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NEW APPLICATION

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BEFORE THE ARIZONA CORPORATION COMMISSION

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IN THE MATTER OF THE APPLICATION OF UNS ELECTRIC, INC. FOR APPROVAL OF ITS 2013 RENEWABLE ENERGY STANDARD IMPLEMENTATION PLAN AND DISTRIBUTED ENERGY ADMINSITRATIVE PLAN AND REQUEST FOR RESET OF ITS RENEWABLE ENERGY ADJUSTOR.	DOCKET NO E-04204A-12-0297 **APPLICATION**

UNS Electric, Inc. ("UNS Electric" or "Company"), through undersigned counsel, hereby submits its 2013 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*.

UNS Electric's Plan is designed to achieve 2013 REST compliance as cost-effectively as possible. The 2013 Plan incorporates the renewable energy resources the Company intends to add through 2017, the programs it plans to implement, including previously Commission-approved programs, the budgets for each program, and the customer funding required under the Plan. The estimated cost for 2013 related projects and programs is $8.9 million. UNS Electric proposes to recover $8.9 million through the REST tariff. In order to implement this Plan, UNS Electric requests approval of a 2013 REST surcharge of $0.012700/kWh.

UNS Electric remains solidly committed to the REST and its Plan provides for renewable generation to meet the 2013 compliance requirement of four (4) percent of retail sales. The Company has entered into agreements with developers for the construction of renewable generation and is moving forward with plans to construct its own renewable generation.

UNS Electric believes that its Plan provides a cost-effective strategy for complying with the REST requirements. Accordingly, UNS Electric requests that the Commission;

1. Approve UNS Electric's 2012 Renewable Energy Implementation Plan prior to December 31, 2012; and
2. Approve the proposed REST surcharge of $0.012700/kWh.

RESPECTFULLY SUBMITTED this 2nd day of July 2012.

UNS ELECTRIC, INC.

By _____

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Original and 13 copies of the foregoing
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UniSourceEnergy SERVICES

UNS Electric, Inc.

2013 Renewable Energy Standard Implementation Plan

TABLE OF CONTENTS

ATTACHED EXHIBITS

I. EXECUTIVE SUMMARY

UNS Electric, Inc. ("UNS Electric" or "Company") has prepared its 2013 Implementation Plan ("Plan") in compliance with the Arizona Corporation Commission's ("Commission") Renewable Energy Standard ("REST") Rules pursuant to Arizona Administrative Code ("A.A.C") R14-2-1813. The cost effective strategy set forth in the Plan demonstrates UNS Electric's commitment to fulfilling the REST requirements for 2013 and beyond. The key components of the Plan include: new renewable energy resources to be added through 2017; proposed and existing Company programs; the budgets for each of those programs and the customer funding and related REST. UNS Electric requests the Commission approve the Plan, as well as the associated budget and tariff prior to December 31, 2012 so it may become effective January 1, 2013.

Pursuant to A.A.C. R14-2-1804 and R12-2-1805, UNS Electric must obtain four (4) percent of its 2013 annual retail sales from renewable resources by 2013, thirty (30) percent of that four percent must come from Distributed Generation ("DG"). In order to meet this requirement, UNS Electric proposes to utilize existing utility-scale renewable generation, Power Purchase Agreements ("PPA") with renewable developers, new utility-owned renewable generation, and DG incentive programs. The resulting renewable portfolio will include solar and wind projects.

UNS Electric's Plan utilizes the most cost-effective measures to achieve 2013 REST compliance. The estimated cost for 2013 REST-related projects and programs is $8.9 million. Under the proposed incentive levels (which have been modified from the 2012 Plan levels) and the anticipated renewable generation requirements, $8.9 million is expected to remain relatively flat through 2017, adding up to a five year total of $44 million. (See attached Exhibit 1: Energy, Capacity, and Cost Forecast for estimated projected budgets thru 2017.) The REST funding is necessary to cover the cost of: utility-scale renewable generation, incentive payments for distributed generation resources, customer education and outreach, program implementation, and

administration costs. For 2013, UNS Electric proposes recovery of approximately $8.9 million through the REST tariff.

UNS Electric's Plan provides a realistic and cost-effective strategy for complying with the REST requirements. Therefore, UNS Electric requests Commission approval of the Plan prior to December 31, 2012, and a finding that it is in the public interest.

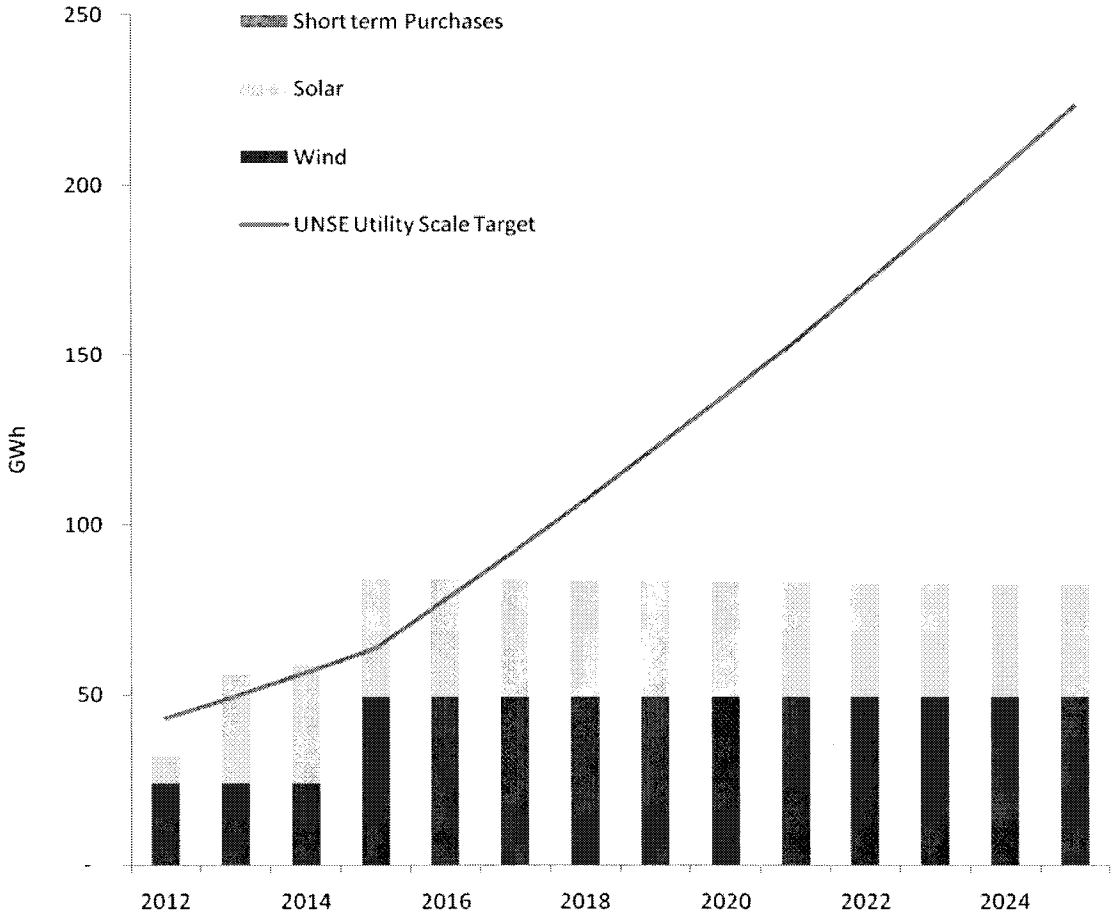
II. UNS ELECTRIC 2013 IMPLEMENTATION PLAN COMPONENTS

For 2013, UNS Electric's total renewable generation requirement is four (4) percent of retail sales, or 70,987 megawatt hours ("MWh"). The REST targets two resource categories - utility-scale generation and DG. UNS Electric intends to expand its utility-scale generation portfolio and enhance its Bright Arizona Solar Buildout Plan.

A. Utility-Scale Renewable Generation.

UNS Electric will meet the 2013 utility-scale requirement by having a renewable generation capacity of 49,691 MWh in place by the end of 2013. UNS Electric will meet this target through a combination of self-owned generation and PPAs entered into by the Company. The Commission approved a PPA between UNS Electric and Western Wind on April 1, 2010. This project is located in the Kingman, Arizona area and has an estimated annual generation of 24,000 MWh from wind power and 850 MWh from solar power. Additionally, the Company has a 10 MW solar PPA at Black Mountain, and a 1.2 MW utility-owned solar project, built by Solon in 2011, that will generate approximately 22,000 MWh annually. The above projects will provide UNS Electric with the renewable generation to meet and exceed its utility-scale REST requirement in 2013. Chart 1 below depicts the Company's utility scale REST requirements and expected resources.

Chart 1. Renewable Energy Standard Targets.



B. Bright Arizona Solar Buildout Plan.

UNS Electric's solar ownership plan ("Bright Arizona Solar Buildout Plan" or "Buildout Plan"), represents a small portion of the utility-scale requirement that will be met through the utility-owned program. UNS Electric's proposed investments in its Buildout Plan were approved by the Commission in the Company's 2010 rate case (Decision No. 71914, September 30, 2010).

The Decision approved the Company to invest up to $5 million in capital each year to develop renewable technologies and will help the Company's efforts to diversify its renewable portfolio and meet the REST requirements.[1] The Buildout Plan program is an essential component of the UNS Electric's renewable strategy because utility-owned projects provide balance to the renewable portfolio, as well as providing greater certainty for the continued development of renewable energy in the Company's territory.

As approved, the $5 million annual Buildout Plan (see Table 1) will allow UNS Electric to own approximately 20 percent of the renewable energy needed to meet the utility-scale requirement of the renewable energy standard, with the balance of the requirement met through PPAs. Current market costs for panels and balance of system components have continued to decline in 2012, and UNS Electric expects to increase its installed capacity to approximately 1.5 MW annually under the Buildout Program.

Table 1. Bright Arizona Solar Buildout Plan Investment Timeline.

Year Installed	Year Recovered	Annual Capital Investment	MW Capacity
2011	2012	$5,000,000	1.5 MW
2012	2013	$5,000,000	1.5 MW
2013	2014	$5,000,000	1.5 MW
2014	2015	$5,000,000	1.5 MW
4-Year Total		**$20,000,000**	**6 MW**

The annual revenue requirement for the investment is detailed in Table 2 below. Revenue requirement encompasses recurring costs related to the capital investment, including return on investment, depreciation, property taxes, and operations and maintenance ("O&M")

[1] Decision No. 71914 (September 30, 2010) at page 64, line 6-9.

expense. UNS Electric is proposing to continue to recover these costs through the REST adjustor as approved by the Commission until the investment can be included in rate base. Each column shown in Table 2 represents the expected revenue requirement for UNS Electric's capital investment from the prior year. It should be noted that the property tax revenue requirement for each investment is recovered in year 2 for each project (i.e., property tax collected in 2014 is from 2012 capital investment). Please refer to Table 3 below for expected cumulative annual revenue requirements.

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

Revenue Requirement	**2013**	**2014**	**2015**	**2016**
Carrying Costs	$ 494,648	$ 357,027	$ 658,578	$ 569,766
Book Depreciation	$ 652,734	$ 299,740	$ 575,500	$ 575,500
Property Tax Expense	$ 22,872	$ -	$ 23,576	$ 46,544
O & M	$ 21,208	$ 12,500	$ 25,375	$ 26,136
Total Revenue Requirement	$ 1,191,463	$ 669,266	$ 1,283,029	$ 1,217,946

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

Utility Owned Solar Projects by Year	**2013**	**2014**	**2015**	**2016**
La Senita	$523,853			
Santa Cruz School	$475,776			
Santa Cruz School	$191,833	$657,277	$612,833	$590,990
Santa Cruz School		$11,990	$670,196	$626,956
Annual Revenue Requirement	**$1,191,463**	**$669,266**	**$1,283,029**	**$1,217,946**

C. Distributed Generation Incentive Program.

UNS Electric's Plan is proposing to continue the successful implementation of its DG programs. The Plan proposes $2.5 million to fund the incentive programs, with annual increases to the program budget to accommodate both the increased DG energy target and customer demand. The DG program requirements and incentive levels are outlined in the Renewable Energy Credit Purchase Program ("RECPP"), included in attached Exhibit 2. There are no additions to the 2013 RECPP, however, programs have been streamlined and incentive levels modified to be consistent with current market demands.

1. Renewable Energy Credit Purchase Program.

The RECPP portion of UNS Electric's Plan targets three areas: (1) residential up-front incentives ("UFI"); (2) non-residential UFIs; and (3) non-residential performance based incentives ("PBI"). To meet the 2013 compliance requirements, the Company is requesting $524,415 for the residential program, with a ten percent (or $102,539) upfront incentive carve-out for solar hot water.

The remainder of the RECPP budget consists of $177,118 for non-residential DG projects and $1.8 million for cumulative and incremental PBI projects.

<u>Non-residential incentives will be paid at the following levels</u>:

UFI PV - $0.40 per watt on a first come, first serve basis (max 70 kW DC)

PBI PV - $0.072 per kWh for > 70-200 kW systems

$0.068 per kWh for 201-400 kW systems

$0.064 per kWh for > 400 kW systems

UFI SHW - $0.50 per kWh of annual kWh savings

PBI SHW - $0.57 per kWh

PBI reservations will be accepted using the reverse auction process with a quarterly allocation cap of $12,000, which is approximately 100 kW of capacity. The residential UFI and existing PBI allocations shown in Table 4 are necessary in order for UNS Electric to fully satisfy the REST's DG requirement through the Company's offered programs in the RECPP.

