



**2011 SCHOOLS AND GOVERNMENT PROGRAM
PHOTOVOLTAIC SYSTEM (GRID-TIED)
PRODUCTION BASED INCENTIVE RESERVATION
APPLICATION**

This Incentive Program is funded by APS customers and approved by the Arizona Corporation Commission

Is this a revision of a previously submitted reservation application? Yes No

In order to qualify for a production based incentive under the Schools and Government Program, the total incentive over the lifetime of the project must be over \$75,000. Projects not meeting this requirement may apply for funding using our Non-Residential Up-Front Incentive program application.

RESERVATION APPLICATION

APS Customer Name GILA COUNTY

(This should be the customer name as shown on APS bill for this location. If the name you want is different than what APS has in our system, please contact the APS customer care center at 602-371-7171 and make the account name change PRIOR to submitting the reservation application).

Division of Government name or School District Name: Public Works Facility

Installation Address 5804 Russell GLOBE, AZ. 85501

County : GILA

Is the property: Owned Leased

If leased, a Landlord/Tenant rider will also be required and must be submitted with the application (located at www.aps.com/gosolar).

APS Account Number * 377017284 Meter Number * (6 digits) U47329
(Meter Number associated with installation address)

Are you a: School or Government Entity

Is this system applying for the 2011 Solar Daylighting Deployment Drive reimbursement**? Yes No

* If there is currently no electrical service at the installation site, please leave account and meter number blank and check here.

**For details on the Solar Daylighting Deployment Drive, please email SolarSchoolGov1@aps.com

APS CUSTOMER CONTACT INFORMATION (Please Note: installer/dealer contact information requested on next page)

APS Customer Contact Name Gila County Public Works Diana Jones Email: djones@co.gila.az.us

Business Phone 928-402-8516 Alternate Phone N/A

Fax Number 928-425-8104

Mailing Address 1400 E. Ash Street Globe, Arizona 85501
(No P.O. Boxes, please - must be able to receive FedEx deliveries at this address)

Is the Customer a dealer or manufacturer of any of the components proposed in the qualifying system, or an employee of a dealer or manufacturer? Yes **XXX** No

If customer is a dealer, employee of, or a manufacturer of the system components, system costs are limited to actual costs rather than retail.

Is the Customer the primary occupant at the site location? **XXX** Yes No

If not, are you the landlord or owner? Yes No

***NOTE:** All school PV systems participating in the 2011 APS Schools and Government Solar program will be required to install an APS "*Mission: Sustainability*" School Kiosk prior to incentive payment being requested. For a list of supplied materials and a marketing guide for the APS "*Mission: Sustainability*" School Kiosk, please contact Jon Higuchi at Jon.Higuchi@aps.com.

INSTALLER INFORMATION

Installer Name (please supply full legal name) Kitchell Contractors Inc. of Arizona

Contact Name Greg Patzer Email GPatzer@kitchell.com

Telephone (602) 798-5711 Fax (602) 798-5758

Mailing Address 1707 E Highland, Suite 200, Phoenix, AZ 85016

Installer's Arizona Registrar of Contractors (AZROC) License Information

Number ROC067969 Class B-01 Expiration 11/30/2012

EQUIPMENT DEALER INFORMATION (if same as installer, check here XXX)

Dealer Name (please supply full legal name) _____

Contact Name _____ Email _____

Telephone _____ Fax _____

Mailing Address _____

Dealer's Arizona Registrar of Contractors (AZROC) License Information

Number _____ Class _____ Expiration _____

SYSTEM OWNER INFORMATION (if different than customer)

Company Name (please supply full legal name) A special purpose LLC owned by Tioga Energy, Inc

Contact Name Marc Roper, Vice President of Sales & Marketing Email mroper@tiogaenergy.com

Telephone (415) 625-0700 Fax (415) 513-1645

Mailing Address 123 Mission Street, 9th Floor, San Francisco, CA 94105

SYSTEM INFORMATION [Please contact your dealer/installer if unsure of the information to provide in this section]

Estimated Installation Date 4/1/2012 Is this a system expansion? Yes **XXX** No

(For Production Based Incentives, the system must be installed within 365 days from date of reservation. Allowing for engineering, permitting and interconnection approvals, what is the realistic estimated date of installation?)

