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AZ CORP COMMISSION
DOCKET CONTROL

BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

KRISTIN K. MAYES - CHAIRMAN
GARY PIERCE
PAUL NEWMAN
SANDRA D. KENNEDY
BOB STUMP

Arizona Corporation Commission
DOCKETED

SEP 3 2010

VICTOR PETER POLIVKA,

DOCKETED BY [Signature]

DOCKET NO. E-01933A-10-0340

Complainant,

TUCSON ELECTRIC POWER
COMPANY'S ANSWER TO
FORMAL COMPLAINT

vs.

AND

TUCSON ELECTRIC POWER COMPANY,

MOTION TO DISMISS

Respondent

Tucson Electric Power Company ("TEP" or "Company"), through undersigned counsel, answers the Complaint filed by Victor Polivka ("Complainant") docketed on August 11, 2010. TEP anticipated participating in the mediation process with Complainant after speaking with Consumer Services Analyst, Jenny Gomez, on August 30, 2010. Given this understanding, the Company filed a Motion for an Extension of Time so that the mediation process could take place. Since that time, Complainant has decided that he does not wish to participate in the mediation. TEP was informed of this on September 3, 2010 after a TEP Representative called the Commission. TEP was also informed that it had inadvertently omitted Complainant from its earlier filing. The Company apologizes for this omission, and has corrected its distribution list to ensure that Complainant receives all filed communications in the future.

TEP respectfully requests that the Arizona Corporation Commission ("Commission") dismiss Complainant's Complaint for the reasons explained below.

ANSWER

1. TEP denies that Complainant is ineligible for any applicable incentives due to not paying the Renewable Energy Standard Tariff ("REST"). TEP denies that it told Complainant to

1 disconnect his system. Complainant installed his solar system himself, without the advice of
2 local installers and without consulting TEP first. Complainant did not investigate TEP's
3 Renewable Energy Credit Purchase Program ("RECPP") prior to installing his system, nor did he
4 research the City of Tucson's structural requirements for solar systems. For these reasons,
5 Complainant incorrectly configured his battery back-up pack system. Moreover, he neglected to
6 obtain a City of Tucson Inspection Permit, verifying that his mobile home is structurally sound
7 enough to withstand the weight of solar panels. Please see the attached Exhibit 1, a letter from
8 Complainant to TEP dated February 17, 2010, wherein Complainant details his inability to get a
9 permit from the City of Tucson, and acknowledges that he may "just have a very expensive
10 electric system that will never pay for itself..." Please see attached Exhibit 2, Complainant's
11 applications for both the On-Grid and Off-Grid programs, and the accompanying Commission
12 approved Agreements, which state system requirements for both programs, including (in
13 Attachment A at number 10) that "[t]he Customer System and installation must meet the
14 requirements of all federal, state and local building codes and have been successfully inspected
15 by the building official having jurisdiction." TEP asserts that Complainant's system has been
16 and continues to be incorrectly configured to receive either an on-grid or off-grid incentive. TEP
17 asserts that Complainant was aware of all of this as evidenced by his letter to TEP (Exhibit 1)
18 and his attempt to qualify for either program (Exhibit 2).

19 2. In response to Complainant's "violations" numbers two through five and number
20 seven, TEP denies that Complainant's system was disallowed due to the presence of a battery
21 storage back-up system. Complainant has been informed multiple times, in writing and in
22 person, of the reasons why his system is ineligible, including numerous exchanges with
23 Commission Consumer Services Analyst, Jenny Gomez, all of which were made available to
24 Complainant. Please see the attached Exhibit 3, which contains Complainant's initial complaint,
25 Jenny Gomez's inquiries to the Company, and the Company's responses.

26 3. TEP denies that Complainant's application was denied due the system being self-
27 installed. Complainant's system was inaccurately configured to participate in the Company's

1 RECPP, but only because Complainant failed to research the RECPP requirements prior to
2 installation, and not because it was self-installed. Despite Complainant's inaccurate
3 configuration, TEP attempted numerous times to incorporate Complainant's system, including
4 offering him \$4,000 off-grid incentive (please see the attached Exhibit 4, wherein TEP
5 Representative Blanka Anderson explains the offer to Complainant).

6 4. In response to Complainant's "violation" number eight, TEP is in compliance
7 with all of its Renewable Energy Standard and Tariff Implementation Plan filings. TEP has and
8 will continue to file compliance reports related to the Renewable Energy Standard. Arizona
9 Administrative Code R14-2-1812 refers only to REST compliance reports and hearing to
10 determine a utility's compliance with the REST rules. This section of the Code does not deal
11 with or refer to customer complaints in any manner.

12 5. TEP denies that it is refusing to send the City of Tucson a letter of
13 acknowledgement. TEP is not aware of any such letter or requirement. TEP did call the City's
14 Development Service Department and spoke with Ken Van Karsen to ensure that there was no
15 confusion on the Company's part. TEP was informed that the City did not need any such letter.
16 Moreover, as the City is aware, TEP is in need of a letter of inspection from the City on
17 Complainant's behalf, certifying that Complainant's solar configuration meets all applicable
18 building codes. This is for the Complainant's safety and under the jurisdiction of the City. The
19 City informed TEP that it was awaiting information from Complainant. Please see the attached
20 Exhibit 3 for the details of this exchange.

21 6. TEP denies that Complainant has had final system inspection as required and
22 explained in Exhibit 2. TEP Representative Chris Lindsey did go to Complainant's home to
23 evaluate Complainant's system for participation in any of TEP's incentive programs. This was
24 not a final inspection, however, and since that time, Complainant threatened to call the police on
25 Mr. Lindsey for coming to his home for unlawful purposes (please see Exhibit 5). Complainant
26 cannot now assert that his system underwent and passed a final system inspection that day as he

27

1 states in Exhibit 5 that Mr. Lindsey “did not inspect anything in my presence (*sic*) indie (*sic*) the
2 home.”

3 7. TEP denies that its previous offer to include Complainant in any incentive
4 program was in error. TEP properly calculated the only incentive that Complainant could partake
5 of, and that would only have been after he passed inspection by the City of Tucson. Please see
6 the attached Exhibit 3 for an explanation of this incentive amount.

7 8. TEP denies each and every allegation not specifically admitted herein.

8 **AFFIRMATIVE DEFENSES**

9 9. Complainant has failed to state a claim upon which relief may be granted.

10 10. Complainant has alleged no “violation of any provision of law or any order or rule
11 of the commission” as required by Arizona Revised Statute § 40-246(A).

12 11. TEP does not know at this time which, if any, additional defenses may apply.
13 TEP believes that facts may come to light in this case that support any or all of the affirmative
14 defenses set forth in Rule 8(c), Arizona Rules of Civil Procedure, and hereby incorporates them
15 by reference.

16 WHEREFORE, having fully answered Mr. Polivka’s Complaint, TEP requests that the
17 Commission issue a Decision dismissing the Complaint; and

18 1. Denying all relief sought by Complainant, including any request that Complainant
19 be compensated outside the requirements of TEP’s Commission approved RECPP; and

20 2. Granting such further relief as this Commission deems just and reasonable.

21

22 RESPECTFULLY SUBMITTED this 3rd day of September 2010.

23

TUCSON ELECTRIC POWER COMPANY

24

By Melody Gilkey

25

Melody Gilkey, Regulatory Counsel

26

Tucson Electric Power Company

27

One South Church Avenue, Suite 200

Tucson, Arizona 85701

Attorney for Tucson Electric Power Company

1 Original and 13 copies of the foregoing
2 filed this 3rd day of September 2010 with:

3 Docket Control
4 Arizona Corporation Commission
5 1200 West Washington Street
6 Phoenix, Arizona 85007

7 Copy of the foregoing hand-delivered/mailed
8 this 3rd day of September 2010 to:

9 Belinda A. Martin, Esq., Administrative Law Judge
10 Hearing Division
11 Arizona Corporation Commission
12 400 West Congress Suite # 221
13 Tucson, AZ 85701-1347

14 Jenny Gomez
15 Utilities Division
16 Arizona Corporation Commission
17 400 West Congress Suite #221
18 Tucson, AZ 85701-1347

19 Scott Hesla
20 Legal Division
21 Arizona Corporation Commission
22 1200 West Washington Street
23 Phoenix, Arizona 85007

24 Steve M. Olea, Director
25 Utilities Division
26 Arizona Corporation Commission
27 1200 West Washington Street
Phoenix, Arizona 85007

Victor P. Polivka
4675 S. Harrison Road, 82
Tucson, Arizona 85730-4537

By Cara Ruben

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EXHIBIT 1

Wednesday, February 17, 2010

Viktor Peter Polivka
4675 S. Harrison Rd. #82
Tucson, Arizona 85730
Phone: 520-303-7308

Mrs. Blanca Anderson
Tucson Electric power Company
PO. Box 711
Tucson, Arizona 85702
Phone: 520-918-8296

RE: On Grid Residential Solar Electric Application
Ref: Acct. # 4110417652

Dear Mrs. Anderson:

Enclosed is my application for the On Grid Solar Electric Incentive (UFI). I've attached all the available publications that refer to my equipment am installing in my residence at the above listed address. The application is filled to the extend that I was able complete. I called the Tucson Development Office for a permit , but the answer is quite nebulous regarding the need for a permit – in fact, I'm installing a "low voltage system (24VDC), which needs no permit, but now they changed the "classification" since I'm using inverters, allegedly I then need a permit.

The main issue now will be the fact, that I'm living in a "Mobile Home"(apparently there are no mobile homes in Tucson that have applied for the On Grid Residential Solar Electric, hence they are "applying the standards that apply to a standard home construction of "fixed structures and not mobile. The fact that mobile homes indeed meet building codes for a manufactured home and are approved as such is a reality and a fact of life. Hence, discriminating against mobile homes for not meeting construction standards' is not equitable. The are built to a unique construction codes, that do not apply to homes However, they are not able to met the "construction standards of a fixed custom home residence. This therefore now becomes a "Catch 22" dilemma , for some structural elements have been omitted or modified, thus the mobile home can not meet the standard the code enforcement people want to impose, yet they are APPROVED by the State of Arizona as a mobile unit.

The main issue at hand is the "structural" composition of the roof design as compared to a fixed home. I've contacted several Architects in Tucson, and they referred me to a" Structural Engineer. However, when I called, the Engineer stated that he no longer does "structural evaluations on mobile homes (he also stated that this is due to his insurance company no longer covering mobile homes, and that all Structural Engineers in Tucson have the same problem —they do not evaluate structural elements of mobile homes, since most have the same insurance company – I also called the manufacturer of my

mobile home Cavco, but the Engineer is out of the office until March (vacation). But, I'm certain that they do not have any documentation of the structural elements for my unit on file any longer (1984 model).

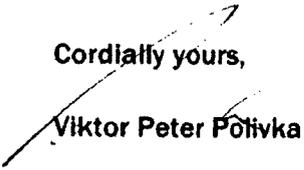
The only way I see how to "alleviate" the structural stress, if any by the Solar Arrays to wind exposure, is to "lower" the modules to the original flat mounting parallel to the pitch of the roof 16degrees, this then will eliminate the wind stress and only the total weight of the modules would be a factor (combined weight is 1000lbs). Also, they are trying to "enforce" a wind load to a category 2 Hurricane. The mounting rails will withstand un to category 5, but I doubt that the roof or the entire structure would fly off long before that (as a mater of fact, I do not believe that many homes in Tucson would withstand that sort of wind load anyway!

Well I'll give it a try, and maybe I'll be approved for the incentive. Also during the conversation with the "code person", he motioned something about the Sunshade program, that does not need to have a permit for the Solar system as long as it is approved by TEP! Maybe. I'll qualify for that program.

I'm sending you 2 applications: one for the On Grid Residential Solar Electric and the other for the Off Grid Residential Solar Electric -I do not see what the difference is the apps are the same- but, if that is the only alternative to qualify for the incentive, why not. I can go Off Grid, but then TEP would not be able to receive my excess electricity I'll harvest - I guess, I'll have to purchase a truck full of light bulbs to consume the unneeded current?