Table 4. UFI/PBI Budget and Forecast

Customer Segment	2013 Budget	Annual MWh	Annual MW
Residential UFI	$524,415	1,846	1.1
Small Commercial UFI	$177,118	693	.4
Large Commercial PBI	$1,836,416	693	.4

Residential incentives in 2013 will be paid at the following levels:

UFI PV - $0.40 per DC Watt (max 30 kW DC)

UFI SHW - $0.50 per annual estimated kWh saved (max $1,750)

Although the Company has utilized a trigger mechanism over the last few years to lower the incentive rate consistent with market signals, the Company is not proposing the continuance of a trigger mechanism in 2013. Because of the proposed incentive level - and in light of the uncertainty in the market with regards to product availability, pricing, tax equity, and federal legislation - the Company (based upon input from the solar stakeholder community) requests a fixed incentive level of $0.40 per installed DC Watt, and flexibility for the Company to adjust the incentive levels as appropriate based on real-time market signals. Neither the Company, nor the solar stakeholder community, have enough information at this time to accurately predict the continuation of lower installed costs. Therefore, UNS Electric does not recommend the use of a trigger mechanism in 2013. The Company is proposing a lower UFI in response to the depletion of 2012 funds at the $0.50 per DC Watt incentive level.

UNS Electric is also requesting that a residential DG compliance floor be set in order to facilitate market stability and provide the solar stakeholder community with a steady percentage increase between of 2013 and 2018. As shown in attached Exhibit 1, the current percentage increase in the REST mandate from 2013 to 2015 is 0.5 percent, followed by a 1.0 percent increase in following years. This results in a significant decrease in the number of systems through 2015 followed by a marked increase in 2016. This creates unnecessary market instability and the potential for the market to be unable to meet compliance requirement in 2016 and beyond.

UNS Electric is proposing that the residential DG percentage increase at a rate of 0.75 percent for 2013 through 2018 followed by the existing one (1) percent increase that is currently mandated by the REST Rules. As shown on the graphs in attached Exhibit 3, this will result in the same number of cumulative residential systems installed by the year 2018.

D. Market Cost of Comparable Conventional Generation.

Consistent with the REST rules, UNS Electric calculates program expenses using the Market Cost of Comparable Conventional Generation ("MCCCG"). Details on the methodology for the MCCCG calculation are included in attached Exhibit 4. 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 PPAs pricing after subtracting the corresponding MCCCG based on projected hourly energy profiles and are included in Exhibit 5 (confidential).[2] The profiles are determined by UNS Electric's production cost model in coordination with the Company's annual Purchase Power and Fuel Adjustment Clause ("PPFAC") filing. The MCCCG will be included for wind, PV systems, concentrated solar with storage, and bio-fueled renewable resources.

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[2] Exhibit will be provided to Commission Staff upon execution of a protective agreement.

III. THE PLAN BUDGET

As stated previously, the cost to implement UNS Electric's Plan will be $8.9 million. The Plan's detailed budget is attached as Exhibit 6. Exhibit 6 includes a breakdown of the costs for renewable energy, the DG programs, research and development, outside services support and reporting, technology, and marketing. Table 5 includes a high level Plan budget.

Table 5. Plan Budget by Category.

Utility Scale	$5,917,463
Residential UFI	$524,415
Commercial UFI	$177,118
Commercial PBI	$1,836,416
Other Costs (Metering, I.T., Reporting & Labor, Technical Training, Edu/Outreach, and R&D)	$456,042
TOTAL	$8,911,454

IV. THE 2013 REST TARIFF

The Plan's tariff is contained in Exhibit 7.[3] UNS Electric's Plan will require a tariff charge to be set at $0.012700/kWh, 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 are increased proportionately. Table 6 details the Company's approved budget for 2012 and proposed budget for 2013 delineated by rate class and sets forth the currently approved customer class caps and the caps proposed for the 2013 Plan.

[3] Additionally, the Customer Self-Directed Tariff is set forth in the attached Exhibit 8 and the Customer Load Percentage Analysis is set forth in the attached Exhibit 9.

Table 6. 2012/2013 REST Budget by Rate Class.

Rate Class	2012 Approved REST Budget	2013 Proposed REST Budget
Residential	$3,566,066	$4,425,833
Commercial	$2,941,414	$4,055,902
Lighting (PSHL)	$5,788	$6,613
Industrial & Mining	$1,159,954	$421,103
Total	**$7,673,222**	**$8,909,452**

Rate Class	Current Rates Caps	Proposed Rates Caps
Residential	$4.50	$5.50
Commercial	$150.00	$190.00
Lighting (PSHL	$135.00	$175.00
Industrial & Mining)	$5,500.00	$7,000.00
Per kWh to all Classes	**$0.008887**	**$0.012700**

V. RESEARCH AND DEVELOPMENT

UNS Electric dedicates portions of its current REST funding towards research and development in order to support the adoption of renewable energy. The Company has proposed a $20,000 research and development budget to support the Arizona Research Institute for Solar Energy Global Institute ("AzRISE"). UNS Electric plans to continue its commitment of furthering renewable energy research by continuing its participation in AzRise.

AzRISE at the University of Arizona ("U of A") conducts fundamental interdisciplinary solar energy research. This research is backed by accurate and realistic economic analyses for the deployment and practical implementation of solar energy solutions. UNS Electric believes these findings are vital to supporting the REST's goals. UNS Electric's REST dollars spent with

AzRISE help to further the renewable energy market and help UNS Electric meet its renewable goals. AzRISE will be responsible for ongoing data management for the UNS Electric Solar Test Sites, energy storage data evaluation, and ongoing distributed generation production analysis specific to Arizona. These projects represent significant contributions to the local knowledge base in the efforts to make the use of solar energy more effective. The AzRISE project is budgeted at $20,000.

VI. ADDITIONAL COMPLIANCE ISSUES AND INFORMATION

A. Compliance with Commission Decision No. 72034.

As part of Decision No. 72034, UNS Electric was required to "include, as part of future annual REST plan filings, a list of any cases within the previous three calendar years where UNS Electric has received damages or other considerations as a result of non-compliance related to REST contracts." As of the date of this filing, UNS Electric has received no damages or other considerations as a result of non-compliance related to REST contracts in the previous three years.

UNS Electric was also ordered, as part of Decision No. 72034, to "disclose, as part of future annual REST plan filings, whether its affiliates, its employees, or its directors have any direct financial or other interest in renewable energy projects that are owned or whose output is contracted for by UNS Electric." As of the date of this filing, UNS Electric has no affiliates, employees, or directors with any direct financial or other interest in renewable energy projects that are owned or whose output is contracted for by UNS Electric.

B. Compliance with Commission Decision No. 72738 requirement to impose REST surcharge on customers who take utility incentive.

On June 15, 2012, UNS Electric filed a Request for an Extension of Time to Comply with Requirements Set forth in Decision No. 72738 and to Defer the Matter to Another Docket

("Request") *i.e.* the 2013 Plan docket. UNS Electric's Request applies to the following requirement set forth in Decision No. 72738:

> IT IS FURTHER ORDERED that residential, small commercial, large commercial and industrial customers who receive incentives, from the effective date of this Decision, under the REST rules will pay a monthly REST charge equal to the amount they would have paid without the renewable installation. This payment shall begin when UNS Electric reprograms its billing system to accomplish this, or with the October 2012 billing cycle, whichever is sooner. [4]

As noted in the Request, the Commission recently adopted a similar requirement in the APS rate case that states:

> We believe that customers who benefit by receiving incentives under the REST rules should provide and equitable contribution to future REST benefits for other customers. We will therefore require that residential, small commercial, large commercial and industrial customers who receive incentives under the REST rules pay a fixed cost, the monthly REST cap. This payment shall begin when APS reprograms its billing system to accomplish this, or with the March 2013 billing, whichever is sooner. The requirement shall only apply to renewable systems installed on and after July 1, 2012. [5]

Given the complexities associated with the implementation of a new billing system to comply with the UNS Electric requirement as set forth in Decision No. 72738, and in an effort to have consistency among the utilities, UNS Electric is proposing the below language as part of this Plan to be adopted in this case. This language would expressly modify the requirement in Decision No. 72738, to more closely resemble the language adopted by APS:

> We believe that customers who benefit by receiving incentives under the REST rules should provide an equitable contribution to future REST benefits for other customers. We will therefore require that residential, small commercial, large commercial and industrial

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[4] Decision No. 72738 (January 19, 2012) at page 27, line 7.
[5] Decision No. 73183 (May 24, 2012) at page 42,line 6.

> customers, who receive incentives under the REST rules, or sign up for net metering in the absence of a utility incentive program, pay a fixed cost, the monthly REST cap. This payment shall begin when UNS Electric reprograms its billing system to accomplish this, or with the June 2013 billing, whichever is sooner. The requirement shall only apply to renewable systems installed on and after January 1, 2012.

The UNS Electric language above differs slightly from the Commission approved APS language by including a provision that would allow for UNS Electric to continue to collect the REST surcharge should utility incentives be discontinued in the next few years.[6] If utility incentives are no longer utilized, customers will continue to enjoy the advantages of net-metering, even though net-metering will significantly reduce their respective portion of the REST surcharge. The Company understands that that there may be reluctance to continue a surcharge based on a customer's use of net-metering. However, if the above proposed language – "or sign up for net metering in the absence of a utility incentive program" – is not included, the currently written requirement would apply to only a very small segment of UNS Electric customers should utility incentives be reduced to zero.

The above proposed language requires customers to pay a fixed cost of the monthly REST cap; as an alternative, UNS Electric is proposing for the Commission's considering, language requiring each customer class to pay the average REST surcharge per customer category. This alternative provides a potential solution to address the concern over the requirement of paying the cap precluding the small commercial customer class from participating. Accordingly, UNS Electric is proposing the below alternative language for Commission consideration:

[6] Should utility incentives be discontinued in the next few years, UNS Electric will still maintain the annual budget necessary to pay for the utility scale and performance based projects over their contract life.

> We believe that customers who benefit by receiving incentives under the REST rules should provide an equitable contribution to future REST benefits for other customers. We will therefore require that residential, small commercial, large commercial and industrial customers, who receive incentives under the REST rules, or sign up for net metering in the absence of a utility incentive program, pay a fixed cost, equal to the average monthly customer surcharge as provided by the Company in each annual REST plan. This payment shall begin when UNS Electric reprograms its billing system to accomplish this, or with the June 2013 billing, whichever is sooner. The requirement shall only apply to renewable systems installed on and after January 1, 2012.

C. Request for guidance on meeting the DG requirement in a post incentive environment.

In order to meet the REST requirement, specifically for residential and non-residential DG, a utility is required to retire the associated Renewable Energy Credit (REC) for each kWh of renewable energy produced. In order to incentivize the customer to install a renewable energy system, utilities have historically offered an incentive program that purchased the REC's from the customer. However, as utilities approach an "incentive free" environment, they are faced with the problem of no longer being able to claim and retire the REC's in order to meet the REST requirement, as they will no longer be able to buy the REC's from their customers.

While this problem currently exists in relatively small numbers, it has the potential of becoming a very large problem in the next few years. UNS Electric believes it would be prudent to address the issue now. Accordingly, the Company is presenting for Commission consideration, the following potential solutions:

1. Change or waive the existing Resource Portfolio Standard ("RPS") to eliminate either the DG requirement, or the requirement to retire REC's associated with the customer-sited distributed generation system and allow the utility to report metered production data in order to show the percentage of sales associated with renewable energy.

2. Allow utilities to modify their existing net-metering tariffs to require customers to surrender all credits and environmental attributes in exchange for net-metering.

3. Allow utilities to meet the RPS DG requirement by showing a percentage of their sales through metered data without the requirement of retiring REC's (and without altering the existing rules).

4. In the absence of existing rule changes, allow the utilities to request waivers for meeting the DG requirement through the use of REC retirement and allow the utility to show compliance in an alternative manner.

While this is not meant to be a comprehensive list of potential solutions, it is intended to provide the Commission with options to address what the Company believes is a significant issue. The Company is requesting the Commission allow the Company to include these net-metered customers for compliance purposes, as well as provide guidance on how the utilities should address this issue on a going-forward basis.

D. Request for clarification on AZ Goes Solar reporting requirements

In Decision No. 71465 (January 26, 2010) the Commission required Utilities to report cost data from all systems that received a utility incentive:

> IT IS FURTHER ORDERED that UNS Electric, Inc. shall make publicly available, twice monthly, via the new "Go Solar Arizona" website at least the following information: the reservation request review date; the incentive program under which the incentive being offered; the amount of the incentive offered; the size and nature of the systems (whether commercial or residential); the step in the reservation process each system is in at the time it is posted; total cost of the system; nameplate rating of the system: current incentive application status; and the name of the installer of the system.[7]

The requirement to provide total cost of the system under the current lease model environment is unnecessary and in most cases, is not representative. The purpose was to provide

[7] Decision No. 71465 (January 26,2010) page 7, line 13.

the customer with valuable information to assist in evaluating renewable energy system purchases. However, the total cost of the system as currently reported for leased systems is no longer valid. The Company hereby requests that the Arizona Goes Solar reporting requirements be modified to remove the requirement to report total cost of the system for leased systems.

VII. CONCLUSION

The proposed 2013 Renewable Implementation Plan filed by UNS Electric has been developed with an emphasis on providing a plan that benefits UNS Electric customers, the stakeholder community and the Company. The Company respectfully requests the Commission adopt UNS Electric's 2013 REST Implementation Plan as submitted.

EXHIBIT

"1"

UNS Electric, Inc.

Exhibit 1

Energy, Capacity, and Cost Forecast					
	2013	2014	2015	2016	2017
Forecast Retail Sales MWH	1,774,685	1,794,373	1,823,371	1,855,314	1,885,441
% Renewable Energy Required	4.0%	4.5%	5.0%	6.0%	7.0%
Overall Renewable Requirement MWH	70,987	80,747	91,169	111,319	131,981
Utility Scale Requirement MWH	49,691	56,523	63,818	77,923	92,387
Utility Scale Cumulative MW	28	32	36	45	53
DG Requirement MWH	21,296	24,224	27,351	33,396	39,594
RES DG Requirement MWH	10,648	12,112	13,675	16,698	19,797
RES DG Cumulative MW	6	7	8	10	11
Non-Res DG Requirement MWH	10,648	12,112	13,675	16,698	19,797
Non-Res Cumulative MW	6	7	8	10	11
Total Cumulative Required MW	41	46	52	64	75
Total Program Cost	$8,911,454	$8,151,439	$8,708,640	$8,773,471	$8,966,700

EXHIBIT

“2”

Exhibit 2

UniSource Energy Services

Renewable Energy Credit Purchase Program

2013

TABLE OF CONTENTS

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.