If you plan for the system to be installed in 2011, the following year-end interconnect deadlines apply:

1. October 7, 2011: interconnection application with full set of diagrams must be submitted
2. November 4, 2011: diagrams must be approved
3. November 18, 2011: scheduling of inspection must be confirmed

Estimated number of PV Panels 348 PV Module Manufacturer Trina Solar

Model # TSM-PC14 UL Listing UL 1703

What is the DC watt rating per panel? 280

Estimated number of Inverters 1 Inverter Manufacturer PV Powered

Model #(s) PVP100kW-480 UL Listing UL 1741

What is the AC watt rating of each inverter? 100kW-AC

Estimated Total Project Costs* and system installation 903062

* Total Project Costs is defined in the Credit Purchase Agreement and may include eligible financing, if applicable.

APS Compensation for Excess Production from PV System:

Please indicate your rate plan choice for any excess kWh production that will be delivered to the APS distribution system by your PV system. Please note that the rate chosen below is not a guarantee, but will be confirmed during the review process.

XXX EPR-6 (Energy sent back to the APS grid will appear as a kWh credit on your bill, often called "net metering". Any unused kWh credits that appear in the last billing cycle of the year will be paid out at a wholesale price) **NOTE: In order to qualify for this rate, the total AC inverter rating(s) CANNOT exceed 125% of the customer's metered peak demand during the last twelve months. Note, this Net-Metering rider is not available to Schools on the GS-SCHOOLS M or GS-SCHOOLS L rate schedule.**

EPR-2 (Energy sent back to the APS grid will be purchased by APS at a wholesale price, often called "net billing")

SC-S (If your inverter size is 100 kWac or larger and you are not using EPR-6, you must select the Standard Contract-Solar, or SC-S, rate. Energy sent back to the APS grid will be purchased by APS at the EPR-2 price, but additional standby charges may also apply based on customer demand.)

Rate schedules are posted at www.aps.com or call 602-328-1924.

POTENTIAL ADDITIONAL CHARGES:

Additional charges could include, but are not limited to:

- Upgrades to APS existing infrastructure required to support customer project
- Additional equipment required based on size or design of system
- RTUs as required by the interconnection study group

A copy of APS's Interconnection Requirements can be found at http://www.aps.com/main/green/choice/choice_79.html.

INCENTIVE REQUEST

Please review the following information prior to completing the Incentive Request below. Payment of the requested incentive is subject to the following Incentive Program guidelines:

Funding reservations for production-based incentives are awarded on a competitive basis. For more detailed information, please see the [decision process](#) on the APS website at www.aps.com/gosolar under the appropriate program and technology. The per kWh incentive levels listed below are **maximum** amounts available. Because this is a competitive process, requesting less than the maximum amount will typically provide a more competitive ranking score.

Requested Renewable Energy Credit (REC) Agreement Term Incentive:

XXX 15-Year-\$0.171/kWh

20-Year-\$0.155/kWh

The following information is REQUIRED to process your application:

1. Most recent 12 month usage history (kWh) for the meter the system is interconnecting to at the installation site: 182560 kWh (If this is new construction, please provide an annual use estimate along with supporting documentation such as E-sheets from your electrical engineer).
2. Highest Peak demand (kW) during the most recent 12 month usage history: 96 kW
3. Proposed kWdc System Size: 97.44 kWdc
4. Proposed System Inverter Size: 100 kWac (Maximum 2MWac)
5. System Size: 97.44 kWdc x Estimated Annual kWh per kWdc*: 1632 = Anticipated Annual kWh Production** 159034 kWh per year

*** Please include PV Watts calculation Sheet** (<http://rredc.rnel.gov/solar/calculators/PVWATTS/version2/>)

7. Estimated kWh per kW according to PVWatts2 (please attach) 1632 kWh per kW
8. Anticipated Annual kWh Production 159034 x \$.171 per kWh (REC Term Incentive)
= Estimated Annual Incentive Payment \$ 27194.814
9. For School Districts, what is your Project Ranking Matrix total?: NA

****NOTE: Annual system production CANNOT exceed annual metered**

consumption ASSIGNMENT OF PAYMENT

Will payment be assigned to an installer, dealer or manufacturer of the qualifying system? Yes No If yes, please provide the following information:

Name of Assignee: A special purpose LLC owned by Tioga Energy, Inc

Mailing Address: 123 Mission Street, 9th Floor, San Francisco, CA 94105

CONFIDENTIALITY

Neither Party shall disclose any non-public, confidential or proprietary information relating to the Reservation (the "Confidential Information") to any third party (other than the Party's employees, lenders, counsel, accountants or advisors who have a need to know such information and have agreed to keep such terms confidential) without the other Party's prior written consent. In the event that any Party becomes legally compelled (by deposition, interrogatory, request for documents, subpoena, civil investigative demand or similar process) to disclose any Confidential Information, the legally compelled Party shall give the other Party providing such Confidential Information prompt prior written notice of such requirement so that the providing Party may seek a protective order or other appropriate remedy and/or waive compliance with this Confidentiality provision. In the event that such protective order or other remedy is not obtained, the providing Party waives compliance with the terms hereof with respect to such Confidential Information.