With hopes that I'm on the right track and will come to some sort of agreement, otherwise, I'll just have a very expensive electric system that will never pay for itself, I'll have to live 495 years more just to break even....

Cordially yours,


Viktor Peter Pölvka

PS. PEASE NOTE MY NEW PHONE NUMBER. It is: 520-303-7308

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EXHIBIT 2

OPTION # 1
OPTION # 1

Module Home
~~Net Agreement~~

* Annual in year *

ACC APPROVED 4/10/08

TUCSON ELECTRIC POWER COMPANY ON-GRID RESIDENTIAL SOLAR ELECTRIC APPLICATION



SunShare

Customer Information

Name (As it appears on utility bill) Viktor P. Polivka
Mailing Address 4675 S. HARRISON RD LOT # 82
City TUCSON, AZ Zip Code 85730
Street Address (If different from above) _____
Daytime Phone Number 520-303-7308
E-mail Address: PPOLIVKA@POLIVKA.NET Account Number 4110417652
Operating Agent (If different from Customer) _____

Solar - PV System Information

Module Supplier Name KYOCERA/ALTE Nameplate DC Rating 210 watts
Module Manufacturer KYOCERA Type KD210GXLP Quantity of Modules 24
Module Warranty 20 year (Copy of warranty must be on file with Tucson Electric Power.)
Inverter Make and Model Number XANTREK XW4024-120/240-60
Inverter Warranty 5 years (Copy of inverter warranty must be on file with Tucson Electric Power).
Total Cost 49,344.60 PV Cost 18,705.50 Labor Cost SELF INSTALL
Estimated Installation Date MARCH 1, 2010

System Qualifications

The system must meet the requirements outlined in Attachment A and Attachment B of the On-Grid Residential Solar Up Front Incentive (UFI) or Performance Based Incentive (PBI) Agreements.

Rebate Calculation

Rebate Calculation: Nameplate DC Rating 210 Watts x Quantity of Panels 24 = System Size 5040W

UFI Calculation for residential projects with a 10 year inverter warranty.

Rebate Calculation: 5040 kW (System Size) x \$3.00 per W = 15,120

Rebate Calculation for Self-Install: _____ kW (System Size) x \$3.00 x 70% = _____

UFI – Residential BIPV 5 kW DC or less

Rebate Calculation: _____ kW (System Size) x \$ _____ x 90% = _____ (UFI)

PBI Calculation for residential projects with less than a 20 year module warranty or less than a 10 year inverter warranty or for residential projects with a BIPV system over 5 kW .

Estimated annual energy production of system _____ kwh x PBI amount _____ \$/kwh = _____ PBI

TEP rebate cannot be more than 60% of system cost. Customer must pay at least 15% of system cost.

Customer Reservation Bid

Customer may elect to use maximum PBI payback listed in the Project Incentive Matrix or choose a smaller PBI amount that will be more competitive in the period ranking system.

Project Information

Has a City/County Permit been secured? _____ Yes No

Is this an application for Net Metering: _____ Yes No (Net metering applies to systems 10 kW AC or less)

Does this installation meet all ACC Interconnection/REST requirements? Yes _____ No

Installer Information

Installer/Dealer Name _____

Business Address _____

Arizona Registrar of Contractors (AZROC) License Information

AZROC License Number _____ Class _____ Expiration Date _____

Assignment of Payment

I authorize Tucson Electric Power (TEP) to issue, on my behalf, my full rebate to the following installer/dealer as payment toward the cost and/or installation of my PV system. I acknowledge that the payment made to the below named installer satisfies the financial obligation to me in connection with the Agreement signed by myself and TEP.

Company Name _____

Contact Person _____

Business Address _____

Customer Signature _____ Date _____

Inspection Authorization

TEP, at its option, may perform periodic inspections of the system to ensure it is operating efficiently and safely. Presently TEP outsources all SunShare inspection services to a qualified third-party contractor. Do you authorize TEP to use a qualified third party contractor for your annual inspection?

Authorization Agreed
Authorization Denied

There are animals in the yard that the Program Inspector needs to be aware of. Yes No (DOG)

WHEN COMPLETE PLEASE MAIL TO: SunShare/Renewables, PO Box 711, Mailstop DS501, Tucson, AZ 85702

OPTION #1

REVISION 0
ACC APPROVED 4/10/08



A UniSource Energy Company

**SunShare Residential Solar Program
Grid-Tied
Up Front Incentive (UFI)
Renewable Energy Credit Purchase Agreement**

This Grid-Tied Residential Solar Up Front Incentive (UFI) Agreement (the "Agreement") is hereby made and entered into this 29th day of FEBRUARY, 2010, by and between Tucson Electric Power Company, an Arizona corporation ("Company"), and Viktor Peter Polivka, ("Customer"). Company and Customer may be referred to individually herein as a "Party" or collectively as the "Parties." Grid-Tied Residential Solar is hereby referred to as the "Program."

RECITALS

A. Company desires to increase the number of solar electricity generation facilities and the consumption of solar electricity within its service territory, while concurrently reducing the cost of solar electric generation systems for its customers. In support of these objectives and to further Company's continuing commitment to develop and encourage the use of renewable energy resources, Company has implemented the Program to provide financial incentives to its customers to install solar generating equipment; and

B. Company desires for Customer to participate in the Program and Customer desires to so participate under the terms and conditions contained in this Agreement, at the address of 4675 S. HARRISON RD, 40182, TUCSON, Arizona (the "Premises").

NOW, THEREFORE, in consideration of these premises and of the mutual promises herein contained, Company and Customer hereby agree as follows:

AGREEMENT

1. PROGRAM

Customer shall elect to participate in the Program by entering into this Agreement subject to the following conditions:

1.1 Renewable Energy System

1.1.1 System. Customer shall purchase a renewable energy generating system from any third party of Customer's choice ("Customer System"). To qualify under the Program, any such Customer System must comply with all renewable energy grid-tied residential solar technology specific requirements set forth in Attachment A "System Qualifications" and Attachment B "Off Angle & Shading Annual Derating Chart", which are attached hereto and incorporated herein.

1.1.2 Basis of Payment. The calculation of Customer environmental credits and Company payments hereunder shall be based on the system capacity or estimated energy kWh production rather than on measured system output. This represents a one time Up Front Incentive ("UFI") payment method.

2. SYSTEM INSTALLATION

To qualify for participation in the Program, all Customer Systems shall be installed by or on behalf of Customer in accordance with the requirements set forth in Attachment A and Attachment B, including, without limitation, a proper interconnection with Company's existing power grid. Customer shall be solely responsible for the installation of the Customer System, including all costs and expenses associated therewith.

3. SYSTEM INSPECTION

Following installation of Customer's System, Company shall inspect the Customer System for compliance with the applicable requirements set forth in Attachment A and Attachment B. If the Customer System or installation is found to be not in compliance for any reason, Company will notify Customer of the deficiencies causing the noncompliance. Company will have no further obligations under this Agreement until all such deficiencies are remedied by Customer to Company's reasonable satisfaction.

4. SYSTEM ELECTRICAL OUTPUT

Customer hereby assigns to Company all of its rights to all electrical output of the Customer System and all associated environmental credits, specifically including those created under the Arizona Corporation Commission's Renewable Energy Standard and Tariff Program (the "REST"), which may result from the installation and use of the Customer System. Company will thereafter return any and all value of such electric output to the Customer at no cost to

Customer. Company's right to Customer's power output and Renewable Energy Credits assigned hereunder shall continue until December 31st of the 20th full calendar year after completion of the installation of the Customer System in compliance with this Agreement (the "Assignment Period") and shall survive any termination of this Agreement.

5. RENEWABLE ENERGY CREDIT PURCHASE

Subject to the Customer System passing the Company inspection set forth in Section 3 above and to Customer's compliance with the remaining terms and conditions of this Agreement, Company shall pay Customer \$3.00 per DC Watt of installed on-grid residential solar generating capacity of the Customer System for which completed Agreements are received and accepted by the Company and which system is operational within 180 days after application acceptance, as prorated by any de-rating for off-angle and shading that may apply by the percentages listed on the chart in Attachment B. The Customer System's DC Watts of installed on-grid residential solar generating capacity shall be determined by Company following Company's receipt of a copy of the City or County building permit associated with the installation of the Customer System, successful Customer System inspection and determination of the level of compliance with Attachment B. Any amounts determined to be owed under this Section shall be paid by Company to Customer within 30 days following the Company's completion of AC kWh testing hereunder.

6. RIGHTS TO CREDITS

Company shall have the right to the Renewable Energy Credits from the Customer System until the end of the Assignment Period. Customer shall not offer to sell or trade Renewable Energy Credits from the Customer System to any other party during this time. Customer shall not remove the Customer System or any components thereof from the Premises during the Assignment Period without express agreement of Company. If Customer removes the Customer System in violation of this Section 6, Customer shall immediately reimburse Company all UFI amounts paid by Company to Customer hereunder.

7. METER READING

Once per year, typically in late December, during the term of this Agreement, Company shall read the Customer System solar production meter. Thus, Company reserves the right to read, at its option, the Customer System meter. Customer shall provide Company with reasonable access to its Customer System to conduct any such readings.

8. WARRANTY

COMPANY MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND HEREUNDER, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ITS PERFORMANCE HEREUNDER WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, COMPANY MAKES NO REPRESENTATIONS

OR WARRANTIES WITH RESPECT TO THE CUSTOMER SYSTEM, ITS OPERATION, SAFETY, INSTALLATION, OR COMPLIANCE WITH ANY BUILDING OR SAFETY CODES, RULES OR REGULATIONS, AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, COMPANY HEREBY EXPRESSLY DISCLAIMS ANY AND ALL LIABILITY ASSOCIATED THEREWITH.

9. LIMITATION OF LIABILITY

COMPANY'S ENTIRE LIABILITY ARISING OUT OF ITS PERFORMANCE UNDER THIS AGREEMENT SHALL BE LIMITED TO DIRECT ACTUAL DAMAGES STEMMING FROM CLAIMS DIRECTLY ATTRIBUTABLE TO COMPANY'S GROSS NEGLIGENCE OR WILLFUL MISCONDUCT. IN NO EVENT SHALL COMPANY, ITS EMPLOYEES OR AGENTS BE LIABLE TO CUSTOMER FOR LOSS OF PROFITS OR ANY OTHER SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGE, HOWEVER CAUSED, RESULTING FROM COMPANY'S PERFORMANCE HEREUNDER.

10. TERMINATION

If either Party shall at any time commit any material breach of any covenant or warranty under this Agreement and shall fail to cure the same within 30 days following written notice thereof, the non-breaching Party may terminate this Agreement, in whole or in part. This Agreement may also be terminated at any time by mutual written agreement of the Parties.

11. MISCELLANEOUS

- 11.1 Modification, Waiver and Severability. This Agreement may not be modified or supplemented except by written instrument signed by the Parties. No waiver of any default or breach hereof shall be deemed a waiver of any other default or breach thereof. If any part of this Agreement is declared void and/or unenforceable, such part shall be deemed severed from this Agreement which shall otherwise remain in full force and effect.
- 11.2 Assignment. This Agreement and the rights, duties, and obligations hereunder may not be assigned or delegated by any Party without the prior written consent of Company.
- 11.3 Governing Law and Venue. This Agreement shall be governed by the laws of the State of Arizona, without regard to the choice of law provisions thereof. Venue for any dispute arising hereunder shall be any court of competent jurisdiction located in Pima County, Arizona.
- 11.4 Entire Agreement. This Agreement is the final integration of the agreement between the Parties with respect to the matters covered by it and supersedes any prior understanding or agreements, oral or written, with respect thereto.