UniSource Energy Services (UNSE 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 UNSE. Customers deemed eligible for participation in UNSE'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 UNSE 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 www.uesaz.com/Customer/Rates/Pricing/.

Why is UNSE involved with DG?

The ACC, which regulates UNSE and utilities like it in Arizona, enacted the Renewable Energy Standard and Tariff (REST) Rules in 2008. These rules require UNSE 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, UNSE may purchase Renewable Energy Credits (REC) from eligible customers through their incentive programs. Under these programs, UNSE 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 UNSE get involved with DG?

One way in which UNSE 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 UNSE 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 UNSE 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. UNSE 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 UNSE'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 UNSE's DG programs. Alternatively, any UNSE-qualified installer may submit the required DG program application on behalf of a qualifying UNSE customer.

What is a UNSE-qualified installer?

A UNSE-qualified installer is an installer that has been evaluated by UNSE personnel and deemed to have met the prerequisites for qualification. In order to become UNSE-qualified, each installer must meet certain UNSE 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 Registrar of Contractor's (ROC) license appropriate for the solar technology being installed, Arizona business license in good standing, and similar information regarding any sub-contractor(s), if applicable. UNSE will not, under any circumstances, issue or assign incentive payment(s) to an installer who is not UNSE-qualified.

Where can I find more information?

For the terms and conditions of participation in any of UNSE's DG programs, please consult UNSE's Renewable Energy Credit Purchase Program (RECPP), which can be found online at www.uesaz.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 UNSE's RECPP is intended as a guarantee of funds or qualification for purposes of program participation.

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

UNSE'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

UNSE 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 UNSE 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. **Up-Front Incentive Levels for Solar Electric Residential Projects 30 kW DC or Less and Non-Residential Projects 70 kW DC or Less;**
2. **Residential and Small Non-Residential Solar Water Heating and Space Heating Smaller than 400,000 kWh Equivalent Annual Production per Year, Non-Residential Solar Pool Heating;**
3. **Ground Source Heat Pumps - Residential and Non-Residential Applications; and**
4. **Wind Systems Smaller Than 20 kW.**

Funds will be made available for reservations on a first-come, first-reserved 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.

Funding for the following is detailed below:

1. **Non-Residential Solar Daylighting;**
2. **Performance Based Incentive Levels for Non-Residential Solar Electric Projects Greater than 70 kW DC; and**
3. **Large Non-Residential Solar Water Heating Systems and Space Heating Systems with Annual Production Output Larger Than 400,000 kWh Equivalent**

Funds will be allocated on a quarterly basis. . Funds will be made available to projects based on a ranking generated by lowest expected life cycle credit purchase cost, as provided in the application and verified by UNSE, as well as likelihood of construction. Projects submitted to the utility for reservation will be ranked based on a calculated index value for purposes of allocating non-residential funds as proposed in the application and verified by UNSE. Lowest lifecycle cost projects will be funded first. Indexing of the non-residential projects will be performed based on the verified incentive values and duration of the proposed agreement in the application for that project. In addition, the bid evaluator assesses the likelihood that the project will be completed. Projects with higher incentive payments result in a higher expected life cycle credit purchase cost and projects that produce more kWh result in a lower expected life cycle credit purchase cost. In the event of a tie in the ranking, when the program would be fully subscribed if both projects were given reservation status, funds will be awarded based on the date of receipt of the completed reservation request.

Reservation requests will reviewed by the utility bi-monthly. Once reservation requests are fully ranked, notification of reservation approvals and rejections will be made in conformance with the rankings and available funding.

Funds unused in one period will not be rolled over into subsequent months. Funds allocated to non-residential projects will not roll forward from one year to the next. Reservations which are rejected as a result of insufficient program funds may elect to carry forward into the next period and retain the original reservation date. The election must be made at the time of the original application.

Funding for the following is detailed below:

1. **Non-Residential Biomass/Biogas or Geothermal Space Heating, Process Heating, or Space Cooling;**
2. **Biomass/Biogas, Hydro or Geothermal Electric; and**
3. **Solar Space Cooling**

Funds will be allocated on a quarterly basis. Funds will be made available to projects based on a ranking generated by lowest expected life cycle credit purchase cost as provided in the application and verified by UNSE, as well as likelihood of construction. Projects submitted to the utility for reservation will be ranked based on a calculated index value for purposes of allocating non-residential funds as proposed in the application and verified by UNSE. Lowest lifecycle cost projects will be funded first. Indexing of the non-residential projects will be performed based on the verified incentive values and duration of the proposed agreement in the application for that project. In addition, the bid evaluator assesses the likelihood that the project will be completed. Projects with higher incentive payments result in a higher expected life cycle credit purchase cost and projects that produce more kWh result in a lower expected life cycle credit purchase cost. In the event of a tie in the ranking, when the program would be fully subscribed if both projects were given reservation status, funds will be awarded based on the date of receipt of the completed reservation request.

- Reservation requests will reviewed by the utility on a monthly basis. Once reservation requests are fully ranked each month, notification of reservation approvals and rejections will be made in conformance with the rankings and available funding.
- Funds unused in one period will not be rolled over into subsequent months. Funds allocated to non-residential projects will not roll forward from one year to the next. Reservations which are rejected as a result of insufficient program funds may elect to carry forward into the next period and retain the original reservation date. The election must be made at the time of the original application.

III. 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. UNSE 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 UNSE Installer's Packet and have provided the above information to be retained on file with UNSE. 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 UNSE for all incentive amounts paid by UNSE to customer or on behalf of customer to an authorized third party.

In addition, if a Qualified System is removed, UNSE 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.

UNSE 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, UNSE offers the Bright Arizona Community Solar Program. The Bright Arizona Community Solar Program offers an easy and affordable way for UNSE 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 UNSE's Green Energy webpage at www.uesaz.com/Renewable/Home/Bright/.

VII. Up-Front Incentives

Up-Front Incentive (UFI) programs are limited to Residential and Small Non-Residential Projects only.

a. Qualifications

Qualifying Technology	Size Limit
Residential Solar Photovoltaics (PV)	Less than 30 Kilowatts (kW) Direct Current (DC)
Residential Hot Water & Space Heating	
Residential and Non-Residential Ground Source Heat Pumps	Up to 200 Tons
Wind Systems	Less than 20 kW Alternating Current (AC)
Small Non-Residential Solar PV	Less than 70 kW DC
Small Non-Residential Hot Water & Space Heating	Less than 400,000 Kilowatt Hours (kWh) of Estimated Annual Savings
Non-Residential Pool Heating	

b. Application Process

UNSE's UFI application process appears below. UNSE 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. UNSE 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 UNSE, modifications will not be allowed.**

1st Step: Submittal of the Properly Completed Reservation Packet* to UNSE.

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 UNSE main customer
4. Current UFI Renewable Energy Credit Purchase Agreement, signed by the UNSE main customer.
5. 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.
6. For Solar Space Heating Incentives:
   - A copy of an Energy-Modeling and Performance Simulation Report that estimates the energy savings that can be expected from the system. Report should include a system schematic/diagram.
   - A recent copy of the SRCC OG100 Certification and Rating obtained from the SRCC website.

* Please visit www.uesaz.com/renewable to find out which programs are eligible for online application submission.

All other program applications, including new construction and solar leasing, require paper applications.

2nd Step: Required program documents & other associated paperwork can be forwarded as follows:

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

UniSource Energy Services
PO Box 3099
Kingman, AZ 86402

Emails may be sent to renewables@uesaz.com or faxed to (928) 681-8999. **Paperwork sent directly to any specific employee Company email address may not be processed.**

3rd Step: Confirmation or Denial of Reservation.

- Once received, UNSE will match the online or paper 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. Outdated forms or forms with missing and/or incorrect information are subject to rejection by UNSE.
- UNSE 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.** UNSE will also verify, where an installer is used, that the installer is a UNSE-qualified installer. Provided that the application meets UNSE's requirements, and that the installer, if any, is UNSE-qualified, and that program funds sufficient to fund the application are available, UNSE will issue the customer and installer a reservation confirmation letter and provisionally approve the application. **If no funds are available at the time UNSE processes the reservation, UNSE will notify the installer and customer and the application will be denied.**

4th Step: Submittal of Jurisdictional Final Inspection.

1. Residential and Non-Residential Programs:

   Within 60 days from the date of the reservation confirmation letter, customer or installer must submit an application to the appropriate jurisdictional entity for a permit 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 UNSE that a correctly completed application for a jurisdictional final inspection was made within the timeline required. UNSE 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 UNSE 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 all systems, the installer or customer must submit proof of a passed final inspection directly to UNSE that includes the installation address, scope of work, and inspection status.

5th Step: Submittal of Installation Certification Form.

For all solar installations: in addition to the jurisdictional final inspection, the installer or customer must submit the Installation Certification.

6th Step: UNSE will inspect the system and set the appropriate meters if required (such as for PV).

7th Step: UNSE process of incentive payment.

UNSE will process the incentive payment upon successful inspection and mail the check to the party indicated on the Assignment of Payment form or as designated by the UFI REC Purchase Agreement. In the case of solar leases where only the Lessor can be paid, see section 6.3 of the UFI REC Purchase Agreement. Assignment of Payment forms may only be submitted once as part of the RECPP Reservation Packet. UNSE will not accept changes to the AOP. UNSE will not pay incentives without complete and accurate receipt of the required documents.

c. Restrictions/Important Notes:

1. UNSE reserves the right to modify the business process to better serve customers or to increase efficiency. Please refer to www.uesaz.com/renewable for the most up-to-date information.

2. With the exception of minor system modifications during the procurement process (panel wattage changes of less than 10 watts, alternative inverter, et cetera), 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

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. Submission of the online application or receipt of the paper application is not valid until a properly completed RECPP Reservation Packet has been received by UNSE. Once the Reservation Packet is received and deemed complete, the online reservation and or paper 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. In 2013, UNSE will not purchase RECs from retroactive systems. "Retroactive" is defined as a renewable solar system installed before an application for incentive was received and approved by UNSE. UNSE 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 UNSE a completed Installer's Packet and Agreement Form. This document is available in the Installer's Corner at www.uesaz.com/renewable.

A. Solar Electric Residential Projects 30 kW DC or Less and Non-Residential Projects 70 kW DC or Less

The UFIs for eligible customers with residential projects 30 kW DC or less and non-residential projects 70 kW or less are paid in a one-time payment based on the system's designed capacity. Table 1 identifies the incentives available for eligible systems.

Table 1. Dollar per Watt Incentive for On-Grid Residential Systems Smaller than 30 kW DC and On-Grid Non-Residential Systems 70 kW DC or Less

YEAR	RESIDENTIAL	SMALL NON-RESIDENTIAL
2013	$0.40	$0.40

a. Terms & Restrictions

- On-Grid Residential customers will receive a UFI up to a **cap of 30 kW DC**. If a residential system is installed larger than 30 kW DC, UNSE will only provide an incentive payment for the first 30 kW DC.
- Any residential project larger than 10 kW AC will be subject to Engineering review to determine if proposed project is on a shared transformer. Following UNSE's Service Requirements, customers may potentially be subject to a reduction in system size or upgrading of existing facilities at the expense of the customer should it be determined necessary by UNSE Engineering.
- On-Grid Small Non-Residential customers will receive a UFI up to a **cap of 70 kW DC**. Small Non-Residential systems larger than 70 kW DC must apply under the large non-residential program.
- 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.
- As described later in this document, **these incentive levels may be decreased because of sub-optimal system positioning**.
- The incentive amount will be calculated at the time the application is approved for reservation. If federal or state incentives change after the system reservation is approved, the incentive amount reserved will not change as long as the reservation is not cancelled.
- For consumer protection, and in order to minimize program manipulation affecting legitimate solar development, no incentive applications will be accepted where the installed price per watt exceeds $6.00, or where labor charges are in excess of 200% of the system component costs.
- In return for UNSE's payment of a UFI, UNSE 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. If a system size exceeds the incentive cap, UNSE will still be given complete and irrevocable ownership of the Renewable Energy Credits, within this timeline, for the full system size.

Project Requirements after Installation

After completing the installation of a Residential Solar Electric project of 30 kW DC or less, or a Non-Residential Solar Electric project of 70 kW DC or less, the customer must continue to provide information to UNSE about the system's performance.

All customer systems receiving UFIs are obligated to include a UNSE-supplied production meter, which will report system production to UNSE in accordance with the regular meter-reading schedule. UNSE, at its option, may perform periodic inspections of the system for operation, metered production, and reporting purposes.

b. System Qualifications and Requirements

All solar electric generating Customer Systems must meet the following system and installation requirements to qualify for UNSE's RECPP. Capitalized terms not defined herein shall have the meanings ascribed to them in the RECPP Agreement.

The following equipment qualifications listed are mandatory requirements which must be met at the time of project commissioning to receive an 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 an RECPP incentive, as it does reflect both industry and UNSE concurrence with 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.