Each Party acknowledges that the unauthorized disclosure of any Confidential Information may cause irreparable harm and significant injury that may be difficult to ascertain. Each Party therefore agrees that specific performance or injunctive relief, in addition to other legal and equitable relief, are appropriate remedies for any actual or threatened violation or breach of the provisions of this Paragraph, although neither Party shall be entitled to any special, consequential, indirect or punitive damages as a result of a breach of the provisions of this Paragraph, whether a claim is based in contract, tort, or otherwise.

Have you provided the required attachments?

XXX PV Watts calculation sheet (<http://rredc.mel.gov/solar/calculators/PVWATTS/version2/>)

NA Project Ranking Matrix Sheet (only necessary for School Districts)

XXX A written system description

NA A Landlord-Tenant Rider, if applicable

NA If this is new construction, supporting documentation for estimated annual usage

If your reservation is approved, please note the following timelines:

1. You are required to submit a copy of a Qualified Provider document within 30 days of reservation approval to signify that a developer has been selected.
2. Your signed Credit Purchase Agreement must be returned to APS within 60 days of submission of the Qualified Provider document.
3. Submittal of an Interconnection Application within 90 days of reservation date
4. A progress update is required at 150 days from reservation date, including status of the following:
 - a. Interconnection Application
 - b. Local permitting applications
 - c. Equipment orders
5. System must be installed within 365 days from reservation date.

Projects not meeting timelines may be cancelled. If extenuating circumstances exist, you may request consideration for an extension by contacting APS at SolarSchoolGovt@aps.com. If your project requires outside financing, it should be secured at the beginning of the application process. Please note that extensions will not be granted for lack of secured financing.

This Reservation Request and any attachments provided supersede all prior Reservation Requests submitted for the installation address listed on the first page of this document and for this particular technology.

Please note that this is a CUSTOMER program, and the signature required is that of the of APS customer of record. By signing below, customer acknowledges that all application information and all required documents provided have been submitted in good faith.

CUSTOMER:

Gila County
Name (Please Print)

Michael A. Pastor, Chariman
Title/Business Name

Signature

8/16/2011
Date

In order for an application to be submitted, please submit this request electronically to SolarSchoolGovt@aps.com. Once the application is received, a confirmation email will be sent to the e-mail address from which the application was sent. If a confirmation response is not received within five days, you should contact APS by sending a follow-up email to SolarSchoolGovt@gjaps.com.

APS will not accept incomplete applications. Please note:

- APS is not responsible for applications not received due to an undeliverable email address
- A reservation application will not be accepted unless it is signed by the APS customer of record
- A reservation application must be received by the nomination period deadline (which ends the last BUSINESS day of the month - weekends are not included in the deadline period)

Approved As To Form

Bryan B. Chambers
Chief Deputy Gila County Attorney



AC Energy
&
Cost Savings



Type comments here to appear on printout; maximum 1 row of 50 characters.

Station Identification		Results			
Cell ID:	0188372	Month	Solar Radiation (kWh/m ² /day)	AC Energy (kWh)	Energy Value (\$)
State:	Arizona	1	4.00	9892	882.07
Latitude:	33.4 ° N	2	4.73	10476	934.14
Longitude:	110.7 ° W	3	5.79	13921	1241.34
PV System Specifications		4	6.98	15858	1414.06
DC Rating:	97.4 kW	5	7.63	17263	1539.34
DC to AC Derate Factor:	0.858	6	7.82	16599	1480.13
AC Rating:	83.6 kW	7	7.13	15675	1397.74
Array Type:	Fixed Tilt	8	6.57	14522	1294.93
Array Tilt:	10.0 °	9	6.14	13317	1187.48
Array Azimuth:	180.0 °	10	5.30	12353	1101.52
Energy Specifications		11	4.39	10210	910.43
Cost of Electricity:	8.9 ¢/kWh	12	3.63	8949	797.98
		Year	5.85	159034	14181.06
<input type="button" value="Output Hourly Performance Data"/> <i>(Gridded data is monthly; hourly output not available.)</i>		<input type="button" value="Output Results as Text"/> Saving Text from a Browser			
<input type="button" value="Run PVWATTS v.2 for another location"/>		<input type="button" value="Run PVWATTS v.1"/>			