- 11.5 Counterparts. This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same Agreement.
- 11.6 Titles and Captions. Titles or captions contained in this Agreement are inserted for convenience and for reference only and in no way define, limit, extend, or describe the scope of this Agreement or the intent of any provision hereof.
- 11.7 Expenses and Attorney's Fees. In the event of a breach or threatened breach of any term or provision of this Agreement, the non-breaching party shall be entitled to all of its remedies available at law or in equity, unless otherwise limited in this Agreement, and in addition shall be entitled to be reimbursed for all of its reasonable costs and expenses in enforcing this Agreement (if successful), including, but not limited to, reasonable attorney's fees. This section shall survive termination or expiration of this Agreement for any reason.
- 11.8 Force Majeure. Neither Party shall be liable to the other for failure to perform its obligations hereunder to the extent such failure results from causes beyond its reasonable control, including strikes, climatic conditions, acts of God, governmental laws, regulations, orders or requirements, interruptions of power or unavailability of equipment or supplies.
- 11.9 Customer Sale of Premises. In the event Customer sells the Premises where the Customer installed the Customer System, Customer's successor-in-interest shall expressly assume all of Customer's obligations hereunder in writing, and this Agreement shall not be affected, nor shall Company's rights hereunder be disturbed in any way, including, without limitation, Company's continued right to all Renewable Energy Credits assigned pursuant to Section 4 hereunder.
- 11.10 Notices. All notices under this Agreement shall be in writing and shall be given to the Parties thereto by personal service (including receipted confirmed facsimile), or by certified or registered mail, return receipt requested, or by recognized overnight courier service, to the Parties at the addresses set forth below. All notices shall be deemed given upon the actual receipt thereof.

Company: Tucson Electric Power Company
PO Box 711
Tucson, Arizona 85702
Fax: (520) 918-8350
Attn: Renewable Energy & Energy Efficiency Group

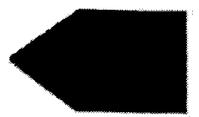
[signatures on following page]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed as of February 22, 2010.

TUCSON ELECTRIC POWER COMPANY

By: _____

Title: _____



CUSTOMER

By: _____

Print Name: Viktor Peter Poulos

Address: 4675 S. HALLISON RD.

LOT # 82

TUCSON AZ 85730

Phone: 520-303-7308

BELOW TO BE FILLED IN BY UTILITY

Estimated Capacity Reserved: _____ kW

Estimated Funding Reserved: \$ _____

Date Reserved: FEB 22 2010

Application Process
ATTACHMENT A
Grid-Tied Residential Solar System Qualifications

All grid-tied residential solar Customer Systems must meet the following system and installation requirements to qualify for Tucson Electric Power Company's ("TEP" or the "Company") Renewable Energy Credit Purchase Program. Capitalized terms not defined herein shall have the meanings ascribed to them in the Renewable Energy Credit Purchase Program Agreement.

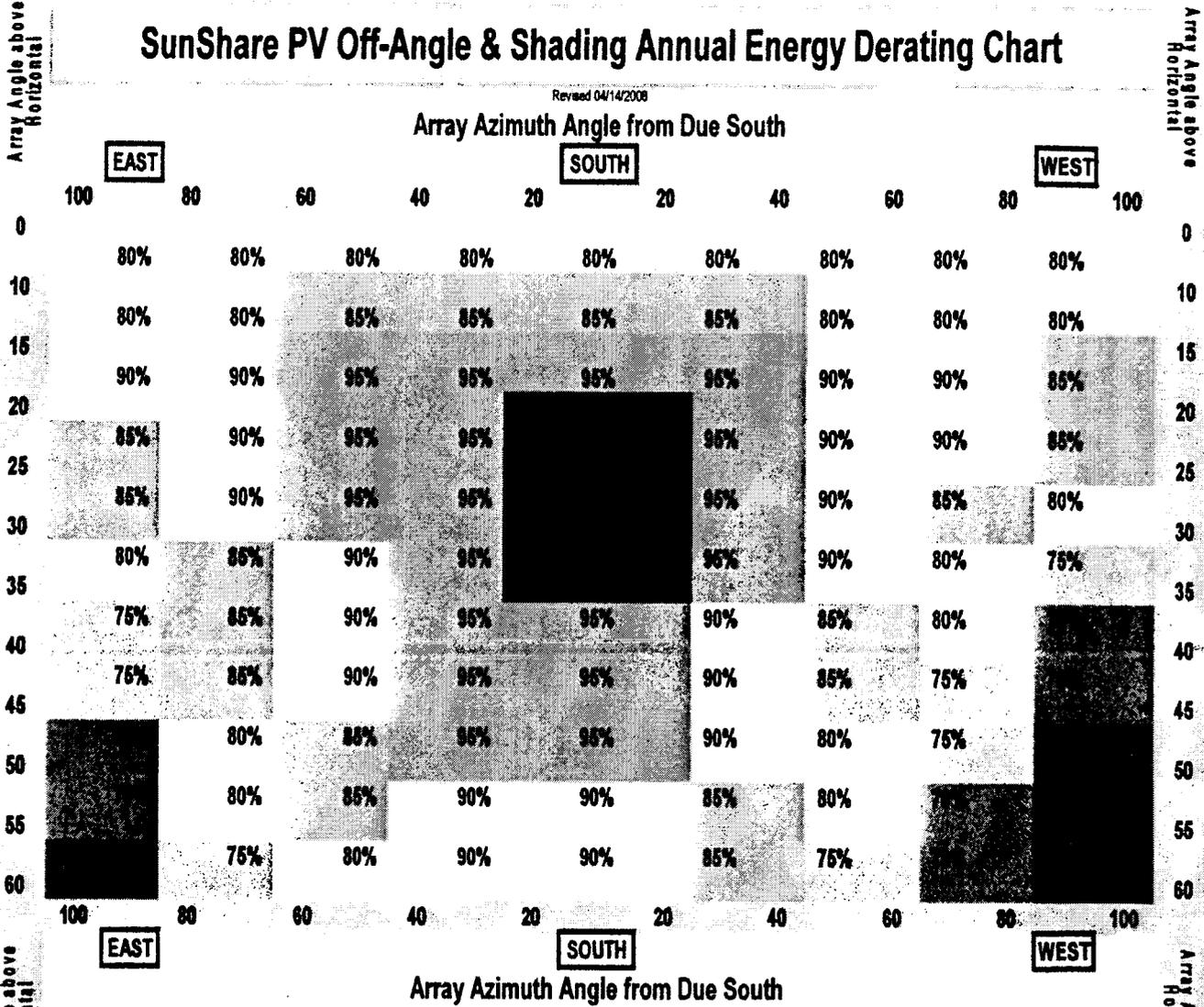
1. All systems shall be installed with a horizontal tilt angle between 10 degrees and 60 degrees, and an azimuth angle of +/- 100 degrees of due south. Installation configurations for some systems receiving a UFI will not be eligible for the full RECPP incentive. The reduction will be determined by the TEP developed de-rating chart, Attachment B of this document, and as discussed further in this report under the section titled Conforming Project Incentives.
2. Qualifying systems using Building Integrated Photovoltaic (BIPV) modules of total array capacity of 5 kWDC or less shall receive 90% of the UFI incentive value for PV systems listed in Attachment A. Systems using BIPV module of total array capacity of greater than 5 kWDC shall only receive a PBI (see on-grid residential PBI Agreement).
3. Photovoltaic modules must be covered by a manufacturer's warranty of at least 20 years.
4. Inverters must be covered by a manufacturer's warranty of at least ten years to receive a UFI and at least five years to receive a PBI (see on-grid residential PBI Agreement).
5. The minimum PV array size shall be no less than 1,200 Wdc.
6. All photovoltaic modules must be certified by a nationally recognized testing laboratory as meeting the requirements of UL Standard 1703.
7. All other electrical components must be UL listed.
8. 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.
9. 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, overcurrent protection, disconnect and labeling requirements.

10. 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.
11. The Customer System must meet Company and Arizona Corporation Commission interconnection requirements for self-generation equipment.
12. The Customer System installation must meet the TEP Service Requirements 2000 Edition, Page 1.20, as follows:

"AN AC DISCONNECT MEANS SHALL BE PROVIDED ON ALL UNGROUNDED AC CONDUCTORS and SHALL CONSIST OF A LOCKABLE GANG OPERATED DISCONNECT CLEARLY INDICATING OPEN OR CLOSED. THE SWITCH SHALL BE VISUALLY INSPECTED TO DETERMINE THAT THE SWITCH IS OPEN. THE SWITCH SHALL BE CLEARLY LABELED STATING "DG SERVICE DISCONNECT."
13. For Residential Customer Systems, Company will provide a meter and meter socket that will be installed in a readily accessible outdoor location by the Customer between the Customer System and the connection to the overcurrent device in the Customer's electric service panel.
14. Energy storage devices are not allowed as part of the Customer System unless the energy storage charge controller is a separate component and Company can locate the meter at the Customer System's inverter output. Other types of qualified energy storage devices meet PBI requirements (see PBI Agreement).
15. Installation must have been made after January 1, 1997.
16. The Customer must be connected to the Company's electric grid.
17. All Customer System installations must be completed in a professional, workmanlike and safe manner.

ATTACHMENT B
SunShare PV Off-Angle & Shading Annual Energy Derating Chart

SunShare PV Off-Angle & Shading Annual Energy Derating Chart



If both off angle and shading conditions apply, multiply the off angle derating factor with the shading derating factor to obtain the array derating factor for the SunShare payment calculation.

Maximum Morning Shaded Hours	1	0	2	1	2	2	0	3	3	3
Maximum Evening Shaded Hours	1	2	0	2	1	2	3	0	3	1
Percentage of Annual Energy =	95%	90%	90%	85%	85%	75%	75%	70%	75%	70%

OPPOU # 2

Agreement Disagreed

ACC APPROVED - 4/10/08

* Animal in yard *

TUCSON ELECTRIC POWER COMPANY
OFF-GRID
RESIDENTIAL SOLAR ELECTRIC APPLICATION



Customer Information

Name (As it appears on utility bill) VICTOR P POLIVKA
Mailing Address 4675 S. HARRISON RD LOT # 82
City TUCSON, AZ Zip Code 85730
Street Address (if different from above) _____
Daytime Phone Number 520-303-7308
E-mail Address PROVIVA1@COY.NET Account Number 4110417652
Operating Agent (If different from Customer) _____

Solar - PV System Information

Module Supplier Name KYOCERA/ATE Nameplate DC Rating 210 watts
Module Manufacturer KYOCERA Type MD210GX Quantity of Modules 24
Module Warranty 20 years (Copy of warranty must be on file with Tucson Electric Power)
Inverter Make and Model Number XANTREX, XW4024-120/240-60
Inverter Warranty 5 years (Copy of inverter warranty must be on file with Tucson Electric Power)
Total Cost 49,334.60 PV Cost 18,705.50 Labor Cost SELF INSURE
Estimated Installation Date MARCH 1, 2010

System Qualifications

The system must meet the requirements outlined in Attachment A and Attachment B of the Off-Grid Residential Solar Up Front Incentive or Performance Based Incentive Agreements.

Rebate Calculation

UFI Calculation for residential projects with a 20 year or longer module warranty and a 10 year or longer inverter warranty.

Nameplate DC Rating 210 Watts x Quantity of Panels 24 = System Size 5040

Rebate Calculation: _____ kW (System Size) x \$2.00 = _____ (UFI)

Rebate Calculation for Self-Install: _____ kW (System Size) x \$2.00 x 70% = _____

UFI – Residential BIPV 5 kW DC or less

Rebate Calculation: _____ kW (System Size) x \$2.00 x 90% = _____ (UFI)

TEP rebate cannot be more than 60% of system cost. Customer must pay at least 15% of system cost.

Customer Reservation Bid

Customer may elect to use maximum PBI payback listed in the Project Incentive Matrix or choose a smaller PBI amount that will be more competitive in the period ranking system.

Project Information

Has a City/County Permit been secured? Yes No

Is this an application for Net Metering: Yes No (Net metering applies to systems 10 kW AC or less)

Does this installation meet all ACC Interconnection/REST requirements? Yes No

Installer Information

Installer/Company Name _____

Business Address _____

Arizona Registrar of Contractors (AZROC) License Information _____

AZROC License Number _____ Class _____ Expiration Date _____

Assignment of Payment

I authorize Tucson Electric Power (TEP) to issue, on my behalf, my full rebate to the following installer/dealer as payment toward the cost and/or installation of my PV system. I acknowledge that the payment made to the below named installer satisfies the financial obligation to me in connection with the Agreement signed by myself and TEP.