UNSE acknowledges that many regulations and site-specific requirements may apply to the installation of renewable energy technologies. UNSE 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:

Required Equipment Standards

1. The Customer System components must be certified as meeting the requirements of IEEE-929 - Recommended Practice for Utility Interface of Photovoltaic Systems.[1]
2. Photovoltaic components must be certified by a nationally recognized testing laboratory as meeting the requirements of UL-1703 - Standard for Flat Plate Photovoltaic Modules and Panels Systems and be covered by a non-prorated manufacturer's warranty of at least 20 years.
3. The inverter must be certified as meeting the requirements of IEEE-1547 - Recommended Practice for Utility Interface of Photovoltaic Systems and it must be UL-1741 certified. Inverters must be covered by a manufacturer's warranty of at least ten years.
4. The Customer System design and installation must meet all requirements of the latest edition of the National Electrical Code (NEC), including Article 690 and all grounding, conductor, raceway, over-current protection, disconnect, and labeling requirements.
5. All other electrical components must be UL listed.
6. The Customer System and installation must meet the requirements of all federal, state, and local building codes and have been successfully inspected by the building official having jurisdiction. Accordingly, the installation must be completed in accordance with the requirements of the latest edition of NEC in effect in the jurisdiction where the installation is being completed , including, without limitation, Sections 200-6, 210-6, 230-70, 240-3, 250-26, 250-50, 250-122, all of Article 690 pertaining to Solar Photovoltaic Systems, thereof, all as amended and superseded.

[1] Some technology-specific criteria reference third party standards. The requirements of those standards are fully applicable when referenced as part of technology specific criteria. UNSE recognizes that new standards are likely to develop in the near future for technologies included in the RECPP, and recommends that the new standards are examined for application in this program definition as they become available.

7. The Customer System must meet Company and Arizona Corporation Commission interconnection requirements for self-generation equipment. See http://images.edocket.azcc.gov/docketpdf/0000074361.pdf for these requirements.

Installation Requirements

1. A grid-connected Residential Customer System must have a total solar array nameplate rating of at least 1,200 watts DC and no more than 30,000 watts DC.
2. The Customer System installation must meet UNSE's Electric Service Requirements 2011 Edition, Section 1.22, as follows:

   "As required by TEP/UES's Interconnection Requirements for Distributed Generation, the customer shall provide and install a disconnect switch to isolate all ungrounded conductors of the generating facility from the TEP/UES system. The switch shall be a gang-operated, load-break device with a visible air-gap in the open position. It shall be rated for the current and voltage requirements of the generating facility and shall be lockable in the open position".
3. The DG utility meter and utility disconnect will be installed within 10' of the main service panel and in a location readily accessible by UNSE at all times.
4. Products must be installed according to manufacturers' recommendations.
5. The Customer System PV panels and modules must face within +/- 90 degrees of true south, and be substantially unshaded from 9 am to 3 pm. System arrays which are facing at an azimuth angle other than optimal as defined herein or shaded for more than one hour per day will be subject to a reduced incentive payment per Attachment B.
6. The Customer System PV panels and modules must be fitted at an angle of 0 degrees to 60 degrees from horizontal. System arrays which are fitted with an elevation angle other than optimal as defined herein will be subject to a reduced incentive payment per Attachment B.
7. For Residential Customer Systems, Company shall furnish a meter, DG meter socket, and AC disconnect switch in accordance with Section 1.22 of UNSE's Electric Service Requirements. Company shall install the meter. For Non-Residential customer systems, Company shall furnish and install DG meter only. The meter socket and AC disconnect shall be installed in accordance with Section 1.22 of UNSE's Electric Service Requirements. Installer must notify UNSE of wiring configuration so that Company may provide the appropriate 3-phase meter.
8. Total voltage drop on the DC and AC wiring from the furthest PV module to the AC meter will not exceed 2%.
9. PV panels and DC to AC inverter will be installed with sufficient clearance to allow for proper ventilation and cooling. At a minimum, manufacturer clearance recommendations will be observed. PV modules may be mounted less than 4 inches above any surface and an additional inch of clearance for each foot of continuous array surface area beyond four feet in the direction parallel to the mounting support surface, only in cases when arrays are flush-mounted to roof pitch. Otherwise, the four-inch spacing and an additional inch of clearance for each foot of continuous array surface area minimum is required.
10. Storage Batteries are not allowed as part of the Customer System unless the inverter is a separate component and UNSE can locate the DG utility meter at the inverter's output. If configured otherwise, battery losses

will adversely reflect in the annual AC metered energy output. Customer's solar energy generation and energy storage system must meet the requirements of 2 and 3 of this Attachment A.

11. The DC to AC inverter used must provide maximum power point tracking for the full voltage and current range expected from the photovoltaic panels used and the temperature and solar insolation conditions expected within the UNSE service territories..
12. The DC to AC inverter must be capable of adjusting to "sun splash" from all possible combinations of cloud fringe effects without interruption of electric production.
13. UNSE reserves the right to modify standards as technology changes on a case-by-case basis, pending independent laboratory analysis, Professional Engineer (PE) stamp, or UNSE engineering analysis.

General Requirements

1. All Customer System installations must be completed in a professional, workmanlike and safe manner.
2. The Customer must be connected to the Company's electric grid and be a net-metered customer.
3. Systems must be permitted and inspected by the jurisdiction having authority over construction projects in the customer's locale.
4. The project must comply with applicable local, state, and federal regulations.
5. Products must be installed according to manufacturer's recommendations.
6. Installations must meet applicable governmental statutes, codes, ordinances, and accepted engineering and installation practices.
7. 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.
8. All renewable electricity generation systems must include a dedicated performance meter (provided by UNSE) which allows for measurement of system energy production. Certain other non-electric renewable energy production systems will require customer supplied metering for PBI payment calculation purposes.
9. PV system components shall be properly labeled, including AC & DC disconnects, DG meter, service panel (outside cover), and breakers inside the service panel.
10. The system will in all cases have a material and full labor warranty of at least five years.

Solar Electric Off-Angle & Shading Annual Energy Derating Chart for Residential Systems of 30 kW DC or Less and Small Non-Residential Systems of 70 kW DC or Less

Solar PV - DeRate Chart

UNS Electric Up-Front Incentive (UFI) Payment - PV Off-Angle/Azimuth & Shading Derating Chart

Array Azimuth Angle from Due South

Array Angle Above Horizontal	East 90	100	110	120	130	140	150	160	170	South 180	190	200	210	220	230	240	250	260	West 270
0	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%
5	90%	90%	90%	90%	90%	90%	95%	95%	95%	95%	95%	95%	90%	90%	90%	90%	90%	90%	90%
10	90%	90%	90%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	90%	90%	90%	85%
15	90%	90%	95%	95%	95%	95%	100%	100%	100%	100%	100%	100%	95%	95%	95%	95%	90%	90%	85%
20	85%	90%	95%	95%	95%	100%	100%	100%	100%	100%	100%	100%	100%	95%	95%	95%	90%	85%	85%
25	85%	90%	95%	95%	95%	100%	100%	100%	100%	100%	100%	100%	100%	95%	95%	95%	90%	85%	85%
30	85%	90%	90%	95%	95%	100%	100%	100%	100%	100%	100%	100%	100%	95%	95%	90%	90%	85%	80%
35	85%	85%	90%	95%	95%	100%	100%	100%	100%	100%	100%	100%	100%	95%	95%	90%	85%	85%	80%
40	80%	85%	90%	95%	95%	100%	100%	100%	100%	100%	100%	100%	100%	95%	90%	90%	85%	80%	75%
45	80%	85%	85%	90%	95%	95%	100%	100%	100%	100%	100%	100%	95%	95%	90%	85%	85%	80%	75%
50	75%	80%	85%	90%	90%	95%	95%	100%	100%	100%	95%	95%	95%	90%	90%	85%	80%	75%	70%
55	75%	80%	85%	85%	90%	95%	95%	95%	95%	95%	95%	95%	90%	90%	85%	80%	80%	75%	70%
60	70%	75%	80%	85%	85%	90%	90%	90%	95%	90%	90%	90%	85%	85%	85%	80%	75%	70%	0%

0 degree kept at 85% to account for soiling
3/12 roof pitch to be kept at 5% derate for higher cell temps of flush mount

Array Shading

If both off-angle shading conditions apply, multiply the off angle de rating factor with the shading de rating factor to obtain the array de rating factor for the Up-Front Incentive (UFI) payment Calculation.

Maximum Morning Shaded Hours	0	1	0	1	0	2	1	2	2	0	3	1	3	3	2
Maximum Evening Shaded Hours	0	0	1	1	2	0	2	1	2	3	3	3	1	2	3
Percentage of annual energy	100%	100%	100%	95%	90%	90%	85%	85%	75%	75%	70%	70%	70%	80%	80%

Qualifying PV systems using Building Integrated Photovoltaic (BIPV) modules of total array capacity of 5 kW DC or less shall receive 90% of the UFI incentive value. Systems using BIPV modules of total array capacity of greater than 5 kW DC shall be derated based on heating unless the applicant can demonstrate optimal performance.

B. Residential and Small Non-Residential Solar Water Heating and Space Heating Smaller than 400,000 kWh Equivalent Annual Production per Year and Non-Residential Solar Pool Heating

Solar water heating and space heating in residential and small non-residential and non-residential solar pool heating applications are 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 2. UFIs for Residential and Small Non-Residential Solar Water Heating, Space Heating and Solar Pool Heating

Year	Residential Incentive Level**	Small Non-Residential Incentive Level**
2013	$0.50/kWh (max $1,750)	$0.50/kWh (max $200,000)
**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.
- Small non-residential customers will receive a UFI up to the system size with output smaller than a 400,000 kWh equivalent. If a small non-residential system is installed beyond that threshold, it must apply under the large non-residential program.
- 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 UNSE's payment of a UFI, UNSE 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. Non-Residential Solar Pool Heating Equipment Specifications

- Determine whether or not the collector used in the Solar Pool Heating system has an OG-100 rating. If it does not, it is not eligible for the program. The OG100 Certification and Rating must be submitted along with the system schematic/diagram as part of the Reservation Packet.
- Annual energy savings will be determined by submitting an engineering report stamped by a registered third-party professional engineer or a reputable Energy Modeling and Performance Simulation Report.
- UNSE will retain the right to meter the system.

ii. Qualifications for Residential and Small Non-Residential Solar Water Heating and Space 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 UNSE 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.

UNSE acknowledges that many regulations and site-specific requirements may apply to the installation of renewable energy technologies. UNSE 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 third-party professional engineer or a reputable Energy Modeling and Performance Simulation Report detailing annual energy savings.
2. Solar Space Heating systems will utilize OG-100 collectors and systems will be sized appropriately in conformance with the building design review. Annual energy savings will be determined by submitting an engineering report stamped by a registered third-party professional engineer or a reputable Energy Modeling and Performance Simulation Report.
3. 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.

4. The 'high' limit on all Domestic Water Heating controllers shall be set no higher than 160 degrees F.
5. Active thermal storage for solar space heating systems shall use water as the storage element.
6. Contractors must provide a minimum of a five year equipment warranty as provided by the system manufacturer, including a minimum warranty period of five years for repair/replacement service to the customer.
7. 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.
8. The solar collector, heat exchangers, and storage elements shall have an equipment warranty of at least 5 years to qualify either for a UFI or PBI.

Installation Guidance

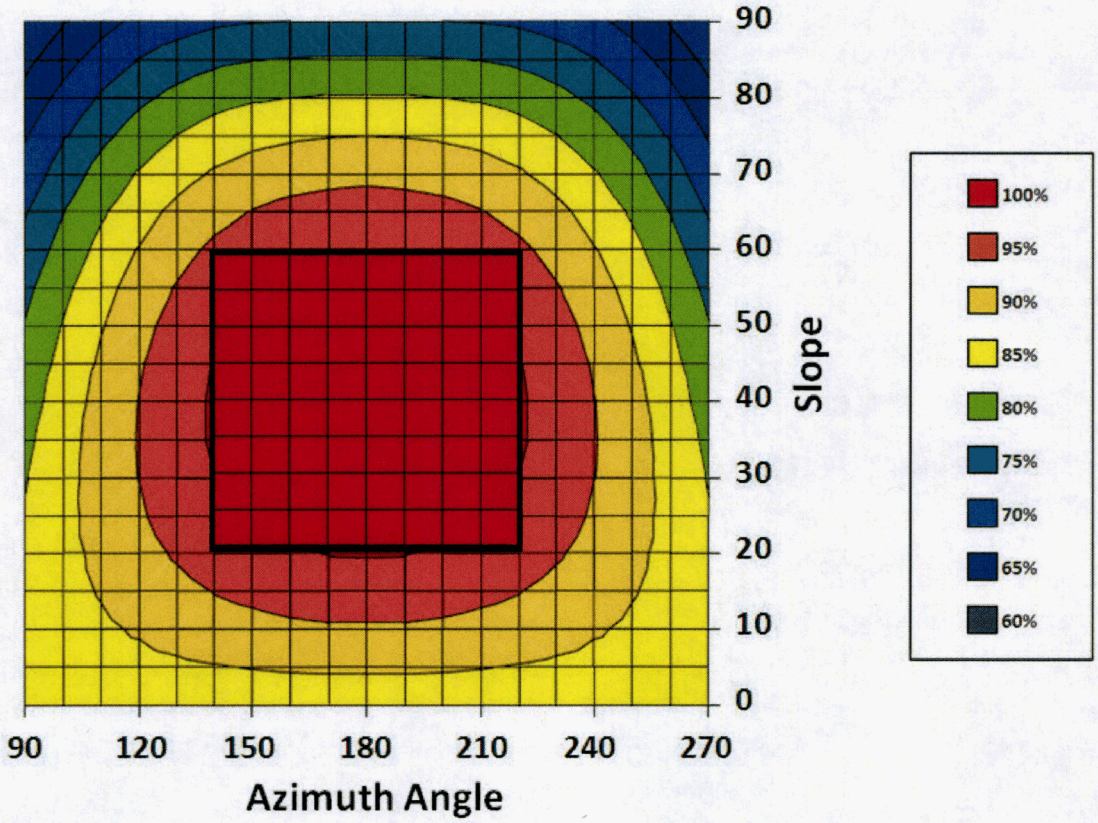
1. The system shall be installed with a horizontal tilt angle between 20 degrees and 60 degrees (40 and 60 degrees for space heating applications), and an azimuth angle of +/- 60 degrees of due south (+/- 20 degrees for space heating applications). It is recommended that collectors be positioned for 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 Hot Water de-rating chart, located on page 30, 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 Hot Water derating 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. UNSE reserves the right to modify standards as technology changes on a case-by-case basis, pending independent laboratory analysis, Professional Engineer (PE) stamp, or UNSE 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.

iii. Solar Hot Water Off-Angle and Shading Annual Energy Derating Chart



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

C. Large Non-Residential Solar Water Heating Systems and Space Heating Systems with Annual Production Output Larger Than 400,000 kWh Equivalent

Solar water heating and space heating in large non-residential applications are eligible for performance-based incentives (PBI). In the case of solar water heating and space heating, the PBI allows the customer to collect incentive payments in relation to the actual system production. In all cases, incentive values listed in Table 3 are maximum values. PBIs are awarded through a bid process, which is discussed later in this section. Applicants are encouraged to submit bids requesting incentive amounts less than the maximums listed. Bids requesting a lower level of incentive payment than the maximum will have an increased chance of acceptance in the allocation ranking process.

