty or planned maintenance schedules.

i. Qualifications for Residential/Non-Residential Solar Water Heating

The following equipment qualifications listed are mandatory requirements which must be met at the time of project commissioning to receive a RECPP incentive. The installation guidance is intended to provide consumers with information on installation and operation practices which are most likely to support achieving the system's designed output. Installation guidance is mandated in order for a project to receive a RECPP incentive, as it does reflect both industry and TEP concurrence on those practices which are important for a technology to best achieve the designed output. In the future, additional installation guidance items may be considered for inclusion as part of the equipment qualifications.

TEP acknowledges that many regulations and site-specific requirements may apply to the installation of renewable energy technologies. TEP agrees that no requirement imposed by these technology criteria shall be imposed in conflict with any other governmental requirements. Any RECPP-based requirement which is in conflict with a site-specific governmental requirement shall be detailed in the reservation request. All qualifying systems must adhere to the following requirements in addition to the RECPP program requirements:

Equipment Specifications

1. Domestic Solar Water Heating systems will be rated by the Solar Rating Certification Corporation (SRCC) and or the International Association of Plumbing and Mechanical Officials (IAPMO) and meet the OG-300 system standard. Systems that include OG-100 collectors, but are not certified under OG-300, will need to be verified by submitting either a testing certification for a substantially similar system prepared by a publicly funded laboratory or by submitting an engineering report stamped by a registered professional engineer or a reputable Energy Modeling and Performance Simulation Report detailing annual energy savings.
2. Active, open-loop systems are not eligible for RECPP incentives except for active, open-loop systems that have a proven technology or design that limits scaling and internal corrosion of system piping, and includes appropriate automatic methods for freeze protection and prevents stagnation temperatures that exceed 250 degrees Fahrenheit (F) under all conditions at the location of installation. Details disclosing conformance with this exception shall be submitted as part of the manufacturer's verification documentation.
3. The 'high' limit on all Domestic Water Heating controllers shall be set no higher than 160 degrees F.
4. Contractors must provide a minimum of a ten year collector warranty as provided by the system manufacturer, including a minimum warranty period of five years for repair/replacement service to the customer.
5. Domestic Water Heating systems that are installed as an addition to an existing system or are submitted as a customer designed system or not certified to OG-300 must be specifically reviewed and approved by the utility.
6. The solar collector shall have an equipment warranty of at least 10 years to qualify for a UFI
7. The heat exchangers, and storage elements shall have an equipment warranty of at least 5 years to qualify for a UFI