Company Name _____

Contact Person _____

Business Address _____

Customer Signature _____ Date _____

Inspection Authorization

TEP, at its option, may perform periodic inspections of the system to ensure it is operating efficiently and safely. Presently TEP outsources all SunShare inspection services to a qualified third-party contractor. Do you authorize TEP to use a qualified third party contractor for your annual inspection?

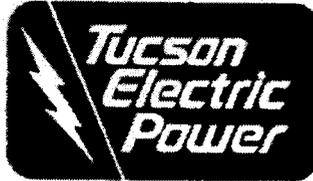
Authorization Agreed
Authorization Denied

There are animals in the yard that the Program Inspector needs to be aware of: ✓ Yes No *DOB,*

WHEN COMPLETE PLEASE MAIL TO: SunShare/Renewables, PO Box 711, Mailstop DS501, Tucson, AZ 85702

OPTION #2

REVISION 0
ACC APPROVED - 4/10/08



A UniSource Energy Company

**SunShare Residential Solar Program
Off-Grid
Up Front Incentive (UFI)
Renewable Energy Credit Purchase Agreement**

This Off-Grid Residential Solar Up Front Incentive (UFI) Agreement (the "Agreement") is hereby made and entered into this 24 day of FEBRUARY, 2010, by and between Tucson Electric Power Company, an Arizona corporation ("Company"), and VINCENT PETER POLIHA, ("Customer"). Company and Customer may be referred to individually herein as a "Party" or collectively as the "Parties." Off-Grid Residential Solar is hereby referred to as the "Program."

RECITALS

A. Company desires to increase the number of solar electricity generation facilities and the consumption of solar electricity within its service territory, while concurrently reducing the cost of solar electric generation systems for its customers. In support of these objectives and to further Company's continuing commitment to develop and encourage the use of renewable energy resources, Company has implemented the program to provide financial incentives to its customers to install solar generating equipment (the "Program"); and

B. Company desires for Customer to participate in the Program and Customer desires to so participate under the terms and conditions contained in this Agreement, at the address of 4675 S. HARRISON RD, LOT 82, TUCSON, Arizona (the "Premises").

NOW, THEREFORE, in consideration of these premises and of the mutual promises herein contained, Company and Customer hereby agree as follows:

AGREEMENT

1. PROGRAM

Customer shall elect to participate in the Program by entering into this Agreement subject to the following conditions:

1.1 Renewable Energy System

1.1.1 System. Customer shall purchase a renewable energy generating system from any third party of Customer's choice ("Customer System"). To qualify under the Program, any such Customer System must comply with all renewable energy off-grid residential solar technology specific requirements set forth in Attachment A "System Qualifications" and Attachment B "Off Angle & Shading Annual Derating Chart", which are attached hereto and incorporated herein.

1.1.2 Basis of Payment. The calculation of Customer environmental credits and Company payments hereunder shall be based on the system capacity (Watts DC) rather than on measured system output. This represents a one time Up Front Incentive ("UFI") payment method.

2. SYSTEM INSTALLATION

To qualify for participation in the Program, all Customer Systems shall be installed by or on behalf of Customer in accordance with the requirements set forth in Attachment A and Attachment B, Customer shall be solely responsible for the installation of the Customer System, including all costs and expenses associated therewith.

3. SYSTEM INSPECTION

Following installation of Customer's System, Company shall inspect the Customer System for compliance with the applicable requirements set forth in Attachment A and Attachment B. If the Customer System or installation is found to be not in compliance for any reason, Company will notify Customer of the deficiencies causing the noncompliance. Company will have no further obligations under this Agreement until all such deficiencies are remedied by Customer to Company's reasonable satisfaction.

4. SYSTEM ELECTRICAL OUTPUT

Customer hereby assigns to Company all of its rights to all electrical output of the Customer System and all associated environmental credits, specifically including those created under the

Arizona Corporation Commission's Renewable Energy Standard and Tariff Program (the "REST"), which may result from the installation and use of the Customer System. Company will thereafter return any and all value of such electric output to the Customer at no cost to Customer. Company's right to Customer's power output and Renewable Energy Credits assigned hereunder shall continue until December 31st of the 20th full calendar year after completion of the installation of the Customer System in compliance with this Agreement (the "Assignment Period") and shall survive any termination of this Agreement.

5. RENEWABLE ENERGY CREDIT PURCHASE

Subject to the Customer System passing the Company inspection set forth in Section 3 above and to Customer's compliance with the remaining terms and conditions of this Agreement, Company shall pay Customer \$2.00 per DC Watt of installed off-grid residential solar generating capacity of the Customer System for which completed Agreements are received and accepted by the Company and which system is operational within 180 days after application acceptance, as prorated by any de-rating for off-angle and shading that may apply by the percentages listed on the chart in Attachment B. The Customer System's DC Watt of installed off-grid residential solar generating capacity shall be determined by Company following Company's receipt of a copy of the City or County building permit associated with the installation of the Customer System, successful Customer System inspection and determination of the level of compliance with Attachment B. Any amounts determined to be owed under this Section shall be paid by Company to Customer within 30 days following the Company's completion of AC kWh testing hereunder.

6. RIGHTS FOR CREDITS

Company shall have the right to the Renewable Energy Credits from the Customer System until the end of the Assignment Period. Customer shall not offer to sell or trade Renewable Energy Credits from the Customer System to any other party during this time. Customer shall not remove the Customer System or any components thereof from the Premises during the Assignment Period without express agreement of Company. If Customer removes the Customer System in violation of this Section 6, Customer shall immediately reimburse Company all UFI amounts paid by Company to Customer hereunder.

7. WARRANTY

COMPANY MAKES NO REPRESENTATIONS OR WARRANTIES OF ANY KIND HEREUNDER, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ITS PERFORMANCE HEREUNDER. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, COMPANY MAKES NO REPRESENTATIONS

OR WARRANTIES WITH RESPECT TO THE CUSTOMER SYSTEM, ITS OPERATION, SAFETY, INSTALLATION, OR COMPLIANCE WITH ANY BUILDING OR SAFETY CODES, RULES OR REGULATIONS, AND TO THE MAXIMUM EXTENT PERMITTED BY LAW, COMPANY HEREBY EXPRESSLY DISCLAIMS ANY AND ALL LIABILITY ASSOCIATED THEREWITH.

8. LIMITATION OF LIABILITY

COMPANY'S ENTIRE LIABILITY ARISING OUT OF ITS PERFORMANCE UNDER THIS AGREEMENT SHALL BE LIMITED TO DIRECT ACTUAL DAMAGES STEMMING FROM CLAIMS DIRECTLY ATTRIBUTABLE TO COMPANY'S GROSS NEGLIGENCE OR WILLFUL MISCONDUCT. IN NO EVENT SHALL COMPANY, ITS EMPLOYEES OR AGENTS BE LIABLE TO CUSTOMER FOR LOSS OF PROFITS OR ANY OTHER SPECIAL, INDIRECT, OR CONSEQUENTIAL DAMAGE, HOWEVER CAUSED, RESULTING FROM COMPANY'S PERFORMANCE HEREUNDER.

9. TERMINATION

If either Party shall at any time commit any material breach of any covenant or warranty under this Agreement and shall fail to cure the same within 30 days following written notice thereof, the non-breaching Party may terminate this Agreement, in whole or in part. This Agreement may also be terminated at any time by mutual written agreement of the Parties.

10. MISCELLANEOUS

- 10.1. Modification, Waiver and Severability. This Agreement may not be modified or supplemented except by written instrument signed by the Parties. No waiver of any default or breach hereof shall be deemed a waiver of any other default or breach thereof. If any part of this Agreement is declared void and/or unenforceable, such part shall be deemed severed from this Agreement which shall otherwise remain in full force and effect.
- 10.2. Assignment. This Agreement and the rights, duties, and obligations hereunder may not be assigned or delegated by any Party without the prior written consent of Company.
- 10.3. Governing Law and Venue. This Agreement shall be governed by the laws of the State of Arizona, without regard to the choice of law provisions thereof. Venue for any dispute arising hereunder shall be any court of competent jurisdiction located in Pima County, Arizona.

- 10.4 Entire Agreement. This Agreement is the final integration of the agreement between the Parties with respect to the matters covered by it and supersedes any prior understanding or agreements, oral or written, with respect thereto.
- 10.5 Counterparts. This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same Agreement.
- 10.6 Titles and Captions. Titles or captions contained in this Agreement are inserted for convenience and for reference only and in no way define, limit, extend, or describe the scope of this Agreement or the intent of any provision hereof.
- 10.7 Expenses and Attorney's Fees. In the event of a breach or threatened breach of any term or provision of this Agreement, the non-breaching party shall be entitled to all of its remedies available at law or in equity, unless otherwise limited in this Agreement, and in addition shall be entitled to be reimbursed for all of its reasonable costs and expenses in enforcing this Agreement (if successful), including, but not limited to, reasonable attorney's fees. This section shall survive termination or expiration of this Agreement for any reason.
- 10.8 Force Majeure. Neither Party shall be liable to the other for failure to perform its obligations hereunder to the extent such failure results from causes beyond its reasonable control, including strikes, climatic conditions, acts of God, governmental laws, regulations, orders or requirements, interruptions of power or unavailability of equipment or supplies.
- 10.9 Customer Sale of Premises. In the event Customer sells the Premises where the Customer installed the Customer System, Customer's successor-in-interest shall expressly assume all of Customer's obligations hereunder in writing, and this Agreement shall not be affected, nor shall Company's rights hereunder be disturbed in any way, including, without limitation, Company's continued right to all Renewable Energy Credits assigned pursuant to Section 4 hereunder.
- 10.10 Notices. All notices under this Agreement shall be in writing and shall be given to the Parties thereto by personal service (including receipted confirmed facsimile), or by certified or registered mail, return receipt requested, or by recognized overnight courier service, to the Parties at the addresses set forth below. All notices shall be deemed given upon the actual receipt thereof.

Company: Tucson Electric Power Company
PO Box 711
Tucson, Arizona 85702
Fax: (520) 918-8350
Attn: Renewable Energy & Energy Efficiency Group

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed as of February 22 2010.