Table 3. Maximum Incentives for Large Non-Residential Solar Water Heating and Space Heating for REC Agreements of the Specified Duration**

Year	10-year REC Agreement	15-year REC Agreement	20-year REC Agreement
2013	$0.057/kWh	$0.057/kWh	$0.057/kWh
**Incentive level is based on the $/kWh equivalent output.			

a. Terms & Restrictions

- There is no incentive cap for non-residential systems other than annual program funding considerations.
- A PBI cannot exceed 50% of the real project costs, defined as the undiscounted total system cost plus acceptable financing charges. Acceptable finance charges are finance charges used for the PBI incentive cap calculation and cannot exceed the current prime interest rate plus 5%. Financing charges must be disclosed as part of the commissioning package, if not disclosed before.
- 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.
- UNSE will require and perform specific design analysis and review on project design estimates.
- The bid evaluator reserves the right to award incentives to solar thermal projects other than those that meet the specifications outlined in Attachment A. Incentives in these cases will be determined by the bid evaluator.
- The incentive amount will be calculated at the time the application is approved for reservation. If federal or state incentives change after the reservation is approved, the incentive amount reserved will not change as long as the reservation is not cancelled.
- In return for UNSE's payment of a PBI, UNSE will receive complete and irrevocable ownership of the Renewable Energy Credits for the full duration of the PBI Agreement. The agreement duration must fully coincide with the PBI payment schedule and the system must be supported by system warranty or planned maintenance schedules for the term of the agreement.

b. Qualifications

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 UNSE 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.

UNSE acknowledges that many regulations and site-specific requirements may apply to the installation of renewable energy technologies. UNSE 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 Qualifications

1. Solar collector panels used will have a SRCC OG-100 certification or publicly-funded laboratory documentation showing the panel energy output under controlled and replicable test conditions.
2. If annual energy production is expected to exceed 10,000 kWh or equivalent, the system must include a dedicated performance customer-supplied meter to allow for monitoring of the amount of useful heat produced. Otherwise, compliance reporting production will be based on the design energy savings submitted at time of application.
3. Energy savings and designed output for the system will 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. The engineering report 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.
4. The solar collector, heat exchangers and storage elements shall have an equipment warranty of at least five years to qualify for a PBI.
5. The system will in all cases have a material and full labor warranty of at least five years.

Installation Guidance

1. The horizontal tilt angle of the collector panels should be between 20 and 60 degrees (30 and 60 degrees for space heating applications) and an azimuth angle +/- 45 degrees of south. Azimuth or tilt angles outside these parameters may be reviewed and approved by the utility, at their discretion
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 Hot Water de-rating chart may be used to adjust incentive level based upon affected output due to shading.
3. The system installation should comply with the design manual.

4. 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.
5. It is recommended that the anode rod be checked and replaced per manufacturer's recommendations, but no less frequently than every five years.
6. It is recommended that the system design include a timer, switch, and a temperature sensor on the backup element of the storage tank.
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. The customer should consider contacting the manufacturer to determine if warranty or operational life will be affected.
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. Each system shall have a comprehensive operation and maintenance manual at the customer's site, which includes a spare parts list, data sheets and flow diagrams indicating operating temperatures and pressures, maintenance schedules and description of testing methods and each customer must complete an initial start up and operation training review with the contractor at the time of system start up.
10. UNSE reserves the right to modify standards as technology changes on a case by case basis, pending independent laboratory analysis, PE stamp, or UNSE 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.
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.

D. Ground Source Heat Pumps: Residential & Non-Residential Applications

Residential and small non-residential ground source heat pump (GSHP) systems are 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 4 identifies the incentives available for GSHP systems.

Table 4. UFIs for Residential and Non-Residential Ground Source Heat Pump Systems

Year	Incentive Level
2013	$500/ton
*Indicates that the incentive has not yet been approved by the Arizona Corporation Commission and may change pending ACC approval.	

a. Terms & Restrictions

- Customers will receive a UFI up to a cap of 200 tons.
- 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 is approved, the incentive amount reserved will not change as long as the reservation is not cancelled.
- In return for UNSE's payment of a UFI, UNSE 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.

Project Requirements after Installation

After completing the installation of a small distributed energy system, the customer must continue to provide information to UNSE about the system's performance.

All customers receiving renewable energy self-generation incentives are obligated to report system production to UNSE in accordance with the reporting schedule established in the program agreement between UNSE and the customer. UNSE, at its option, may perform periodic inspection of the system for operation, metered production, and reporting purposes.

b. Qualifications

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 UNSE 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.

UNSE acknowledges that many regulations and site-specific requirements may apply to the installation of renewable energy technologies. UNSE 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 Qualifications

1. Geothermal system installations involving a regulated boiler or pressure vessel are required to comply with all Arizona state boiler regulations; provide a qualifying boiler inspection identification number; and keep all applicable permits in good standing.
2. Energy savings and designed output for the system will 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 third-party professional engineer. The engineering report 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.
3. Energy production for space heating, space cooling and process heating will be calculated as one kWh of energy per 3,415 BTU of useful heat delivered by the system as measured by a dedicated heat delivery measuring meter and used by the building space or process.
4. The system will have a material and labor warranty of at least five years.
5. The system must meet Arizona DEQ environmental standards.
6. The most current Energy Star Standards must be achieved. These can be found at http://www.energystar.gov/index.cfm?c=geoheat.prcritgeoheatpumps.

Installation Guidance

Because of the individual nature of geothermal systems, care should be taken to make sure the system complies with all applicable permitting and regulatory requirements including, but not limited to, air emission standards and air permit regulations.

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.
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.

E. Wind Systems Smaller Than 20 kW

Wind systems smaller than 20 kW are 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 5 identifies the incentives available for wind systems smaller than 20 kW.

Table 5. UFIs for Small Wind Systems

YEAR	ON-GRID INCENTIVE LEVEL
2013	$.40/W AC

a. Terms & Restrictions

- UNSE customers will receive a UFI up to a cap of 20 kW. If a system is installed larger than 20 kW, it must apply under the utility-scale program.
- 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.
- 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 is approved, the incentive amount reserved will not change as long as the reservation is not cancelled.
- In return for UNSE's payment of a UFI, UNSE 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.

Project Requirements after Installation

After completing the installation of a small wind project, the customer must continue to provide information to UNSE about the system's performance.

All customer systems receiving renewable energy self-generation incentives are obligated to include a UNSE-supplied production meter, which will report system production to UNSE in accordance with the regular meter-reading schedule. UNSE, at its option, may perform periodic inspection of the system for operation, metered production, and reporting purposes.

b. Qualifications

A small wind generator is a system with a nameplate capacity rating of 20 kW or less. The technology criteria described below is intended for small wind generators with a nameplate rating of 20 kW or less.

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 UNSE 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.

UNSE acknowledges that many regulations and site-specific requirements may apply to the installation of renewable energy technologies. UNSE 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 Qualifications

1. Eligible small wind systems must be certified and nameplate rated by the Consumer Energy Center (CEC)[2]. See www.consumerenergycenter.org/erprebate/equipment.html for a list of certified generators. For grid tied or off-grid wind generators where an inverter is used, the CEC listed nameplate rating of the wind generator will be multiplied by the CEC approved weighted efficiency percentage listed for the inverter in the "List of Eligible Inverters" at www.consumerenegycenter.org/cgi-bin/eligible_inverters.cgi to calculate the wind turbine nameplate rating for use in determining the UFI payment.[3]
2. Grid connected inverters used as part of the system shall carry the Underwriter's Laboratory (UL) listing certifying full compliance (UL-1741).
3. A system must include a dedicated performance meter (provided by UNSE) installed to allow for measurement of the amount of electricity produced.
4. The performance meter and utility disconnect for grid tied systems will be installed in a location readily accessible by UNSE during normal business hours.
5. The tower used in the installation must be designed by an Arizona registered engineer and must be suitable for use with the wind generator. Tower installation must be designed and supervised by individuals familiar with local geotechnical conditions.
6. To receive a UFI, the wind generator and system must be covered by a manufacturer's warranty of at least 5 years. In all cases, the wind system will have a material and labor warranty of at least five years.

Installation Guidance

1. Location: a wind turbine hub should be at least 20 feet above any surrounding object and at least 28 feet above the ground within a 250-foot radius. Wind generators should be installed in locations with an elevation at or above the general elevation of the surrounding terrain.
2. Lot Size: should be one-half acre at minimum. Municipalities and public facilities such as schools and libraries are exempt from the minimum lot size requirements.

[2] UNSE recommends review of the SWCC standards for rating small wind generators once they become available for purposes of supplanting the CEC requirement in this Technology Criterion.
[3] Inverter outputs are rated in DC watts and must be converted to AC watts for incentive calculation purposes.

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.
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.
6. All renewable electricity generation systems must include a dedicated performance meter (provided by UNSE) which allows for measurement of system energy production. Certain other non-electric renewable energy production systems, noted below, will require customer supplied metering for PBI payment calculation purposes.
7. Wind system components shall be properly labeled, including AC & DC disconnects (if present), wind generation meter, service panel (outside cover), and breakers inside the service panel.
8. If the qualifying system is grid-tied, the system must meet Arizona Corporation Commission Interconnection Requirements for Self-Generation Equipment.

See http://images.edocket.azcc.gov/docketpdf/0000074361.pdf for these requirements.

F. Non-Residential Solar Daylighting

Non-residential solar daylighting systems are eligible for up-front incentives (UFI). The UFI allows the customer to collect incentive payments in direct relation to the actual system production. Table 6 identifies the incentives available for non-residential daylighting systems.

Table 6. UFIs for Non-Residential Daylighting Systems

Year	Incentive Level
2013	$0.18/kWh savings during first five years

a. Terms & Restrictions

- The per-kWh incentive applies only to estimated energy savings during the first five years of project operation.
- 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.
- As described later in this document, these incentive levels may be decreased because of sub-optimal system positioning.
- The incentive amount will be calculated at the time the application is approved for reservation. If federal or state incentives change after the reservation is approved, the incentive amount reserved will not change as long as the reservation is not cancelled.
- In return for UNSE's payment of a UFI, UNSE 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.

b. Qualifications

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 UNSE 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.

UNSE acknowledges that many regulations and site-specific requirements may apply to the installation of renewable energy technologies. UNSE 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 Qualifications

All systems shall include the following components as part of the day lighting system:

1. Skylights must adhere to the 2009 International Energy Conservation Code with regard to the U-factor and solar heat gain coefficient and must have a minimum visible transmittance based on the CPUC Savings by Design program (Note: U-value and SHGC ratings should be based on a 20 degree ratings, now standard through the NFRC):
   - Maximum U-factor of 0.75
   - Maximum solar heat gain coefficient of 0.35
   - Minimum visible transmittance of 0.45
2. Skylight can be in a toplighting configuration only.
3. Skylight area may not exceed 3% of the gross roof area.
4. Skylights must be certified by the National Fenestration Rating Council ("NFRC").
5. If artificial lighting systems remain a part of the installation, the system shall include automated lighting control(s) which are programmed to keep electric lights off/dimmed during daylight hours of sufficient solar insulation to provide minimum design illumination levels.
6. The system will have a material and labor warranty of at least five years.

Installation Guidance

All systems should be installed such that the skylight dome is substantially unshaded and have substantially unobstructed exposure to direct sunlight between the hours of 9:00 a.m. and 3:00 p.m.

General Qualifications

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.
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.

VIII. Performance Based Incentives

UNSE's Performance Based Incentive (PBI) programs are limited to Large Non-Residential Projects only.

a. Qualifications

Non-Residential Qualifying Technology	Size Limit
Solar PV	Greater than 70 Kilowatts (kW) Direct Current (DC)
Biomass/Biogas (Electric)	N/A
Biomass/Biogas – Combined Heat and Power (CHP) (Electric)	N/A
Biomass/Biogas – CHP (Thermal)	N/A
Biomass/Biogas (Thermal)	N/A
Biomass/Biogas (Cooling)	N/A
Geothermal – (Electric)	N/A
Geothermal – (Thermal)	N/A
Small Hydro	N/A
Solar Space Cooling	N/A

b. Application Process

UNSE's PBI application process appears below. UNSE 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. UNSE will assign payment under its PBI application process to the party that appears on the assignment of payment form. Please work with your installer or contractor prior to beginning the process below to determine who payment should go to.

1st Step: Submittal of the Completed Performance Based Incentive Application to UNSE.

The submitted application must include a proposed renewable energy credit (REC) term, price, and payout term in years.

2nd Step: Holding of the Completed Application and REC Proposal until Auction Time.

UNSE will hold all applications until the next applicable auction time (revolving quarterly awards). Once the auction process begins, UNSE will open 1/4 of its approved budget for the year and funds will be awarded to the most competitive projects based on the following criteria:

- Actual REC Price Requested
- Annual Incentive Amount Requested
- Terms of Payment and REC Transfer
- Overall REC Price

3rd Step: Process for Project Selection.