Attachment 2: Public Works System Description

Solar System Description – Gila County Public Works

Location: 745 N. Rose Mofford Way, Globe, AZ 85501
Account: 377017284
Meter: U47268
System Size: 97.44 kW
Modules: Trina 280w
Inverter(s): PVP 100kW
Type of Solar: Covered Parking
Structure Use: Office work; mostly day use – County Public Works Department

Description

This system will support the electrical use of the Gila County Public Works Department, which moved into the facility 7 months ago (Feb. 2011). As stated in the accompanying 'System Sizing' section below, this system is compliant with the APS School and Government Incentive Program's usage and demand restrictions.

This system consists of solar covered parking structures facing approximately due south to slightly off due south (160deg-200deg). The modules will be tilted at approximately 10 degrees. The modules will be standard polycrystalline-silicon Trina Solar 280w (TSM-280-PC14) and the inverter will be one (1) PV Powered 100 kW. The system layout will have the following parameters:

- Grouped into several sections to accommodate the existing parking lot dimensions
- Set in close proximity to the building and Service Entrance Section
- Comprised of both single car (L) and dual end to end (T) layouts

Estimate of Facility Electrical Usage/Demand

As highlighted in Exhibit 1 (below), extracts of the online data for electrical usage show the building has consumed approximately 15,213 kWh of electricity on average over its first six months of occupancy (Feb. 7- July 8, 2011). These six months should be representative of the facility's annual load profile, as they cover the spectrum of seasonal variation of load data (winter through summer months). Therefore, it is reasonable to assume the full year usage at 12 times the average month usage (15,213 kWh) or 182,560 kWh. The structure has already reached a peak demand of 96 kW during this first six month period, so it is also reasonable to assume that this will be representative of the facility's annual peak demand level.

System Sizing (Compliance with Program Demand/Usage Restrictions)

This system is not expected to approach either the expected annual usage (approx. 182,560 kWh) or demand limits (approx. $1.25 \times 96 = 120$ kW) mandated in the APS School and Government Incentive Program.

Usage: Using PVsyst production modeling that utilizes data from the nearest TMY3 weather station, we have accurately calculated this 97.44 kW system to yield a 1632 kWh/kWp production factor (NOTE: this production factor has also been substantiated using PVWatts v2, as seen in the accompanying reports). With an expected 1st year system output of 159,034 kWh, the system is expected to support approximately 87% of total usage (182,560 kWh), providing a comfortable margin below the Program ceiling of 100% of usage.

Demand: With a 96 kW peak demand in the last 6 months, the maximum allowed inverter size is 120 kW (1.25*96kW). However, since this system will only use a 100 kW inverter, ample margin below the Program demand sizing constraint exists as well.

Exhibit 1

6 Month APS Account/Meter Usage and Demand History:

APS Account #	Rate Plan	Meter Number	Service Number	Start Date	End Date	Billing Days	kW	Total kWh	Usage Charge	Billed Amount
377017284	2 XS/S	U47268	8851592282	7/8/2011	8/4/2011	27	41	12800	\$1,701.81	\$1,831.15
377017284	2 XS/S	U47268	8851592282	6/6/2011	7/8/2011	32	46	14880	\$1,945.39	\$2,093.24
377017284	2 XS/S	U47268	8851592282	5/9/2011	6/6/2011	28	47	10000	\$1,637.02	\$1,761.43
377017284	2 XS/S	U47268	8851592282	4/7/2011	5/9/2011	32	32	9360	\$1,299.21	\$1,397.95
377017284	2 XS/S	U47268	8851592282	3/9/2011	4/7/2011	29	32	9520	\$1,142.13	\$1,228.93
377017284	2 XS/S	U47268	8851592282	2/7/2011	3/9/2011	30	96	34720	\$3,447.39	\$3,709.39
6 Month Average:							49	15213		
Projected August-January Total:							49	91280		
Expected Annual Total:							96	182560		