TUCSON ELECTRIC POWER COMPANY

By: _____

Title: _____



CUSTOMER

By: _____

Print Name: Viktor Peter Polunko

Address:

4675 S. MADISON RD

LOT # 82

TUCSON ARIZONA 85730

Phone: 520-308-7308

TO BE FILLED OUT BY UTILITY

Estimated Capacity Reserved: _____ kWh

Estimated Funding Reserved: \$ _____

Date Reserved: FEB 22 2010

Application Process
ATTACHMENT A
Off-Grid Residential Solar System Qualifications

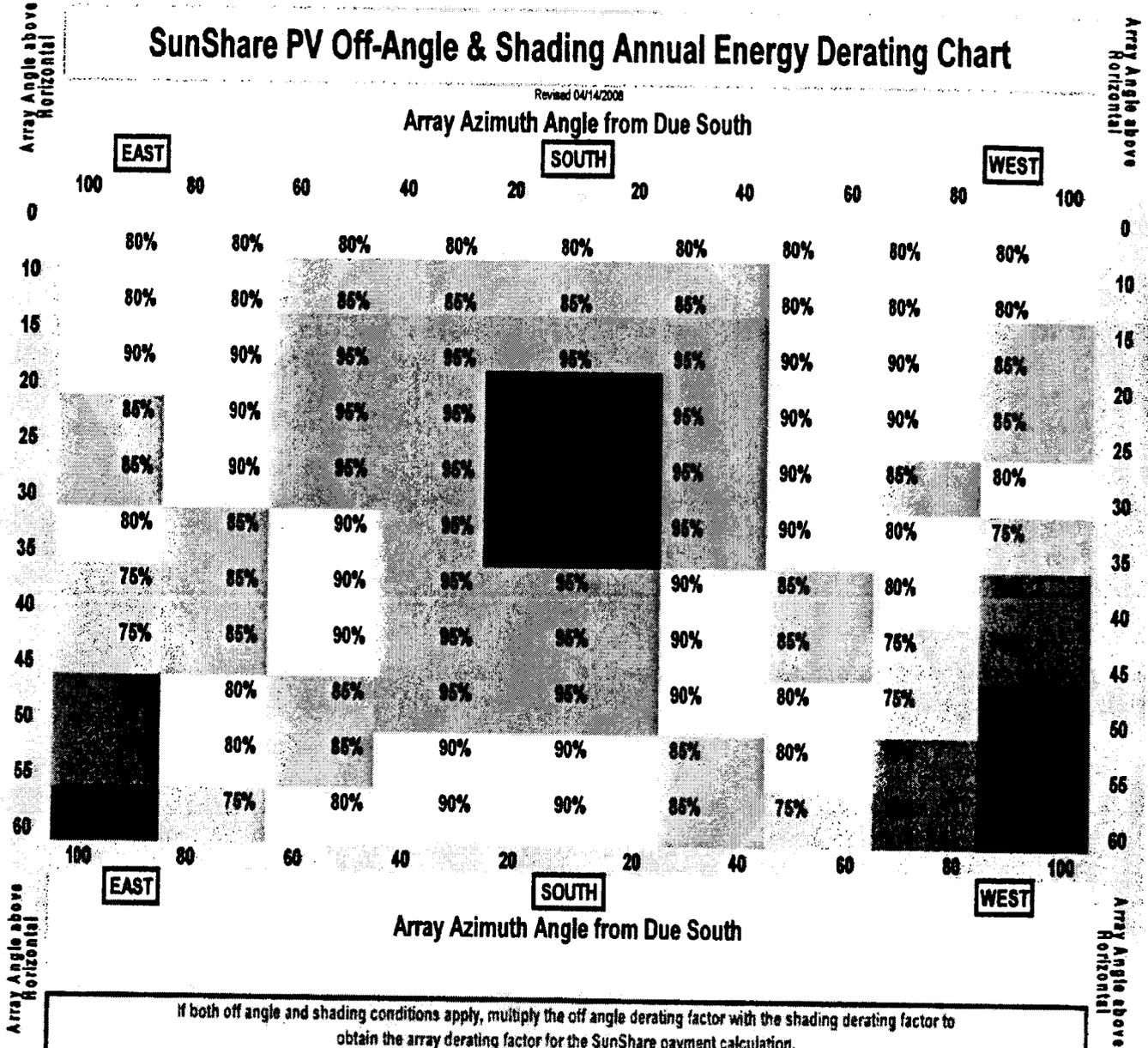
All off-grid residential solar Customer Systems must meet the following system and installation requirements to qualify for Tucson Electric Power Company's ("TEP" or the "Company") Renewable Energy Credit Purchase Program. Capitalized terms not defined herein shall have the meanings ascribed to them in the Renewable Energy Credit Purchase Program Agreement.

1. All systems shall be installed with a horizontal tilt angle between 10 degrees and 60 degrees, and an azimuth angle of +/- 100 degrees of due south. Installation configurations for some systems receiving a UFI will not be eligible for the full RECPP incentive. The reduction will be determined by the TEP developed de-rating chart, Attachment B of this document, and as discussed further in this report under the section titled Conforming Project Incentives.
2. Qualifying systems using Building Integrated Photovoltaic (BIPV) modules of total array capacity of 5 kWDC or less shall receive 90% of the UFI incentive value for PV systems listed in Attachment A. Systems using BIPV module of total array capacity of greater than 5 kWDC shall only receive a PBI.
3. Photovoltaic modules must be covered by a manufacturer's warranty of at least 20 years.
4. Inverters must be covered by a manufacturer's warranty of at least ten years to receive a UFI and at least five years to receive a PBI.
5. The minimum PV array size shall be no less than 600 Wdc and the maximum PV array size shall not exceed 2,000 Wdc.
6. All photovoltaic modules must be certified by a nationally recognized testing laboratory as meeting the requirements of UL 1703.
7. Off-grid systems will not be metered. Compliance reporting production will be based on an annual 20% capacity factor using nameplate DC rating for capacity.
8. All other electrical components must be UL listed.

9. 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, overcurrent protection, disconnect and labeling requirements.
10. 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.
11. The Customer System must meet Company and Arizona Corporation Commission interconnection requirements for self-generation equipment.
12. The Customer System installation must meet the TEP Service Requirements 2000 Edition, Page 1.20, as follows:

"AN AC DISCONNECT MEANS SHALL BE PROVIDED ON ALL UNGROUNDED AC CONDUCTORS and SHALL CONSIST OF A LOCKABLE GANG OPERATED DISCONNECT CLEARLY INDICATING OPEN OR CLOSED. THE SWITCH SHALL BE VISUALLY INSPECTED TO DETERMINE THAT THE SWITCH IS OPEN. THE SWITCH SHALL BE CLEARLY LABELED STATING "DG SERVICE DISCONNECT."
13. Installation must have been made after January 1, 1997.
14. All Customer System installations must be completed in a professional, workmanlike and safe manner.

ATTACHMENT B



If both off angle and shading conditions apply, multiply the off angle derating factor with the shading derating factor to obtain the array derating factor for the SunShare payment calculation.

Maximum Morning Shaded Hours	1	0	2	1	2	2	0	75%	75%	75%
Maximum Evening Shaded Hours	1	2	0	2	1	2	3	75%	75%	75%
Percentage of Annual Energy =	95%	90%	90%	85%	85%	75%	75%	75%	75%	75%

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EXHIBIT 3

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**COMPLAINANT'S
INITIAL COMPLAINT**

ARIZONA CORPORATION COMMISSION
UTILITY COMPLAINT FORM

Investigator: Jenny Gomez

Phone: (520) 628-6550

Fax: (520) 628-6559

Priority: Respond Within Five Days

Complaint No. 2010 86551

Date: 4/26/2010

Complaint Description: 19Y Other - Elec Dereg - Renewable Resource Portfolio
N/A Not Applicable

Complaint By: **First:** Viktor Peter **Last:** Polivka

Account Name: Viktor Peter Polivka

Home: (520) 303-7308

Street: 4675 S. Harrison Rd. #82

Work:

City: Tucson

CBR: Viktor Peter [ppolivka1@cox.

State: AZ Zip: 85714

is: E-Mail

Utility Company: Tucson Electric Power Company

Division: Electric

Contact Name: Cara Ruben

Contact Phone: (520) 884-3651

Nature of Complaint:

The solar power system self installed on my home (mobile home 70x14') is composed of the following equipment:

1) Before installation, I augmented the roof by installing a new 22 gage steel Metal Roof Panels (PBR), manufactured by Western Staes Roofing over the asphalt shingles, roof is rated at 20# psf load, as per HUD Standards Part 3280 and factory reinforced by double trusses at midship to accommodate a factory installed Water Cooler (topping out at 455Lbs full of water) which was removed by me to increase the shadless PV installation for the PV mounting area. By adding the Metal Panels the roof now is resistant to wind load up to 133MPH with a total weight added for the roof panels at 821 Lbs (1.14Lbs psf) over a structure of 34 trusses each rated at 200Lbs Load and the total roof bearing load with 1/2 plywood is rated at 19,040Lbs (using only the south facing side rated at 9520 Lbs load bearing capacity). The installation on the house roof, consists of 20 PV modules (4 additional PV modules are installed on an adjacent shed, constructed of 2x4 studs on 24" centers with plywood roof to yield a combined wattage of the solar arrays rated at 5040 Watts for all 24 modules. This metal roof panel installation is not a requirement by code or TEP (PV modules indeed generate higher than ambient temperatures exposure to the roof, potential ignition point-- it should be required, since the roof is the "base" for the entire solar array system longevity. Asphalt shingles service life expectancy is but 10 years under the normal Arizona sun, Yet TEP has been approving installation on asphalt shingle roofing, regardless of the age of the roof) but for my own peace of mind and am guaranteed worry free for 25 years This metal roofing now gives me additional fire resistance from flying embers as well as heat protection for the shingles and additional insulation for the home.

2) The 3 inverters are configured in a stacked configuration and synchronized in a network rated, each connected to its own battery bank composed of 8 (6 Vdc) batteries connected in series as well as parallel to yield a 24 VDC to provide a 464Wh power storage system at 12,000Watts continuous output (surges up to 15,000 Watts) or 52 Amps at 240 volts AC 60 Hz

3) The 3 inverters are supplied power from the arrays by 3 solar charge controllers, Model XW MPPT60-150, absorbing the harvested current from 2 solar arrays, composed of 4 PV stringed modules each, Each controller is connected to its own battery bank that primarily supplies its own assigned inverter. There is a 4th controller

ARIZONA CORPORATION COMMISSION

UTILITY COMPLAINT FORM

installed, but not yet functional until I can gather the funds required to purchase for an additional solar array of 8 modules to supply the controller-- I planned an expansion of the system to a full 6740 Watt of harvesting capacity eventually - this is required to cover the 15% of overcast.rainy days annually as per weather bureau for this area of Arizona and ration the AC unit to merely
2 1/2hours per 24 hour day running time)

4) The solar array system now installed is composed of 24 modules, arranged /wired in 3 arrays, composed of 2 strings of 4 PV modules each. Each array has its own combiner box, fused w/2 15 Amp breakers. Each combiner box then feeds a specific assigned controller . via independent line in a separate conduit. There are 3 feed lines coming down from the roof mounted PV arrays to the controllers, which then feed its own assigned battery bank, via a battery disconnect 60 Amp breaker.

5) The entire battery bank consists of 24, 6Vdc supplying an average nightly consumption with a 1392 Wh storage capacity or an average current available is then 165Wh per hour --my required consumption is 200 Wh during the evening (awake time 4 hours) and the remaining storage for the next 4 hrs is @100Wh to run the bare necessities like fridge and PC that gives me a wake up remaining battery voltage at 24.9Vdc during the summer months .To cover the hours of darkness, I need to add one more battery bank of 464Wh capacity (8, 6VDC batteries) to cover the longer hours of darkness during the winter months. But that is the "price" I need to pay for a stand alone system. without a Grid Support and NO MONTHLY electric bill -- during the day I have a surplus current available , since I need only 33% of my systems harvesting capacity. but my storage capacity need some more future work-- maybe go to sleep at an earlier hour, to conserve my stored energy - maybe go to sleep at 8PM instead of 10PM! This is workable, just need to adjust my lifestyle for eliminating the need of grid electricity. A small price to obtain complete freedom...

.I hope that I explained my entire system. This is not a fly by night scam, but is now "functioning" The entire system is 95% efficient, from the harvesting to delivered usable current -- the "loss of current in the conversion of DC current to AC current is but a mere 4% to 6% as this data is gathered by the XW Config software I run in my network, that is an acceptable "loss" and as far as TEP claims that it impedes the metering is nothing but bulk/marketing propaganda. for even the Non Battery system that TEP so adamantly "pushes" also has the same loss as I do on a battery system -- that is a basic law of physics --ALL CONVERSION OF CURRENT, DC to AC or AC to DC have a Loss, that is unless TEP has found a way to alter the law of physics. The only difference is the Inverter they are pushing "Sunny Boy" current become AC if the PV supplied DC? -- all PV technology today only harvests for solar rays DC -- The fact that it is done internally, without the user's control only favors the utility provider, since this process is achieved, and if not enough current is harvested, it switches to "grid support automatically". Thus they are able to claim 100% efficiency. during sunlight hours. But if that is true, how come the customers still have a monthly electric bill? How come, as per TEP website, the customers average energy saving are but \$612.00 annually -- my electric bill is/was on, hence does not have the capacity/potential to produce the current required TEP claims it does - even the TEP website confirms my statement that the average home in Tucson needs to have at least a 6,000 Wh harvesting capacity to stay in the credit side of the NET METERING program event on Zero Usage -- to have no electric bill due every month! My system works as I stated is also due to my "conservation it as a trophy on the wall. well I did frame it anyway, since after the engineer returned to his office, he emailed me. that I need to get off the grid, since I did not have a "permit" to be connected to the electric grid for my inverters, hence as soon as I read the email I went outside and not only disconnected the wires but also pulled the 100 amp breaker. This was on 04.09/2010 @ 4:30 PM.. and I've been fine ever since -- I had to modify my battery bank and since I had no money to purchase additional batteries, I stripped the ones out my golf cart batteries as I knew I did not have enough storage capacity at the time --I did not need then on grid support mode, but stand alone I needed them...