If a project is selected, the customer will be notified and an acceptance packet will be mailed to them. The acceptance packet will include the following:

- REC Agreement
- New Supplier Fact Sheet (provides information on entity receiving incentive payment)
- IRS Form W-9
- Interconnection Application
- Assignment of Payment Form
- Information Regarding Demand-Based Rates (if applicable)

4th Step: Submittal of Acceptance Paperwork.

- Within 45 days from the date the acceptance packet is mailed to the customer, customer must return the interconnection application.
- Within 180 days from the date the acceptance packet is mailed to the customer, customer must return all remaining paperwork included as part of the acceptance packet to UNSE as proof of advancement of project.

5th Step: Project Completion.

All accepted projects must be complete within 365 days from the date the acceptance packet is mailed to the customer. A project is not considered complete until an approved final inspection from the appropriate local jurisdiction is submitted to UNSE. It is the installer's responsibility to ensure the approved final is submitted to UNSE. The installer must also submit an Installation Certification to UNSE. Once UNSE receives both the approved jurisdictional final inspection and the Installation Certification, it will perform a commissioning of the completed system. Incentive payments will not issue until ***after*** the first full quarter after completion; incentive payments will continue thereafter on a quarterly basis.

c. Restrictions/Important Notes

1. UNSE does not provide any meter sockets, disconnects, et cetera for non-residential installations.
2. If a project is not accepted, it will remain in the queue for the next award period. If no award period remains in that year, the customer will be notified and asked to resubmit in the next calendar year.
3. Request for reservation extensions, with proof of project status, must be submitted in writing and include the customer's signature. Reservation extensions requests will only be granted where warranted. UNSE reserves the right to evaluate each reservation extension request on a case-by-case basis, for project hardships encountered that are not due to customer fault.
4. UNSE requires an Interconnection Inspection for all Grid-Tied Renewable Electrical Systems greater than 70 kW DC.
    - Non-residential grid-tied qualifying systems of electrical generating capacity must submit to and pass an interconnection inspection before the system can be commissioned. UNSE conducts the interconnection inspection and will notify the applicant of the results of the inspection. If the system passes the interconnection inspection, the application retains the reservation. An applicant may retain its reservation even if the system fails the initial interconnection inspection so long as the deficiency is remedied within 30 days from the date of the interconnection inspection.

A. Non-Residential Solar Electric Projects Greater than 70 kW DC

Non-residential Solar Electric systems greater than 70 kW DC are eligible for performance-based incentives (PBI). The PBI allows the customer to collect incentive payments in direct relation to the actual system production. Table 7 identifies the incentives available for non-residential Solar Electric systems larger than 70 kW DC.

In all cases, incentive values listed in Table 7 are maximum values. PBIs are awarded through a bid process, which is discussed later in this section. Applicants are encouraged to submit bids requesting incentive amounts less than the maximums listed. Bids requesting a lower level of incentive payment than the maximum will have an increased chance of acceptance in the allocation ranking process. Projects will be reviewed bi-monthly.

Table 7. Maximum PBIs for Non-Residential Projects Greater Than 70 kW DC

70 – 200 kW DC			
YEAR	10-YEAR	15-YEAR	20-YEAR
2013	$0.072	$0.072	$0.072
201 – 400 kW DC			
YEAR	10-YEAR	15-YEAR	20-YEAR
2013	$0.068	$0.068	$0.068
401 kW DC and Greater			
YEAR	10-YEAR	15-YEAR	20-YEAR
2013	$0.064	$0.064	$0.064

a. Terms & Restrictions

- There is no incentive cap for non-residential systems other than program funding considerations.
- A PBI cannot exceed 50% of the real project costs, defined as the undiscounted total system cost plus acceptable financing charges. Acceptable finance charges are finance charges used for the PBI incentive cap calculation and cannot exceed the current prime interest rate plus 5%. Financing charges must be disclosed as part of the commissioning package, if not disclosed before.
- The customer must pay at least 15% of the project cost (as defined above), 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 during the period of time after the reservation approval, the incentive amount reserved will not be changed as long as the reservation is not cancelled.
- In return for UNSE's payment of a PBI, UNSE will receive complete and irrevocable ownership of the Renewable Energy Credits for the full duration of the PBI Agreement. The agreement duration must fully coincide with the PBI payment schedule and the system must be supported by system warranty or planned maintenance schedules for the term of the agreement.

Project Requirements after Installation

All customer systems receiving incentives are obligated to include a UNSE-supplied production meter, which will report system production to UNSE in accordance with the regular meter-reading schedule. UNSE, at its option, may perform periodic inspections of the system for operation, metered production, and reporting purposes.

Installer Qualifications

All systems receiving incentives under the RECPP must be installed by a qualified installer. The following requirements must be submitted by the applicant as part of the reservation request. UNSE 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 technology being installed. Alternatively, the installer must identify use of a contractor holding an appropriate license on file with the AZROC for the technology being installed. A copy of the AZROC license must be provided as part of the reservation request.
2. The installer must possess an Arizona business license that is active and in good standing.
3. Installers may request that the above information be retained on file with UNSE; however, under this option the installer must certify that the information on file remains current with the submission of each reservation request. Information on file must be renewed yearly.

System Qualifications and Requirements

All solar electric generating Customer Systems must meet the following system and installation requirements at the time of project commissioning to qualify for UNSE's RECPP Capitalized terms not defined herein shall have the meanings ascribed to them in the RECPP Agreement.

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 UNSE 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.

UNSE acknowledges that many regulations and site-specific requirements may apply to the installation of renewable energy technologies. UNSE 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 Standards

1. The Customer System components must be certified as meeting the requirements of IEEE-929 - Recommended Practice for Utility Interface of Photovoltaic Systems.[4]
2. Photovoltaic components must be certified by a nationally-recognized testing laboratory as meeting the requirements of UL-1703 - Standard for Flat Plate Photovoltaic Modules and Panels Systems; they must also be covered by a non-prorated manufacturer's warranty of at least 20 years.
3. The Customer System design and installation must meet all requirements of the latest edition of the National Electrical Code, including Article 690 and all grounding, conductor, raceway, over-current protection, disconnect and labeling requirements.
4. The inverter must be certified as meeting the requirements of IEEE-1547 - Recommended Practice for Utility Interface of Photovoltaic Systems and it must be UL-1741 certified. Inverters must be covered by a manufacturer's warranty of at least ten years.
5. All other electrical components must be UL listed.
6. The Customer System and installation must meet the requirements of all federal, state and local building codes and have been successfully inspected by the building official having jurisdiction. Accordingly, the installation must be completed in accordance with the requirements of the latest edition of National Electrical Code in effect in the jurisdiction where the installation is being completed (NEC), including, without limitation, Sections 200-6, 210-6, 230-70, 240-3, 250-26, 250-50, 250-122, all of Article 690 pertaining to Solar Photovoltaic Systems, thereof, all as amended and superseded.
7. The Customer System must meet Company and Arizona Corporation Commission interconnection requirements for self-generation equipment.

See http://images.edocket.azcc.gov/docketpdf/0000074361.pdf for these requirements.

Installation Requirements

1. Any Non-Residential Customer System must have a total solar array nameplate rating of more than 70,000 watts DC.
2. The Customer System installation must meet UNSE's Electric Service Requirements 2011 Edition, Section 1.22, as follows:

> "As required by TEP/UES's Interconnection Requirements for Distributed Generation, the customer shall provide and install a disconnect switch to isolate all ungrounded conductors of the generating facility from the TEP/UES system. The switch shall be a gang-operated, load-break device with a visible air-gap in the open position. It shall be rated for the current and voltage requirements of the generating facility and shall be lockable in the open position".

[4] Some technology-specific criteria reference third party standards. The requirements of those standards are fully applicable when referenced as part of technology specific criteria. UNSE recognizes that new standards are likely to develop in the near future for technologies included in the RECPP and recommends that the new standards are examined for application in this program definition as they become available.

3. The DG utility meter and utility disconnect will be installed within 10' of the main service panel and in a location readily accessible by UNSE at all times.
4. Products must be installed according to manufacturer's recommendations.
5. For Non-Residential Customer Systems, Company shall provide the meter only, to be installed in a Customer supplied meter socket in a readily accessible outdoor location by the Customer between the DC to AC inverter and the connection to the over-current device in/or adjacent to the Customer's electric service panel.
6. Total voltage drop on the DC and AC wiring from the furthest PV module to the AC meter will not exceed 2%.
7. PV panels and DC to AC inverter will be installed with sufficient clearance to allow for proper ventilation and cooling. At a minimum, manufacturer clearance recommendations will be observed. PV modules may be mounted less than 4 inches above any surface and an additional inch of clearance for each foot of continuous array surface area beyond four feet in the direction parallel to the mounting support surface only in cases when arrays are flush-mounted to roof pitch. Otherwise, the four-inch spacing and an additional inch of clearance for each foot of continuous array surface area minimum is required.
8. Storage Batteries are not allowed as part of the Customer System unless the inverter is a separate component and UNSE can locate the DG utility meter at the inverter's output. If configured otherwise, battery losses will adversely reflect in the annual AC metered energy output.
9. The DC to AC inverter used must provide maximum power point tracking for the full voltage and current range expected from the photovoltaic panels used and the temperature and solar insolation conditions expected within the UNSE service territories.
10. The DC to AC inverter must be capable of adjusting to "sun splash" from all possible combinations of cloud fringe effects without interruption of electric production.

General Requirements

1. All Customer System installations must be completed in a professional, workmanlike and safe manner.
2. The Customer must be connected to the Company's electric grid.
3. Systems must be permitted and inspected by the jurisdiction having authority over construction projects in the customer's locale.
4. 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.
5. The project must comply with applicable local, state, and federal regulations.
6. Products must be installed according to manufacturers' recommendations.
7. Installations must meet applicable governmental statutes, codes, ordinances, and accepted engineering and installation practices.
8. All renewable electricity generation systems must include a dedicated performance meter (provided by UNSE) which allows for measurement of system energy production. Certain other non-electric renewable energy production systems, noted below, will require customer supplied metering for PBI payment calculation purposes.

9. PV system components shall be properly labeled, including AC & DC disconnects, solar generation meter, service panel (outside cover), and breakers inside the service panel.
10. If the qualifying system is grid-tied, the system must meet Arizona Corporation Commission Interconnection Requirements for Self-Generation Equipment. See http://images.edocket.azcc.gov/docketpdf/0000074361.pdf for these requirements.
11. For systems above 300 kW AC, transfer-trip protection requirements will be enforced. The customer will be responsible for the costs associated with implementing these requirements.
12. The system will in all cases have a material and full labor warranty of at least five years.

Requirements Specific to Non-Residential PV Systems Greater Than 70 kW DC

1. The Non-Residential Customer System shall be operating, substantially complete and have produced an AC output at least 70% of the total array nameplate DC rating at PTC.[5]
2. Operation, Maintenance and Repair. The Customer shall be solely responsible for the operation, maintenance and repair of the Non-Residential Customer System and any and all costs and expenses associated therewith. Company will notify Customer of all Non-Residential Customer System repairs the Company determines are reasonably necessary to support proper continued electrical production of the Non-Residential Customer System. The Customer will notify the Company within five (5) business days of its receipt of any such Company repair notice if the repair requires the installation of a new inverter and/or PV module. The Customer shall complete any such repair that affects the Non-Residential Customer System performance and does not require the purchase of a new inverter or PV module(s) within five (5) business days of the Company's notice of the need for such repair. For any such repair that does require the purchase and installation of a new inverter and/or PV module, the Customer shall promptly commence and diligently pursue such repair to completion, provided, in no event shall such repair take more than thirty (30) days to complete. At all times while Company is receiving the environmental credits from the Non-Residential Customer System, Customer shall clean all PV modules in the Non-Residential Customer System as necessary to keep them free from foreign material that would visibly obscure the modules, including any dirt and/or oils.
3. Non-Residential Customer System Security. At all times during and after installation of the Non-Residential Customer System, the Customer shall use commercially reasonable efforts to provide adequate security to prevent damage or vandalism to the Non-Residential Customer System.
4. Company shall provide Customer with a revenue grade AC meter to be installed between the Non-Residential Customer System and the grid interconnection. This meter will not be used for billing, but shall be used for any official Non-Residential Customer System production output data. Company will retain ownership of the meter and be responsible for its repair if needed.
5. Customer shall provide Company with all documentation reasonably requested by Company to demonstrate to the Commission that any environmental credits transferred under the Agreement were derived from an eligible technology, that the kWh generated are accurately reported and that the environmental credits have not expired or been used by any other entity for any purpose.

[5] PTC stands for "PVUSA Test Conditions." These standards are also referenced by the California Energy Commission. PTC conditions are based upon 1,000 W/m^2 solar irradiance, 20 degrees Celsius ambient temperature, and 1 m/s wind speed.

6. If certified proof cannot be provided of complete galvanic isolation of any and all DC from the AC output of the inverter(s) used in the Non-Residential Customer System through IEEE-1547 certification of the inverter, the Non-Residential Customer System shall include an isolation transformer installed between the inverter(s) and the grid interconnection. The transformer will be rated at full load continuous operation at 50 degrees C. at 125% of nameplate DC array rating and have an efficiency rating at nameplate DC array rating power of at least 98% as tested. The transformer will have at least one tap each of 2.5% and 5% both above and below the nominal voltage tap.

B. Additional Technologies with Prescriptive Incentives: (i) Non-Residential Biomass/Biogas or Geothermal Space Heating, Process Heating, or Space Cooling, (ii) Biomass/Biogas, Hydro or Geothermal Electric, and (iii) Solar Space Cooling

Additional technologies are eligible to receive performance-based incentives (PBI). The PBI allows the customer to collect incentive payments in direct relation to the actual system production. These incentive levels are specific to each of the groups of technologies. Table 8 summarizes the incentive levels for these technologies for REC agreements signed in 2013.