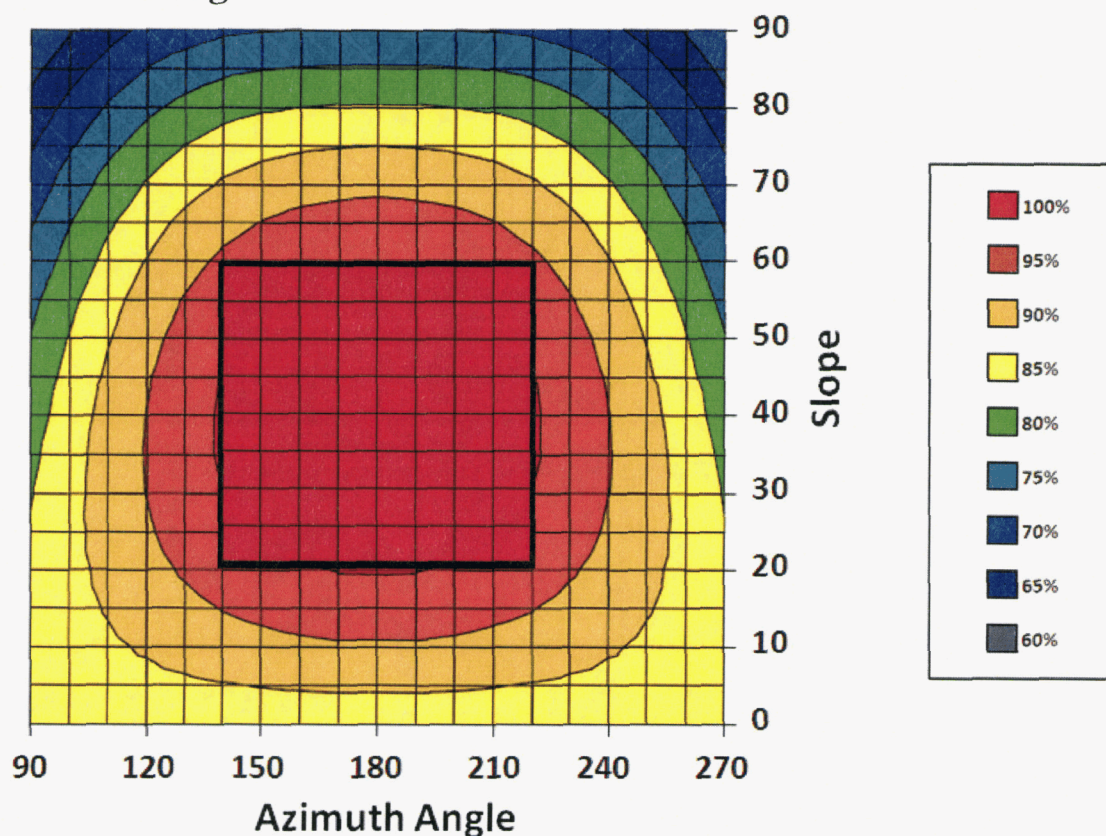
Installation Guidance

1. The system shall be installed with a horizontal tilt angle between 20 degrees and 60 degrees and an azimuth angle of +/- 60 degrees of due south. It is recommended that collectors be positioned for optimum winter heating conditions at a minimum tilt angle of 45 degrees above horizontal, or as recommended by the manufacturer for the specific collector type and geographic location of installation. Azimuth or tilt angles outside these parameters may be reviewed and approved by the utility, at their discretion. Solar Water Heating de-rating chart, contained herein, may be used to adjust incentive level based upon affected output.
2. All systems should be installed such that the energy collection system is substantially unshaded and should have substantially unobstructed exposure to direct sunlight between the hours of 9:00 a.m. and 3:00 p.m. Solar Water Heating de-rating chart may be used to adjust incentive level based upon affected output due to shading.
3. Heat exchange fluid in glycol systems should be tested, flushed and refilled with new fluid as necessary or at a minimum every five years or sooner per manufacturer's recommendations.
4. The anode rod should be checked and replaced per manufacturer's recommendations, but no less frequently than every five years.
5. For optimal system performance; a timer, switch, and a temperature sensor on the backup element of the storage tank is recommended.
6. The collectors and storage tank should be in close proximity to the backup system and house distribution system to avoid excessive pressure or temperature losses.
7. It is recommended that in areas where water quality problems are reported to have reduced the expected life of a solar water heater, that a water quality test is performed for each residence to screen for materials that through interaction with the materials of the proposed solar water heating system may reduce the expected operational life of the system components.
8. In areas subject to snow accumulation, sufficient clearance will be provided to allow a 12" snowfall to be shed from a solar collector without shadowing any part of the collector.
9. Ball valves shall be used throughout the system. Gate valves shall not be used in any new installation systems.
10. Pipes carrying heated fluids shall be insulated for thermal energy conservation as well as personal protection when exposed to ambient conditions, although this is highly recommended in either situation.
11. TEP reserves the right to modify standards as technology changes on a case-by-case basis, pending independent laboratory analysis, Professional Engineer (PE) stamp, or TEP engineering analysis.

General Requirements

1. The project must comply with applicable local, state, and federal regulations.
2. Products must be installed according to manufacturers' recommendations.
3. Installations must meet applicable governmental statutes, codes, ordinances, and accepted engineering and installation practices.
4. Systems must be permitted and inspected by the jurisdiction having authority over construction projects in the customer's locale on new installations.
5. All major system components must be new and must not have been previously placed in service in any other location or for any other application.

ii. **Solar Water Heating Off-Angle and Shading Annual Energy Derating Chart**



If the SWH system falls outside of the 95-100% performance band, then the UFI for the system will be derated. The incentive will be de-rated based on the decrease in annual energy output anticipated by this chart.

IX. Other Incentives

A. Technologies without Technology Specific Criteria

Technology specific criteria have not yet been developed for the following qualifying technologies:

- Fuel Cells
- Other

For applicants requesting incentives for these technologies or for applicants requesting installation of a technology with specific project technology criteria, but where some criteria cannot be met, the applicant will need to submit design and output documentation.

Applicants installing these systems will, at a minimum, need to provide an energy savings and designed output report for the system. The report must include either a testing certification for a substantially similar system prepared by a publicly funded laboratory or an engineering report stamped by a qualified registered professional engineer. The engineering report and/or testing certification shall provide a description of the system and major components, design criteria and performance expectations, applicable standards and/or codes, and a brief history of components in similar applications. Additional information may be required as part of the RECPP requirements.

B. Non-Conforming Projects

Non-conforming projects will be identified as the Program evolves. Incentive levels for such projects will be calculated based on TEP engineering analysis, independent laboratory analysis, and/or professional engineering (PE) stamps. Non-conforming projects that prove combined economic and renewable energy value will be allowed appropriately calculated incentives within the RECPP.