Now lastly, to dispute: the bogus claim TEP makes about their "approved" system "sunny Boy", the system is completely bogus intended to sucker in customers, In the first place, if indeed the system is 100% effective, the system only works when the sun is out, as at this time of the year we do have circa 12 hrs of sunlight -- a situation that will not happen until June 21st that is when the daylight is equal to darkness 12 hrs each (12 hrs sunlight and 12 hrs darkness) but I'll give them the benefit, if that is indeed a true evaluation of the system the system is only productive for 12 Hrs and the need to switch to Grid power, giving them again the benefit of doubt, now the

ARIZONA CORPORATION COMMISSION

UTILITY COMPLAINT FORM

My system is on grid power for the next 12 hrs using up the "credited hours" on the Net Metering, by using up the credits, now the system is only truly only producing at a 50% efficiency, since half of the 24 hour day, they are using grid power -- 100% solar harvesting effectiveness in 12 hours and 0% the next 12 hours since THE DAY is but 24 Hrs long, and that would then be true only if the customer did receive a ZERO amount due at the time of billing. but somehow that is not achieved, that customer still receives a amount due bill! Simple arithmetic. The inverters they approach are perhaps good -- I do not know since I was never interested in the "product, mainly since they cost too much and even cost MORE -- listed at \$350.00 more than a Xantrex costs with less features than the Xantrex has -- no AC charge and is built to "favor the utility and not controllable by the owner -- the Xantrex is more user friendly. The fact that they have "increased" the warranty period from the industry standard from 5 years to 10 means nothing to me. I'm buying Xantrex (actually they were then called Trace, but now the company has new owners -- but anyway I never did use the warranty since I purchased my first Trace in 1985, I now they company will be here tomorrow if need, but Sunny Boy, who by the advertizes: built specially for the "Utilities Requirements/standards does not impress me, and who guarantee they will be here in 10 years. the piece of paper = look good, but 219 years is a long time, what guarantee we have they will be here to honor the warranty? Will TEP take over the warranty in the event Sunny Boy goes out of business?

In closing, I hope you read all this, I do have a valid issue with TEP and the incentive distribution -- they call that is their money at their discretion, but in fact, I and other electric customers were "assessed for the monthly bill -- their public funds, but what concerns me most, the Utilities authority at their discretion the funds, is much like putting a wolf to watch the sheep... This combination does not mix, since there is indeed a severe "conflict of interest" involved, since the utility is now in a position of "losing customers", by supporting too many systems. maybe they public has already spoke, since TEP has only managed to "approve only 139" accounts, Makes one wonder, if they collect approx \$5.M annually how come they only spent \$200.00 annually on the incentive program thus far. That is on average 13.9 new systems per year since the inception of the "tariff was imposed on the public/ Not a very good record, and if indeed they pay utility incentive that I, now we've learned, the scam like an insurance adjuster. I was only offered \$4,000. for my system, which is but a 10% of the actual incentive... Have other been treated the same way????? I guess I'll have to start a website, to find out what really has been happening, and people are ashamed to bring it out publicly!! Anyway, if you have any questions please do not hesitate to contact me, I'm home most of the time, only go out for my medical appointments at the VA one or twice per month... Thank you so far for your help, and hope you can resolve this issue soon.. until I hear you..

Viktor Peter Polivka

As a final "issue" with TEP regarding my solar system. last December, when I was attempting to obtain a permit from the city development Office, one of the requirements to obtain a permit -- even for them just to review the installation plan, the city requires, among other things a LETTER OF RECOMMENDATION for Solar system, for the installation from TEP. I've asked them several times, over the phone as well as via Email for such letter-- TEP - Blanka Anderson -- kept telling they will furnish the letter, but to this date I've never received the letter so as to have my installation reviewed prior to the permit being issued, and despite my repeated request, and idle promises from TEP, that they will give me the required letter, to this date they have never issued/wrote the required letter. The last time in early February, the answer from the engineer was: the city should not require the letter, but after contacting the city inspector, he insisted that the letter from TEP IS A MUST. TEP never addressed the issue anymore, just ignored my repeated request. that is the main reason I never obtained the required permit TEP needs to approve the installation. matter of fact, the city does not inspect the installation themselves, that is assigned to TEP for "approval... This game was on and I was caught in a classic Catch 22 -- the city will not issue a permit without TEP's letter of recommendation, and the city will not issue a permit without the letter -- they will accept a non refundable fee of \$125.00 to review the plans, but will not approve the issuance of the permit until they have the letter!" I did never pay the "review" fee, for that would have been a complete waste of my money, thus unless I had the letter in hand I was not going to pay a fee, without the assurance of obtaining the letter from TEP -- this went on over and over.. That is why I did not have a permit, for I did prefer remain connected to the Grid -- TEP was the biggest obstacle to my installation... Yet as I mentioned before, TEP indeed has and uses an identical inverter as a battery system to market and sell the system-- I guess, if I purchase the inverters from TEP instead directly from Xantrex, perhaps I would have received the required document-- As I stated to TEP, the

ARIZONA CORPORATION COMMISSION
UTILITY COMPLAINT FORM

advertized GREEN RENEWABLE PROGRAM IS INDEED GREEN --LIKE THE COLOR OF THE DOLLAR ONLY. The refusal to aproe my system is the nothing else but MONEDY, not Technology or batteries --since they themselves have a bettery Xantrex system. Go Gren and pay off TEP or you will not get anywhere here i tucson with the solar system....It will be very interesting what answer TEP has regarding this issue. I do not know if they (it is not working for them as it should, but that is not a Xantrex proble, but the lack of knowledge or experine in their ranks to aset it up and make it work....Indirectly I offerd to help, but they are not willing to admitt they do not know what they asre doing, thir eggo was brused when they found out a stupid Polak can make it work. Shattered eggo I guess?...Polivka

Ms Gomez; Sorry ni forgot to attach the TEP Final bill as agreed. here it comes. Also I forgot to list in the 'equipmet" for the system list. I also have Xantrex XW System Control Panel installed. This device controll the systems network for minitoring sanf contolling the modes of inverterss, charges and solar aryyss and batteirs -- this control also keps track of sall tempertured bayyety status charger daily -- in real time -- harveting and voltages of all components as as well as "qulifies the Grid cuurent to assure it is alo swithin specs... Polivka

Is this not a TEP approved solar systems (Xantrex system)? Please explain.
Did TEP tell consumer that they will rebate only \$4,000? Please explain.
Is Blanka Anderson still working on the letter that consumer requested that is needed by the City of Tucson inspectors? Please provide a copy to the Commission.
Please investigate, contact consumer and respond to ACC.
End of Complaint

Utilities' Response:

Investigator's Comments and Disposition:

4/26/10 Email

4/26/10

Ms. Gomez: Attached is a copy of my last TEP electric bilol to be included in my file.. Thanks.. Viktor PeterPolivka

End of Comments

Date Completed:

Complaint No. 2010 - 86551

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COMPANY'S RESPONSE

Ruben, Cara

From: ACC Complaints - All
Sent: Tuesday, May 04, 2010 2:23 PM
To: 'Jenny Gomez'
Subject: ACC Complaints: Polivka, Viktor Peter - Complaint No. 86551
Attachments: rpt_Complaint_EmailPDF.pdf; Copy of email to Mr Polivka.PDF

Is this not a TEP approved solar system (Xantrex system)? Please explain.

Response by Chris Lindsey, Energy Services Engineer III:

The PV system as installed by Mr. Polivka does not meet installation requirement #10 in the 2010 Renewable Energy Credit Purchase Program ("RECPP") found on page 1-10. The issue is not with the Xantrex equipment, the concern is with how the battery backup system is configured. The Xantrex battery backup system, as installed by this consumer integrates the battery bank on the DC side of the system. The power created by the panels is either stored in the battery bank via a charge controller (DC-DC converter in this case) or sent on to the DC side of the inverter. This inverter then inverts DC to AC. Since TEP can only meter the output of the system on the AC side there is no way to eliminate the losses associated with the battery bank from the metered values. In other words, if TEP were to pay a full incentive to a system like this TEP would never realize all of the Renewable Energy Credits ("RECs") paid for up front. As the batteries age they become less efficient, requiring more and more energy from the solar system to keep them charged. With the battery bank located before the kWh production meter an unknown amount of energy would be produced by the system and never registered by the production meter because it is going straight into the batteries.

Did TEP tell the consumer that they will rebate only \$4000? Please explain.

Mr. Polivka was informed that he did not qualify for the On-Grid incentive due to the set-up of his battery back-up system. Mr. Polivka decided to disconnect from the grid and is no longer paying into the REST tariff. The maximum system size allowed in the Off-Grid program under the 2010 RECPP for customers not paying into the REST tariff is 2000 Wac (see Additional Requirements for Off-Grid Systems in the RECPP on page 1-11). The installed system is 5040 Wdc. See the calculation below for the maximum incentive:

$$\frac{2000W_{ac}}{0.7_{(AC-DC_efficiencyfactor)}} = 2857W_{dc}$$

The incentive payment was based on a maximum DC rating of 2857Wdc:

$$2857 \times \frac{\$2.00}{W_{atdc}} = \$5714$$

This was a self-install (70% of standard incentive for self-installs under 2010 RECPP, page 1-7):

$$\$5714 \times 0.7 = \$4000$$

On April 22, 2010, an email was sent to Mr. Polivka explaining the process whereby TEP arrived at the decision to pay an incentive of \$4,000. A copy of this email is provided in this response.

Is Blanka Anderson still working on the letter that consumer requested that is needed by the City of Tucson inspectors? Please provide a copy to the Commission.

Response by Blanka Anderson, REST Residential Coordinator:

TEP is unaware of any approval letter required by the City of Tucson and is not sure where Mr. Polivka received this information. TEP does send approval letters to customers that meet the requirements of the RECPP and are accepted into the incentive program.

Blanka Anderson and Chris Lindsey have both had numerous conversations with Mr. Polivka addressing his concerns and explaining the reasons behind TEP's decision. Mr. Polivka does not agree.

From: Jenny Gomez [mailto:JGomez@azcc.gov]
Sent: Monday, April 26, 2010 3:43 PM
To: ACC Complaints - All
Subject: ACC Complaints: Polivka, Viktor Peter - Complaint No. 86551

Please see the attached complaint. It is in PDF format.

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This footnote confirms that this email message has
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COMMISSION'S FOLLOW-UP QUESTIONS

Ruben, Cara

From: Jenny Gomez [JGomez@azcc.gov]
Sent: Thursday, May 20, 2010 3:32 PM
To: Ruben, Cara
Subject: Viktor Polivka Complaint No. 86551

Cara, per our conversation today here are the additional questions.

Viktor Polivka

Complaint No. 86551

You stated that Blanka Anderson and Chris Lindsey both have had numerous conversations with Mr. Polivka. Please provide in detail to the Commission in chronological order all these conversations. Please give the Commission the history on all your contacts with customer. What were these conversations about?

When you went to customer's home on 4/9/10 what did you inspect? Where is the report? Why did this inspection occur? What did you do? What were you looking for? What were the results of this visit? Please provide complete details of this inspection and a copy of the inspection report to the Commission. Was customer provided a copy of this report? Please provide the ACC a copy of what you gave customer in reference to this inspection. In chronological order please tell us about this inspection, how did you come to have it? Please provide all the history behind the inspection and who authorized this inspection?