In all cases, incentive values listed in Table 8 are awarded through a bid process, which is discussed later in this section. Applicants are encouraged to submit bids requesting incentive amounts less than the maximums listed. Bids requesting a lower level of incentive payment than the maximum will have an increased chance of acceptance in the allocation ranking process.

Table 8. Maximum Incentives for Additional Technologies for 2013

TECHNOLOGY/APPLICATION	10-YEAR REC AGREEMENT SIGNED IN 2013 ($/KWH)*	15-YEAR REC AGREEMENT SIGNED IN 2013 ($/KWH)*	20-YEAR REC AGREEMENT SIGNED IN 2013 ($/KWH)*
Biomass/Biogas (Electric)	$0.060	$0.056	$0.054
Biomass/Biogas – CHP (Electric)	$0.035	$0.032	$0.031
Biomass/Biogas – CHP (Thermal)	$0.018	$0.017	$0.016
Biomass/Biogas (thermal)	$0.015	$0.014	$0.013
Biomass/Biogas (cooling)	$0.032	$0.030	$0.029
Geothermal – (electric)	$0.024	$0.022	$0.022
Geothermal – (thermal)	$0.048	$0.045	$0.043
Small Hydro	$0.060	$0.056	$0.054
Solar Space Cooling	$0.090	$0.085	$0.080

*Indicates in first year savings.

a. Terms & Restrictions

- There is no incentive cap for non-residential systems other than annual program funding considerations.
- A PBI cannot exceed 50% of the real project costs, defined as the undiscounted total system cost plus acceptable financing charges. Acceptable finance charges are finance charges used for the PBI incentive cap calculation and cannot exceed the current prime interest rate plus 5%. Financing charges must be disclosed as part of the commissioning package, if not disclosed before.
- 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.)
- The CHP incentives may be used in combination for the appropriate components of one system.

- The solar space heating and cooling incentives may be used in combination for the appropriate components of the system.
- Systems may not be eligible to receive RECPP incentives if other utility incentives are applied.
- System Cost for a solar space heating system will not include the cost of any passive thermal storage or the cost of the building heating system itself. It will include the cost of new materials and installation of active thermal storage, expansion tanks, controls, tempering valves, piping, vents, drains, safety valves and all freeze protection.
- The incentive amount will be calculated at the time the application is approved for reservation. If federal or state incentives change after the reservation is approved, the incentive amount reserved will not change as long as the reservation is not cancelled.
- In return for UNSE's payment of a PBI, UNSE will receive complete and irrevocable ownership of the Renewable Energy Credits for the full duration of the PBI Agreement. The agreement duration must fully coincide with the PBI payment schedule and the system must be supported by system warranty or planned maintenance schedules for the term of the agreement.

i. Non-Residential Biomass/Biogas or Geothermal Space 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 UNSE 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.

UNSE acknowledges that many regulations and site-specific requirements may apply to the installation of renewable energy technologies. UNSE 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 Qualifications

1. Biomass/Biogas or geothermal system installations involving a regulated boiler or pressure vessel are required to comply with all Arizona state boiler regulations; provide a qualifying boiler inspection identification number; and keep all applicable permits in good standing.
2. Energy savings and designed output for the system will 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. The engineering report 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.

3. Energy production for space heating, space cooling and process heating will be calculated as one kWh of energy per 3,415 BTU of useful heat delivered by the system as measured by a dedicated heat delivery measuring meter and used by the building space or process.
4. The system will have a material and labor warranty of at least five years.
5. The system must meet Arizona DEQ environmental standards.

Installation Guidance

Because of the individual nature of biomass/biogas or geothermal systems, care should be taken to make sure the system complies with all applicable permitting and regulatory requirements including, but not limited to, air emission standards and air permit regulations.

General Qualifications

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.
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.
6. All renewable electricity generation systems must include a dedicated performance meter (provided by UNSE) which allows for measurement of system energy production. Certain other non-electric renewable energy production systems, noted below, will require customer supplied metering for PBI payment calculation purposes.
7. If the qualifying system is grid-tied, the system must meet Arizona Corporation Commission Interconnection Requirements for Self-Generation Equipment.

See http://images.edocket.azcc.gov/docketpdf/0000074361.pdf for these requirements.

ii. Biomass/Biogas, Hydro, or Geothermal Electric

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 UNSE 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.

UNSE acknowledges that many regulations and site-specific requirements may apply to the installation of renewable energy technologies. UNSE 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 Qualifications

1. Biomass/Biogas, Hydro or Geothermal system installations involving a regulated boiler or pressure vessel are required to comply with all Arizona state boiler regulations; provide a qualifying boiler inspection identification number; and keep all applicable permits in good standing.
2. System must include a dedicated performance meter to allow for monitoring of the amount of electricity produced.
3. Pre-operational/or pre-commissioning energy savings and design output for the system will 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 qualified registered professional engineer. The engineering report 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.
4. The system will have a material and labor warranty of at least five years.
5. The system must meet Arizona DEQ environmental standards.

Installation Guidance

Because of the individual nature of biomass/biogas hydro or geothermal systems, care should be taken to make sure the system complies with all applicable permitting and regulatory requirements including, but not limited to, air emission standards and air permit regulations.

General Qualifications

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.
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.
6. All renewable electricity generation systems must include a dedicated performance meter (provided by UNSE) which allows for measurement of system energy production. Certain other non-electric renewable energy production systems, noted below, will require customer supplied metering for PBI payment calculation purposes.
7. If the qualifying system is grid-tied, the system must meet Arizona Corporation Commission Interconnection Requirements for Self-Generation Equipment.
   See http://images.edocket.azcc.gov/docketpdf/0000074361.pdf for these requirements.

iii. Solar Space Cooling

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 UNSE 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.

UNSE acknowledges that many regulations and site-specific requirements may apply to the installation of renewable energy technologies. UNSE 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 Qualifications

1. The minimum cooling capacity of the system will be 120,000 BTU (10 tons) per hour.
2. Solar collector panels used will have a Solar Rating and Certification Corporation (SRCC) OG-100 rating or laboratory documentation showing the panel energy output under controlled and replicable test conditions.
3. Energy savings and designed output for the system will 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. The engineering report 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.
4. System must include a dedicated performance meter to allow for monitoring of the amount of heat input to the thermal cooling device or system. Energy production will be calculated at one kWh per 3,415 BTU of metered heat delivered to the thermal cooling device or system.
5. The system will have a material and labor warranty of at least five years.
6. UNSE reserves the right to modify standards as technology changes on a case by case basis, pending independent laboratory analysis, Professional Engineer (PE) stamp, or UNSE engineering analysis

Installation Guidance

1. The horizontal tilt angle of the collector panels should be between 20 and 60 degrees and an azimuth angle should be between +/- 45 degrees of south.
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.
3. The system installation should comply with the design manual.

General Qualifications

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.
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.

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 UNSE 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 Projects Electing to Not Receive Incentives

If a customer chooses not to receive incentives from UNSE in exchange for the RECs, the customer shall still notify UNSE that a renewable energy generator is being connected to UNSE's grid and complete any associated interconnection processes. The process for non-incentive utility interconnection is available at www.uesaz.com/renewable.

Appendix 1: Incentive Summary Tables

RECPP – CONFORMING PROJECT INCENTIVE MATRIX

2013 Program Year

Technology/Application	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)
BIOMASS/BIOGAS (Electric)	NA	0.060	0.056	0.054
BIOMASS/BIOGAS – CHP (Electric) [3]	NA	0.035	0.032	0.031
BIOMASS/BIOGAS – CHP (Thermal) [3]		0.018	0.017	0.016
BIOMASS/BIOGAS (thermal)	NA	0.015	0.014	0.013
BIOMASS/BIOGAS (cooling)	NA	0.032	0.030	0.029
DAYLIGHTING (Non-Residential)	$0.18/kWh [7] See this note for clarification	NA	NA	NA
GEOTHERMAL – (electric)	NA	0.024	0.022	0.022
GEOTHERMAL – (thermal)	NA	0.048	0.045	0.043
GROUND SOURCE HEAT PUMP – (cooling)	$500/ton	NA	NA	NA
SMALL HYDRO	NA	0.060	0.056	0.054
SMALL WIND (grid-tied) [4]	$.40/Watt AC	NA	NA	NA
SOLAR ELECTRIC:				
RESIDENTIAL (GRID-TIED)	$0.40/Watt DC [8]	NA	NA	NA
NON-RESIDENTIAL (GRID-TIED) 70 kW DC or less	$0.40/Watt DC [8]	NA	NA	NA
NON-RESIDENTIAL (GRID-TIED) 71 - 200 kW DC[11]	NA	0.072	0.072	0.072
NON-RESIDENTIAL (GRID-TIED) 201- 400 kW DC[11]	NA	0.068	0.068	0.068
NON-RESIDENTIAL (GRID-TIED) 401 kW DC and Greater	NA	0.064	0.064	0.064
SOLAR SPACE COOLING [5]	NA	0. 090	0. 085	0. 080
NON-RESIDENTIAL SOLAR WATER HEATING/SPACE HEATING [5,9,10] (400,000 annual kWh output production equivalent or less)	$0.50/kWh	NA	NA	NA
RESIDENTIAL SOLAR WATER/SPACE HEATING [6,9,10]	$0.50/kWh	NA	NA	NA
NON-RESIDENTIAL POOL HEATING [10]	$0.50/kWh	NA	NA	NA

Notes:

1) Residential projects are eligible for an up front incentive (UFI)). UFI payments cannot exceed 50% of the cost of renewable energy equipment.
2) Non-residential systems 70 kW AC or less are UFI only. Non-residential greater than 70 kW AC are PBI only. The total of payments under a production based incentive cannot exceed 50% of the project costs for any project.
3) The CHP incentives may be used in combination for the appropriate components of one system.
4) This UFI applies to a maximum system size of 20 kW.
5) The solar space heating and cooling incentives may be used in combination for the appropriate components of one system.
6) This category includes both traditional water heating and those systems combined with residential solar water heating used for space heating. Space heating applications require a report detailing energy saving for the complete system.
7) Rate applies to measured first five years of energy savings only. Payment is made up-front at beginning of 1st year.
8) Some UFI based installations will require an adjustment of the incentive as detailed in the PV Incentive Adjustment Chart.
9) Energy savings rating is based on the SRCC OG-300 published rating or the UNSE-RECPP Space Heating Calculator. The customer contribution must be a minimum of 15% of the project cost after accounting for and applying all available Federal and State incentives.
10) Rate applies to forecast/estimated first year energy savings only.
11) REC terms may be negotiated in excess of printed maximums to accommodate for higher initial payments.

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 UNSE.

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.