C. Guidelines for Photovoltaic Projects Interconnecting Without Incentives

Customers may install grid-tied photovoltaic electric systems behind their meter without incentives. If a customer chooses to do so, the customer shall still notify TEP that a renewable energy generator is being connected to TEP's grid and complete any associated interconnection processes. The process for non-incentive utility interconnection, for both residential and non-residential projects, is available at www.tep.com/renewable.

Appendix 1: Incentive Summary Tables

RECPP – CONFORMING PROJECT INCENTIVE MATRIX

2015 Program Year	UP FRONT INCENTIVE ¹ 20-Year REC Agreement	10-Year REC Agreement ² 10-Year Payment (\$/kWh)	15-Year REC Agreement ² 15-Year Payment (\$/kWh)	20-Year REC Agreement ² 20-Year Payment (\$/kWh)
RESIDENTIAL/NON-RESIDENTIAL SOLAR WATER ¹	\$0.40/kWh	NA	NA	NA

Notes:

- 1) Energy savings rating is based on the SRCC OG-300 published rating. The customer contribution must be a minimum of 15% of the project cost after accounting for and applying all available Federal and State incentives.

Appendix 2: Glossary of Terms

ACC – Arizona Corporation Commission.

AZROC – Arizona Registrar of Contractors.

Applicant – Utility customer of record for the Utility Revenue Meter located at the installation site; a builder of the structure (residential or non-residential) who will reserve and install the Qualifying system; or for an off-grid Qualifying System, the property owner for the installation site located within a Utility’s service territory.

Arizona Business License – A business license issued by the ACC.

Cancelled – Reservation Status indicating that a Reservation has been terminated, funding is no longer allocated, and the utility has removed the reservation from the funding queue.

Cancellation – The termination of the Reservation.

Commissioned – Qualifying System certified to be in operation.

Commissioning Package – Written verification signed by the installer and the customer confirming that the system has been installed in conformance with the approved reservation and that the system is ready for operation.

Conforming Project – Any project utilizing a renewable technology listed in Attachment D.

Conformance Inspection – Inspection performed by the utility to verify that the system has been installed and operates in conformance with the Reservation application.

Customer – Utility customer of record for the Utility Revenue Meter located at the installation site or a builder of the structure (residential or non-residential) who will reserve and install the Qualifying System.

Extension – The extension of the Reservation Timeframe.

Installer – The entity or individual responsible for the installation of a qualifying system.

Installed – The date of the final clearance from the appropriate jurisdiction

Interconnection Inspection – Inspection performed by the utility to confirm that the system can be safely interconnected to the power grid.

Non-Conforming Project – Non-conforming projects include, but are not limited to, projects with staged completion dates, multi-customer or multi-system projects, projects involving more than one technology, projects requiring new or unique agreement terms, projects with technologies for which qualification standards have not been developed or projects requiring non-standard timeframes.

Performance Based Incentive (“PBI”) – Incentive based on a rate per actual kWh output or on equivalent kWh of energy savings.

Project Costs – System Costs plus financing costs.

Proof of Project Advancement – Documentation demonstrating that a project is progressing on schedule and is staged for Commissioning on or before the end of the Reservation Timeframe.

Qualifying System – Distributed renewable energy systems meeting the qualifications for production of qualified Renewable Energy Credits in Arizona acceptable to the Arizona Corporation Commission as they may be defined for affected utilities to meet any renewable energy standards.

Renewable Energy Credit (“REC”) – One Renewable Energy Credit is created for each kWh, or kWh equivalent for non-generating resources, derived from an eligible renewable energy resource. RECs shall include all environmental attributes associated with the production of the eligible renewable energy resource.

Reservation – A dollar amount committed by the utility to fund a project if all program requirements are met.

Reservation Status – Indicator relating to approval or denial of a Reservation request. If a Reservation is approved, the Reservation Status is Reserved. If a Reservation request is denied, the Reservation Status is either Cancelled or Wait Listed.

Reserved – Status indicating the acceptance of a Reservation request.

Reservation Timeframe – The duration of the utility’s funding commitment for a Reservation.

Retroactive System – A Renewable solar system installed before an application for incentive was received and approved by TEP.

System Costs – Costs associated with the Qualifying System components, direct energy distribution, system control/metering, and standard installation costs directly related to the installation of the Qualifying System.

Up Front Incentive (“UFI”) – One time incentive payment based on system capacity or estimated energy kWh production rather than on measured system output.

Wait List – Status indicating Applicant has met program requirements, but the Utility has insufficient funding to commit to funding the project.

Exhibit 9

**Utility-Owned Distributed Generation
Program Tariff**

TO BE PROVIDED