When did you first acknowledge that customer had a battery system? Please explain. Why did it become an issue on April 9, 2010? Did you not know from day one that the system was battery pack? Please explain.

My last question to TEP was: "PLEASE INVESTIGATE, CONTACT CONSUMER AND RESPOND TO ACC". Please provide the Commission with your investigation to this complaint as of 4/26/10 and after. After 4/26/10 who did the investigation and how was this investigation done? Did any TEP investigators go out to Mr. Polivka home? Utilities companies in the State of Arizona are expected to contact their customers when a complaint is filed. ACC expects all utilities to respond to their customers when a complaint is filed. Please contact customer and respond to ACC.

Is TEP not aware of any "letter of acknowledgement" that customer asked for? Blanka Anderson responded to an "approval letter" not the acknowledgement letter that was requested by customer.

This is a fundamental requirement of the Development Services Department, City of Tucson, to inspect grid-tie PV system. This acknowledging letter is for the City to inspect the structural not the electrical part of his unit. Don't approval letters come after the acknowledging letter and inspections? Please explain. The City of Tucson was never able to inspect because customer was never given the acknowledgment letter that he requested from TEP that enabled him to apply for the permit.

ACC approved the (Residential Solar Electric Application) on 4/10/08 that customer submitted on 2/22/10 for 5 Kw DC or less. He applied for on grid and off grid while paying into the Rest Tariff. Customer has a 5.04 Kw system; he is less than 1% over, due to the size of the solar panels. Why was he offered 2000 Wac off grid system? Why not the 5000 Wac which he applied for? Please explain.

Please provide the Commission the On-Grid and Off-Grid Residential Solar Applications on file for this customer dated 2/22/2010. Please provide customer with his copy.

Customer stated that he was on the grid with his system since 11/09. Please send any documentation that you have where you advised customer that it was disrupting the TEP grid or that it would feed back into the TEP grid during an outage. How was this determined? When was this inspection done? Please provide the Commission with a copy of the report of your on site visit that was conducted were you determined that the system would back feed into the TEP grid during an outage.

Are there any "Storage Battery Systems" on TEP's grid? If yes, please explain the difference from customer's system to any system that might be on the grid with batteries. Please provide any documents that TEP has where customer was advised and helped to bring his system to compliance, to meet TEP's Renewable Credit Purchase Program ("RECPP") requirements. Was customer given a chance to correct any errors if any?

Does TEP generate any electricity that you yourself store in batteries that feeds the grid? Please explain.

In early February Blanka was going to put a meter on the system. What happened? Why did she not do it? Please explain.

Customer came up with a solution for the metering problem on 4/3/10. Did TEP investigate to see if this would work for your customer? Please explain.

Customer stated that he filed his application on 2/22/2010. TEP ("RECPP") was re-defined in March 2010 for 2010-2014. Customer does not recall any batteries issues before your March 2010 re-definition. Were batteries added to RECPP 1-10, in the present issue? Please provide the ACC with the previous copy. Customer stated that TEP starting talking about batteries after March and into April 2010.

Did TEP advise customer to get off the grid? Was customer advised prior from getting off the grid that he would only qualify for 2000 Wac not 5000 Wac, like he applied for? Why was customer lead to believe that he was going to receive the full incentive? Was he advised by TEP that if he is not paying into the REST tariff his unit should not exceed 4,000 Wac? Has TEP submitted to customer a denial letter for the 5000 Wac? Please provide the Commission with a copy.

Has TEP ever had an Inverter/Charger & Charge Controller (made by Xantrex Corp.) with a connected storage battery bank that is set up for demonstrations that is used to attract customers to participate in TEP's Solar Renewable Energy Program?

Was customer offered 70% incentive for self installation? Please explain.

Please provide the Commission a detail explanation and reasons behind TEP's decision to not accept Mr. Polivka's system on TEP's Grid.

What can customer do to qualify for a full incentive benefit? Was customer told by TEP what it would take to get the system to a full incentive? Please explain.

Please investigate, contact customer and respond to ACC.

Sincerely,

Jenny Gomez
Consumer Analyst I
Utilities Division
Tucson Office

JENNY GOMEZ
ARIZONA CORPORATION COMMISSION
CONSUMER SERVICES DIVISION
TUCSON, ARIZONA 85701
(520)628-6556

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COMPANY'S REPOSE TO FOLLOW-UP QUESTIONS

1. You stated that Blanka Anderson and Chris Lindsey both have had numerous conversations with Mr. Polivka. Please provide in detail to the Commission in chronological order all these conversations. Please give the Commission the history on all your contacts with customer. What were these conversations about?

Blanka Anderson, Renewable Energy Standard and Tariff ("REST") Residential Coordinator, and Chris Lindsey, Energy Services Engineer, do not keep records of their phone conversations with customers.

Blanka Anderson's communications began with Mr. Polivka in early February 2010. Ms. Anderson received Mr. Polivka's On-Grid and Off-Grid applications February 22, 2010. Mr. Polivka's system was self-installed and was already completed before he contacted TEP. This is contrary to the normal flow of installations.

Through the course of their conversations over the last several months, Ms. Anderson requested Mr. Polivka contact her via e-mail on a go forward basis.

During the engineering review process, Chris Lindsey contacted Mr. Polivka on several occasions related to the Renewable Energy Credit Purchase Program ("RECPP") installation requirements. The conversations were related to both bringing the system into compliance and determining where the system might fit in the programs.

Mr. Lindsey had approximately three lengthy conversations with Mr. Polivka throughout the process in regards to the system configuration and the metering challenges.

2. When you went to customer's home on 4/9/10 what did you inspect? Where is the report? Why did this inspection occur? What did you do? What were you looking for? What were the results of this visit? Please provide complete details of this inspection and a copy of the inspection report to the Commission. Was customer provided a copy of this report? Please provide the ACC a copy of what you gave customer in reference to this inspection. In chronological order please tell us about this inspection, how did you come to have it? Please provide all the history behind the inspection and who authorized this inspection?

The Sunshare Applications made by Mr. Polivka were submitted after the system had been installed and energized. Since the system configuration does not meet all of the RECPP requirements, an engineering review was necessary. The visit to Mr. Polivka's home was requested by Mr. Polivka. Mr. Lindsey agreed to meet with Mr. Polivka on April 2, 2010. During the site visit, Mr. Polivka showed Mr. Lindsey the configuration of the system and demonstrated the system's operation by paralleling the PV system with the grid. The visit was considered a "site visit" and was not an official inspection; therefore, there was no inspection report prepared.

TEP does a final inspection of all solar systems to verify the systems are operating properly, the configuration matches the application, and the electrical output of the system is within an expected amount. This is done with every solar system. Mr. Polivka's final inspection has not yet been performed.

3. When did you first acknowledge that customer had a battery system? Please explain. Why did it become an issue on April 9, 2010? Did you not know from day one that the system was battery pack? Please explain.

TEP received Mr. Polivka's application in February 2010. TEP determined that the system utilized a battery back-up at that time.

4. **My last question to TEP was: "PLEASE INVESTIGATE, CONTACT CONSUMER AND RESPOND TO ACC". Please provide the Commission with your investigation to this complaint as of 4/26/10 and after. After 4/26/10 who did the investigation and how was this investigation done? Did any TEP investigators go out to Mr. Polivka home? Utilities companies in the State of Arizona are expected to contact their customers when a complaint is filed. ACC expects all utilities to respond to their customers when a complaint is filed. Please contact customer and respond to ACC.**

TEP employees have invested considerable time and effort with Mr. Polivka. Mr. Polivka has demonstrated on numerous occasions his displeasure with TEP's REST policies and procedures. He has been verbally abusive and hostile with TEP's employees.

After the initial ACC complaint response was submitted, Mr. Polivka emailed Mr. Lindsey on May 13, 2010 (please see attached email). Due to the tone and allegations expressed in Mr. Polivka's email, including threatening legal action, TEP determined that TEP employees would refer future communication with Mr. Polivka to its legal department.

If Mr. Polivka has additional questions regarding TEP's response, he can submit his questions to: TEP Legal Department, One South Church Avenue, Tucson, AZ 85702.

5. **Is TEP not aware of any "letter of acknowledgement" that customer asked for? Blanka Anderson responded to an "approval letter" not the acknowledgement letter that was requested by customer.**

TEP's acceptance letter is sent to customers when they are accepted into the Renewable Program. An acceptance letter has not been sent to Mr. Polivka because TEP has not yet approved and accepted his renewable system.

6. **This is a fundamental requirement of the Development Services Department, City of Tucson, to inspect grid-tie PV system. This acknowledging letter is for the City to inspect the structural not the electrical part of his unit. Don't approval letters come after the acknowledging letter and inspections? Please explain. The City of Tucson was never able to inspect because customer was never given the acknowledgment letter that he requested from TEP that enabled him to apply for the permit.**

TEP is unaware of the requirement stated in question 6. TEP contacted Ken Van Karsen with the Development Services Department with City of Tucson and was informed that the City of Tucson requests the following minimum information: cut sheets, site plans, one or three line drawings, and details on how modules would be attached to the roof.

7. **ACC approved the (Residential Solar Electric Application) on 4/10/08 that customer submitted on 2/22/10 for 5 kW DC or less. He applied for on grid and off grid while paying into the Rest Tariff. Customer has a 5.04 kW system; he is less than 1% over, due to the size of the solar panels. Why was he offered 2000 Wac off grid system? Why not the 5000 Wac which he applied for? Please explain.**

Mr. Polivka completely disconnected his electric service from TEP and was no longer considered a customer paying into REST. See page 1-11 of the 2010 RECP addressing Additional Requirements for Off-Grid Systems:

1. *The minimum Solar Electric array size shall be no less than 600 Wac. The maximum Solar Electric array size for customer currently paying into the REST tariff shall not exceed 4,000 Wac. For customers not currently paying into REST tariff, systems shall not exceed 2,000 Wac.*

2. *Off-grid systems will not be metered. Compliance reporting production will be based on an annual 20% capacity factor using nameplate DC rating for capacity.*

Even though Mr. Polivka's system exceeded the 2000 Wac limit, TEP has considered paying Mr. Polivka up to the maximum capacity allowed by the RECPP. If Mr. Polivka brings the system into RECPP compliance and re-establishes service with TEP, then he will be eligible for the greater incentive for an on-grid system allowed by the RECPP.

8. **Please provide the Commission the On-Grid and Off-Grid Residential Solar Applications on file for this customer dated 2/22/2010. Please provide customer with his copy.**

Attached please find the On-Grid and Off-Grid Applications. Copies have been sent to Mr. Polivka.

9. **Customer stated that he was on the grid with his system since 11/09. Please send any documentation that you have where you advised customer that it was disrupting the TEP grid or that it would feed back into the TEP grid during an outage. How was this determined? When was this inspection done? Please provide the Commission with a copy of the report of your on site visit that was conducted where you determined that the system would back feed into the TEP grid during an outage.**

Mr. Polivka was never informed that his system was affecting the TEP grid. TEP was not aware of the existence of Mr. Polivka's system until his application was received.

10. **Are there any "Storage Battery Systems" on TEP's grid? If yes, please explain the difference from customer's system to any system that might be on the grid with batteries. Please provide any documents that TEP has where customer was advised and helped to bring his system to compliance, to meet TEP's Renewable Credit Purchase Program ("RECPP") requirements. Was customer given a chance to correct any errors if any?**

Yes, there are currently four renewable facilities on TEP's system that utilize battery storage, including the system installed by Mr. Polivka. There is only one other battery storage system similar to Mr. Polivka's. That customer participated in the Off-Grid program. Mr. Polivka still has the opportunity to bring his system into compliance with the RECPP requirements.

11. **Does TEP generate any electricity that you yourself store in batteries that feeds the grid? Please explain.**

Currently, TEP has no backup or storage systems providing energy to TEP's system.

12. **In early February Blanka was going to put a meter on the system. What happened? Why did she not do it? Please explain.**

TEP did not install the net meter at that time because TEP had not received City/County inspection approval.