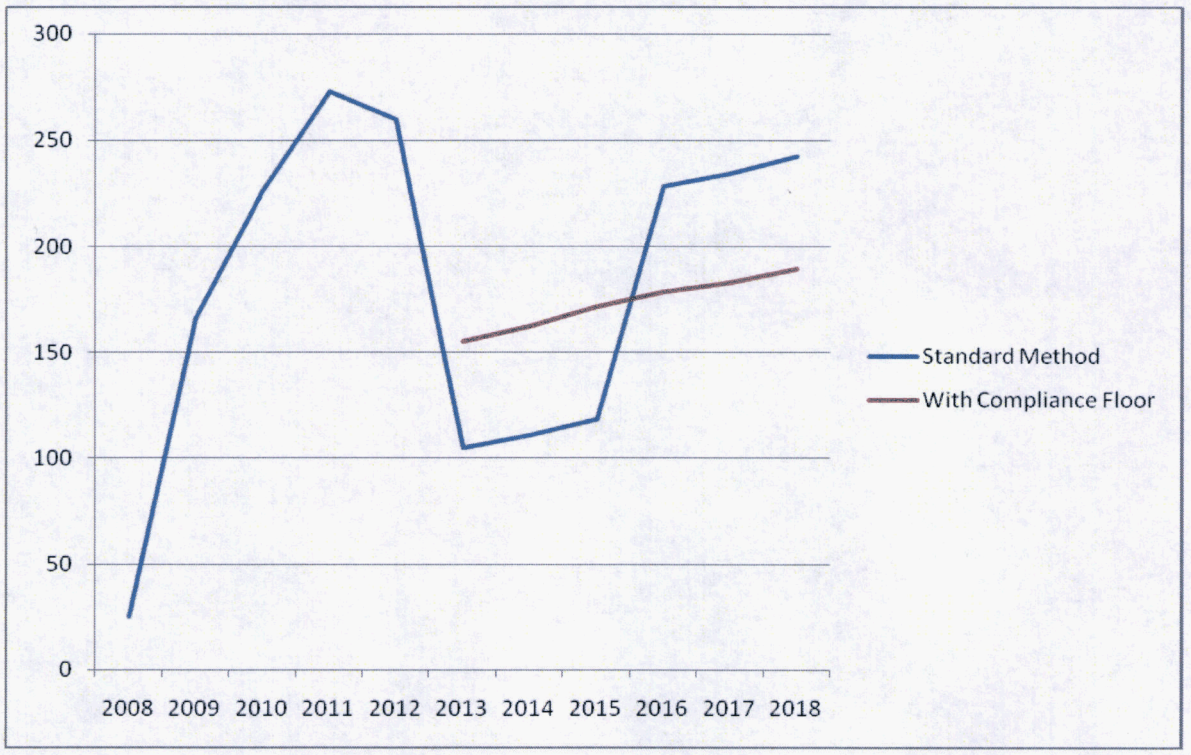
EXHIBIT

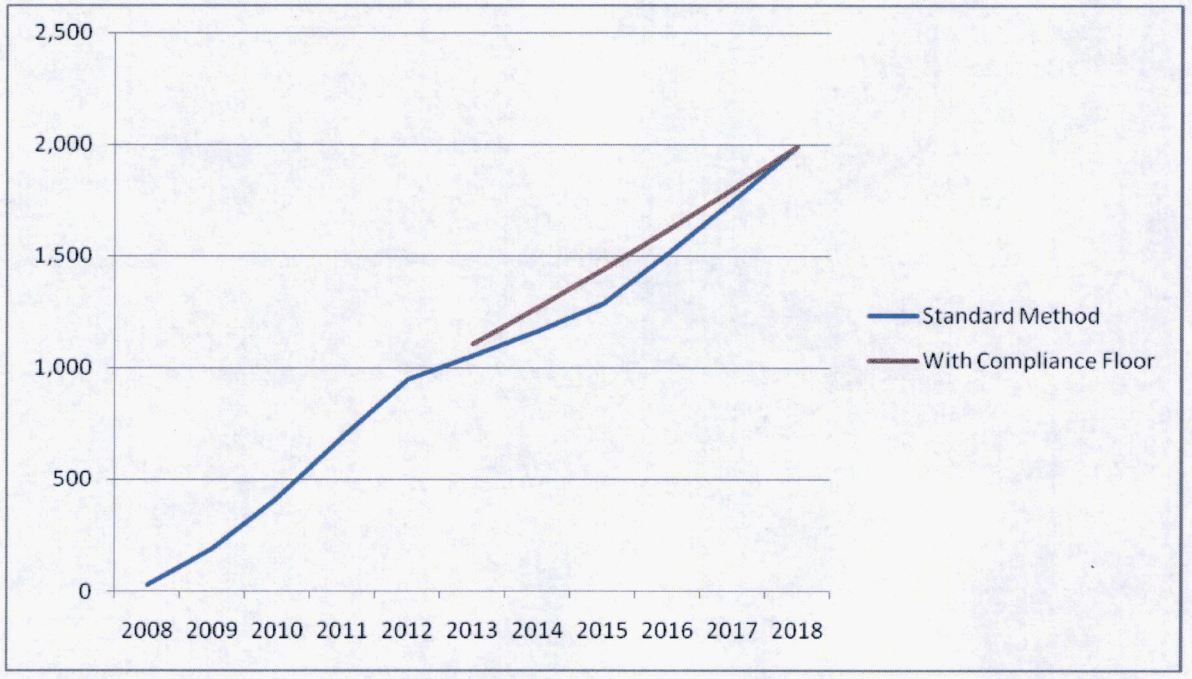
"3"

UNS Electric, Inc.

Exhibit 3

Graphical View of Residential DG Compliance Floor





EXHIBIT

"4"

Exhibit 4

UNS Electric, Inc.

Market Cost of Comparable Conventional Generation

2013 Renewable Energy Standard and Tariff

OVERVIEW

Consistent with the Renewable Energy Standard Tariff ("REST") Rules passed by the Arizona Corporation Commission ("Commission"), Unisource Electric ("UNSE") 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', and will be done in coordination with the company's annual Purchase Power and Fuel Adjustment Clause (PPFAC) filing. 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 generation and transmission capacity to meet all firm load obligations including system reserve requirements. Finally, the cost of renewable generation above the annual MCCCG rates will be recovered through the REST Adjustor Mechanism and REST Tariff.

Table 1 - MCCCG Hourly Rate Determination Matrix

<table>
<tr><th colspan="2"></th><th colspan="4">Types of Renewable Generation Resources</th></tr>
<tr><th rowspan="5">Resource Dispatch Type</th><th></th><th>Dispatchable Renewable Generation</th><th>Firm Renewable Generation</th><th>Non-Firm Renewable Generation</th><th>Curtailable Non Firm Renewable Generation</th></tr>
<tr><td>Wholesale sales transaction served from existing resource portfolio</td><td colspan="4" rowspan="2">The MCCCG 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.</td></tr>
<tr><td>No market transactions. Generation available from thermal resource portfolio.</td></tr>
<tr><td>Day, week or month ahead purchase transaction to serve firm load requirements.</td><td colspan="4">The MCCCG 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.</td></tr>
<tr><td>Spot market transaction to serve firm load requirements.</td><td colspan="4">The MCCCG 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.</td></tr>
</table>

CALCULATION

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

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

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

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

Where

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

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

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

Table 3 – UNSE's 2013 MCCCG Annual Rates

	MCCCG Annual Rates	$/MWh
Renewable Technology	AZ Wind	$48.56
	Biomass	$50.78
	NM Wind	$49.07
	Solar CSP	$57.38
	Solar PV	$57.46

EXHIBIT

"5"

CONFIDENTIAL

EXHIBIT

“6”

Exhibit 6

UNS Electric Renewable Energy Standard Tariff

Line Item Budget	2012	2013
Total REST Budget & Tariff Collection:	**$ 7,673,206**	**$ 8,911,454**
	2012	2013
Utility Scale Energy		
Above Market Cost of Conventional Generation	$ 2,126,740	$ 4,726,000
UNS Owned	$ 665,159	$ 1,191,463
Subtotal	**$ 2,459,055**	**$ 5,917,463**
Customer Sited Distributed Renewable Engergy		
Up-front Incentive (UFI) (residential) PV	$ 1,752,337	$ 421,876
Up-front Incentive (UFI) (residential) H20 10% carve-out		$ 102,539
Up-Front Incentive Commercial	$ 691,614	$ 177,118
Annual Performance Based Incetive (PBI)	$ 1,786,546	$ 1,836,416
Meter Reading	$ 6,250	$ 6,250
Education and Outreach	$ 10,000	$ 50,000
Subtotal	**$ 4,297,273**	**$ 2,594,199**
Technical Training		
Schools Program	$ 190,000	$ -
Internal and Contractor Training	$ 37,500	$ 37,500
Subtotal	**$ 227,500**	**$ 37,500**
Information Systems		
Subtotal	**$ 50,000**	**$ 50,000**
Metering		
Subtotal	**$ 76,070**	**$ 76,070**
Program Labor and Administration		
Labor, Materials, Supplies	$ 252,750	$ 207,722
AZ Solar Website	$ 1,000	$ 1,000
Subtotal	**$ 253,750**	**$ 208,722**
Renewable Energy Balancing, Integration, and Field Testing		
AZRISE	$ 20,000	$ 20,000
UWIG, AWEA, SEPA	$ 7,500	$ 7,500
Subtotal	**$ 27,500**	**$ 27,500**
TotalSpending	**$ 7,315,078**	**$ 8,911,454**
Under Recovered 2010 Funds	**$ -**	**$ -**
Total Amount for Recovery	**$ 7,673,206**	**$ 8,911,454**

EXHIBIT

"7"

CLEAN

UniSourceEnergy SERVICES

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

APPLICABILITY

Mandatory, non-bypassable surcharge applied to all energy consumed by all customers throughout Company's entire electric service area.

RATES

For all energy billed which is supplied by the Company to the customer, the price shall be $0.012700 per kWh of metered monthly energy consumption on all kWh consumed per meter that month up to and including a monthly cap of:

For Residential customers:	$5.50 per month
For Commercial customers:	$190.00 per month
For Industrial customers:	$7,000 per month
For Lighting (PSHL)	$175.00 per month

Note: An industrial customer is one with monthly demand equal to or greater than 3,000 kW.

For non-metered services, the lesser of the load profile or otherwise estimated kWh required to provide the service in question, or the service's contract kWh shall be used in the calculation of the surcharge.

This charge will be a line item on customer bills reading "Renewable Energy Standard Tariff."

RULES AND REGULATIONS

The standard Rules and Regulations of the Company as on file with the Arizona Corporation Commission shall apply where not inconsistent with this pricing plan.

TAX CLAUSE

To the charges computed under the above rate, including any adjustments, shall be added the applicable proportionate part of any taxes or governmental impositions which are or may in the future be assessed on the basis of gross revenues of the Company and/or the price or revenue from the electric energy or service sold and/or the volume of energy generated or purchased for sale and/or sold hereunder.

REDLINED

UniSourceEnergy SERVICES

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

APPLICABILITY

Mandatory, non-bypassable surcharge applied to all energy consumed by all customers throughout Company's entire electric service area.

RATES

For all energy billed which is supplied by the Company to the customer, the price shall be $0.012700~~008887~~per kWh of metered monthly energy consumption on all kWh consumed per meter that month up to and including a monthly cap of:

For Residential customers:	$5.50~~4.50~~ per month
For Commercial customers:	$190.00~~150.00~~ per month
For Industrial customers:	$7,000~~5,500~~ per month
For Lighting (PSHL)	$175.00~~135.00~~ per month

Note: An industrial customer is one with monthly demand equal to or greater than 3,000 kW.

For non-metered services, the lesser of the load profile or otherwise estimated kWh required to provide the service in question, or the service's contract kWh shall be used in the calculation of the surcharge.

This charge will be a line item on customer bills reading "Renewable Energy Standard Tariff."

RULES AND REGULATIONS

The standard Rules and Regulations of the Company as on file with the Arizona Corporation Commission shall apply where not inconsistent with this pricing plan.

TAX CLAUSE

To the charges computed under the above rate, including any adjustments, shall be added the applicable proportionate part of any taxes or governmental impositions which are or may in the future be assessed on the basis of gross revenues of the Company and/or the price or revenue from the electric energy or service sold and/or the volume of energy generated or purchased for sale and/or sold hereunder.

EXHIBIT

“8”

CLEAN

Customer Self-Directed Renewable Energy Option
REST-TS2
Renewable Energy Standard Tariff

AVAILABILITY

Open to all Eligible Customers as defined at A.A.C. R14-02-1801.H.

APPLICABILITY

Any Eligible Customer that applies to the Company under this program and receives approval shall participate at its option.

PARTICIPATION PROCESS

An Eligible Customer seeking to participate shall submit to the Company a written application that describes the Distributed Renewable Energy (DRE) resources or facilities that it proposes to install and the estimated costs of the project. The Company shall have sixty (60) calendar days to evaluate and respond in writing to the Eligible Customer, either accepting or declining the project. If accepted, the Customer shall be reimbursed up to the actual dollar amounts of customer surcharge paid under the REST-TS1Tariff in any calendar year in which DRE facilities are installed as part of the accepted project. To qualify for such funds, the Customer shall provide at least half of the funding necessary to complete the project described in the accepted application, and shall provide the Company with sufficient and reasonable written documentation of the project's costs. Customer shall submit their application prior to May 1 of a given year to apply for funding in the following calendar year.

FACILITIES INSTALLED

The maintenance and repair of the facilities installed by a Customer under this program shall be the responsibility of the Customer following completion of the project. In order to be accepted by the Company for reimbursement purposes, the project shall, at a minimum, conform to the Company's System Qualification standards on file with the Commission. (REST Impolementation Plan, Renewable Energy Credit Purchase Program – RECPP, Distributed Generation Interconnection Requirements, Net Metering Tariff, Company's Interconnection Manual)

PAYMENTS AND CREDITS

All funds reimbursed by the Company to the Customer for installation of approved DRE facilities shall be paid on an annual basis no later than March 30th of each calendar year. All Renewable Energy Credits derived from a project, including generation and Extra Credit Multipliers, shall become the property of the Company and shall be applied towards the Company's Annual Renewable Energy Requirement as defined in A.A.C. R14-2-1801.B.

RULES AND REGULATIONS

The standard Rules and Regulations of the Company as on file with the Arizona Corporation Commission shall apply where not inconsistent with this pricing plan.

RELATED SCHEDULES

- REST-TS1 - Renewable Energy Program Expense Recovery

REDLINED

UniSourceEnergy SERVICES

Customer Self-Directed Renewable Energy Option
REST-TS2
Renewable Energy Standard Tariff

AVAILABILITY

Open to all Eligible Customers as defined at A.A.C. R14-02-1801.H.

APPLICABILITY

Any Eligible Customer that applies to the Company under this program and receives approval shall participate at its option.

PARTICIPATION PROCESS

An Eligible Customer seeking to participate shall submit to the Company a written application that describes the Distributed Renewable Energy (DRE) resources or facilities that it proposes to install and the estimated costs of the project. The Company shall have sixty (60) calendar days to evaluate and respond in writing to the Eligible Customer, either accepting or declining the project. If accepted, the Customer shall be reimbursed up to the actual dollar amounts of customer surcharge paid under the REST-TS1Tariff in any calendar year in which DRE facilities are installed as part of the accepted project. To qualify for such funds, the Customer shall provide at least half of the funding necessary to complete the project described in the accepted application, and shall provide the Company with sufficient and reasonable written documentation of the project's costs. Customer shall submit their application prior to May 1 of a given year to apply for funding in the following calendar year.

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The maintenance and repair of the facilities installed by a Customer under this program shall be the responsibility of the Customer following completion of the project. In order to be accepted by the Company for reimbursement purposes, the project shall, at a minimum, conform to the Company's System Qualification standards on file with the Commission. (REST Impolementation Plan, Renewable Energy Credit Purchase Program – RECPP, Distributed Generation Interconnection Requirements, Net Metering Tariff, Company's Interconnection Manual)

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All funds reimbursed by the Company to the Customer for installation of approved DRE facilities shall be paid on an annual basis no later than March 30th of each calendar year. All Renewable Energy Credits derived from a project, including generation and Extra Credit Multipliers, shall become the property of the Company and shall be applied towards the Company's Annual Renewable Energy Requirement as defined in A.A.C. R14-2-1801.B.

RULES AND REGULATIONS

The standard Rules and Regulations of the Company as on file with the Arizona Corporation Commission shall apply where not inconsistent with this pricing plan.

RELATED SCHEDULES

- REST-TS1 - Renewable Energy Program Expense Recovery

EXHIBIT

“9”

Exhibit 9

UNS ELECTRIC, INC.
2012-2013 REST Customer Load Percentage Analysis

Company Proposal Customer Class	Total Revenue	Percent of Revenue	Average Bill	Montly Cap	Percent of Customers at Cap	Percent of Load
Residential	$4,425,833	49.7%	$4.56	$5.50	69.7%	46.65%
Commercial	$4,055,902	45.6%	$61.01	$190.00	9.8%	34.42%
Industrial & Mining	$421,103	4.7%	$6,903.33	$7,000.00	41.52%	18.93%
Total	$8,902,838	100.0%				