13. **Customer came up with a solution for the metering problem on 4/3/10. Did TEP investigate to see if this would work for your customer? Please explain.**

Yes, the metering solutions suggested by Mr. Polivka will not bring his system into compliance with the RECPP requirements for an on-grid system, specifically because the system still cannot be properly metered.

14. Customer stated that he filed his application on 2/22/2010. TEP ("RECPP") was re-defined in March 2010 for 2010-2014. Customer does not recall any batteries issues before your March 2010 re-definition. Were batteries added to RECPP 1-10, in the present issue? Please provide the ACC with the previous copy. Customer stated that TEP starting talking about batteries after March and into April 2010.

No changes were made in the RECPP from 2009 to 2010 related to battery storage. Please find the 2009-2013 RECPP attached.

15. Did TEP advise customer to get off the grid? Was customer advised prior from getting off the grid that he would only qualify for 2000 Wac not 5000 Wac, like he applied for? Why was customer lead to believe that he was going to receive the full incentive? Was he advised by TEP that if he is not paying into the REST tariff his unit should not exceed 4,000 Wac? Has TEP submitted to customer a denial letter for the 5000 Wac? Please provide the Commission with a copy.

Mr. Polivka was never asked to disconnect service with TEP. Mr. Polivka informed Mr. Lindsey by email that he wanted his TEP service disconnected. Mr. Lindsey advised him to contact TEP Customer Service. Mr. Polivka contacted TEP Customer Service on April 8, 2010 with a request to disconnect service. TEP disconnected service on April 13, 2010. Mr. Polivka never asked whether this would affect his incentive, but was told that he could still participate as an off-grid system. A denial letter was never submitted to Mr. Polivka.

16. Has TEP ever had an Inverter/Charger & Charge Controller (made by Xantrex Corp.) with a connected storage battery bank that is set up for demonstrations that is used to attract customers to participate in TEP's Solar Renewable Energy Program?

Yes, a similar system is utilized on a TEP Solar Trailer. The Xantrex system was specifically chosen for this application because of its off-grid capabilities.

17. Was customer offered 70% incentive for self installation? Please explain.

Yes. This is covered on page 1-7 in the 2010 RECPP:

Installations by Customer (Residential Solar Electric and Wind Only)

Residential customers may self-install Solar Electric systems 10 kWac or smaller providing they adhere to all applicable codes and standards. The customer-installed systems are eligible for an incentive equal to 70% of the standard UFI, as otherwise listed in Table 1, above. TEP reserves the right to withdraw this self-install qualification condition at any time in the future if TEP finds self-installations are not adhering to the applicable codes and standards or are found to be of poor quality workmanship.

18. Please provide the Commission a detail explanation and reasons behind TEP's decision to not accept Mr. Polivka's system on TEP's Grid.

The PV system as installed by Mr. Polivka does not meet installation requirement #10 in the 2010 RECPP found on page 1-10. The issue is not with the Xantrex equipment. It is with how the battery backup system is configured. The Xantrex battery backup system, as installed by Mr. Polivka, integrates the battery bank on the DC side of the system. The power created by the panels is either stored in the battery bank via a charge controller (DC-DC converter in this case) or sent on to the DC side of the inverter. This inverter then inverts DC to AC. Since TEP can only meter the output of the system on the AC side, there is no way to eliminate the losses associated with the battery bank from the metered values. In other words, if TEP were to pay a full incentive to a system like this, TEP would never realize all of the Renewable Energy Credits ("RECs") paid

for up front. As the batteries age, they become less efficient, requiring more and more energy from the solar system to keep them charged. With the battery bank located before the kWh production meter, an unknown amount of energy would be produced by the system and never registered by the production meter because it is going straight into the batteries.

- 19. What can customer do to qualify for a full incentive benefit? Was customer told by TEP what it would take to get the system to a full incentive? Please explain.**

The system would have to be reconfigured to relocate the battery bank to the AC side of the system. The existing configuration has the battery bank located on the DC side of the system. A separate AC to DC charge controller would have to be installed to charge the batteries and a meter could then be installed at the AC output of the inverter to register the energy produced by the PV system. This has been explained several times to Mr. Polivka.

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COMMISSION'S ADDITIONAL FOLLOW-UP QUESTIONS

Ruben, Cara

From: Jenny Gomez [JGomez@azcc.gov]
Sent: Thursday, June 17, 2010 1:01 PM
To: Ruben, Cara
Cc: Jenny Gomez
Subject: COMPLAINT #86551 REFERENCE VIKOR PETER POLIVKA

Cara, Here are additional questions for:

COMPLAINT #86551

REFERENCE: VIKOR PETER POLIVKA

IN YOUR RESPONSE TO #19: WHAT CAN CUSTOMER DO TO QUALIFY FOR A FULL INCENTIVE BENEFIT? WAS CUSTOMER TOLD BY TEP WHAT IT WOULD TAKE TO GET THE SYSTEM TO A FULL INCENTIVE? PLEASE RESPOND TO THE QUESTIONS BELOW:

If the customer follows TEP's instructions in response to #19; would this be the same as if he had submitted his plans for review and approval prior to his installation? Is this all he has to do? Will this be for an on or off grid credit?

In your response to #19 you said "This has been explained several times to Mr. Polivka". When was the last time this was explained to him and by whom?

So Staff has a clear understanding, was he advised if he follows the response to #19, i.e., "The system would have to be reconfigured to relocate the battery bank to the AC side of the system. The existing configuration has the battery bank located on the DC side of the system. A separate AC to DC charge controller would have to be installed to charge the batteries and a meter could then be installed at the AC output of the inverter to register the energy produced by the PV system." His system would be accepted by TEP and credit given?

Would this be an approval for an "on" or "off" grid system?

When TEP provided this information to him, what was his response?

Is TEP 100% satisfied that this customer understands what he failed to do (submit his plans prior to installation for review and approval) so he could obtain full acceptance of his system AND that he understands exactly what he needs to do to achieve this at this time?

In an effort to provide this customer a thorough understanding and advert an escalated complaint process, the Commission wants to ensure that he understands what he should have done and what he needs to do to move forward.

We look forward to a response to these questions as soon as possible, hopefully by the end of business day 6/18/10.

Thanks,

Jenny Gomez
Consumer Service Analyst I
Utilities Division

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**COMPANY'S RESPONSE TO
ADDITIONAL FOLLOW-UP
QUESTIONS**

1. **In your response to #19: What can customer do to qualify for a full incentive benefit? Was customer told by TEP what it would take to get the system to a full incentive?**

Yes, Mr. Polivka was told by TEP what would be required to qualify as an On-Grid system.

2. **If the customer follows TEP's instructions in response to #19; would this be the same as if he had submitted his plans for review and approval prior to his installation? Is this all he has to do? Will this be for an on or off grid credit?**

If Mr. Polivka had submitted the plans for approval prior to the installation of his project TEP would have required the same remedial actions in order to qualify for the On-Grid program. In addition to the relocation of the battery bank and the installation of a meter socket and meter, a City of Tucson permit will be required.

3. **In your response to #19 you said "This has been explained several times to Mr. Polivka". When was the last time this was explained to him and by whom?**

The reconfiguration of the battery bank was discussed at the site visit between Mr. Polivka and Chris Lindsey on April 2, 2010.

4. **So Staff has a clear understanding, was he advised if he follows the response to #19, i.e., "The system would have to be reconfigured to relocate the battery bank to the AC side of the system. The existing configuration has the battery bank located on the DC side of the system. A separate AC to DC charge controller would have to be installed to charge the batteries and a meter could then be installed at the AC output of the inverter to register the energy produced by the PV system." His system would be accepted by TEP and credit given?**

In order to be accepted into the On-Grid program the battery bank will need to be relocated as previously instructed. A meter socket and meter will need to be installed at the AC output of the inverter, and a City of Tucson permit will be required.

5. **Would this be an approval for an "on" or "off" grid system?**

The requirements detailed above will satisfy an "On-grid" system, as long as the system is interconnected with TEP's grid. Approval is contingent on satisfying the aforementioned requirements.

6. **When TEP provided this information to him, what was his response?**

When TEP provided this information to Mr. Polivka previously he stated he was not interested in modifying the existing configuration of the battery bank.

7. **Is TEP 100% satisfied that this customer understands what he failed to do (submit his plans prior to installation for review and approval) so he could obtain full acceptance of his system AND that he understands exactly what he needs to do to achieve this at this time?**

TEP has explained the program requirements to Mr. Polivka on multiple occasions via phone, in person, and through written correspondence.

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EXHIBIT 4

Dear Mr. Polivka:

Tucson Electric Power Company (TEP) is in receipt of both the On-Grid and Off-Grid Residential Solar Applications for 4675 S. Harrison Road, Tucson, AZ, dated stamped February 22, 2010.

As you are aware, the referenced system was installed prior to utility review and approval. Additionally the system is a battery back-up which does not meet TEP's requirements as outlined on page 1-10 of the Renewable Energy Credit Purchase Program (see attachment) which specifically states, "Storage Batteries are not allowed as part of the Customer System unless the inverter is a separate component and TEP can locate the Solar 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."

After discussion between myself and our department engineer, Chris Lindsey, a site visit was conducted to determine that the system would not back feed into the TEP grid during an outage. A department decision was made to offer the compromise of allowing your system to be considered "off-grid" because requirements 2 and 3 referenced above were met wherein allowing us some leeway to pay an incentive based on considering this to be an off-grid system.

It is understood that your service from TEP is now totally disconnected. Referenced on Page 1-11 under *Additional requirements for Off-Grid Systems*, "The maximum Solar Electric array size for customers currently paying into the REST tariff shall not exceed 4,000 Wac. For customers not currently paying into the REST tariff, systems shall not exceed 2,000 Wac." Your system exceeds the 2,000 Wac requirement.

Taking into consideration the size of your system – incenting up to 2857 Wdc of a self installed system, TEP is able to pay an incentive of \$4,000.

If you'll respond via e-mail in agreement to this incentive, I would be more than happy to process an incentive for you

Blanka Anderson
REST/Residential Coordinator

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EXHIBIT 5

From: Viktor Peter [mailto:ppolivka1@cox.net]
Sent: Thursday, May 13, 2010 10:40 PM
To: Lindsey, Christopher
Cc: ACC
Subject: RE: Inspection report

Dear Mr. Lindsey: On 04/09/2010 @ 8:00AM, you came to my home --as per appointment -- to inspect the solar system I've installed and was seeking TEP approval -- Apparently, you have issued a "Report of the Inspection" -- since I received a Email, dated 05/03/2010 at 12:12PM from Andrea Lucero, TEP representative, who referred to a "TEP Inspection that she had, and advised me that I need to "contact a TEP authorized installer" so as to "correct the defects" on my Solar system, so I could receive a TEP approval!. I replied to Ms Lucero and requested a copy, so as to know what is the "problem with my Solar system" that you reported to the company...

You indeed, did come into my home and looked around, but in fact "did not inspect anything in my presence inside the home. You merely, checked the meter stand, to see if I was "transmitting any current to the Grid". You did not even go up the roof, just to see the installation, nor to measure the angle the modules were set at...

The failure to provide with the report, I then must assume that you came to my home UNDER FALSE PRETENCES" to gain access into my home. If that is the case, I'll have to report this incident to the Tucson Police as a Unauthorized entry or criminal trespass? Then, proceed with what ever that complaint will demand. I'll give you 2 days to "produce such Inspection Report", if one indeed was written, since it is my legal right to "see what you reported" to TEP, in writing!

To gain entry into a home with false pretences, is not even allowed by LAW from the Police, much less a utility. I know you mentioned, that TEP is indeed a Monopoly and that TEP can set the rules as they see fit. I do not believe that that entering a private residence, under "so called official business" is -- just to look around -- is not within the realm of the Monopolies privileges" as I understand the LAW in a free society.....

Hoping to hear from you in the very near future, and hopefully you'll send me the requested copy of the Report, if indeed there is one.. If not, I'll proceed with the criminal portion and see what the courts have to say about it..

Cordially,
Viktor Peter Polivka