



Rocky Mountain Power
Solar Incentive Program

Implementation Plan

March 30, 2007



TABLE OF CONTENTS

1. PROGRAM OVERVIEW... 3
2. IMPLEMENTATION PLAN OUTLINE... 4
3. PROGRAM GUIDELINES... 6
3.1 Program Effective Dates... 6
3.2 Incentives and Caps... 6
4. CUSTOMER ELIGIBILITY... 8
5. PROJECT ELIGIBILITY... 9
5.1 Size Requirements... 9
5.2 Equipment Specifications... 9
5.3 Siting Requirements... 10
5.4 New vs. Old Equipment... 12
5.5 Renewable Energy Credits... 12
5.6 Contractor Requirements... 12
5.7 Additional Requirements... 12
5.8 Projects NOT Eligible for Incentives... 13
6 HOW TO APPLY... 14
6.1 Program Participation Steps... 14
6.2 Discrepancies... 15
6.3 Changes After Application Approval... 15
6.4 Inspections... 16
6.5 Forms... 17
7. REIMBURSEMENT PROCESS... 19
7.1 Satisfactory Credit... Error! Bookmark not defined.
8. PROJECT DOCUMENTATION REQUIREMENTS... 20
8.1 Project Application Requirements... 20
8.2 Final Documentation Requirements... 20
8.3 Invoice Requirements... 20
10. 1099 FILING AND REPORTING... 21
11. DEFINITIONS... 22
12. CONTACT INFORMATION... 24
APPENDIX A: ROCKY MOUNTAIN POWER SOLAR INCENTIVE PROGRAM GUIDELINES... 25
APPENDIX B: PROGRAM GUIDELINES AT-A-GLANCE... 26

1. PROGRAM OVERVIEW

Rocky Mountain Power is pleased to offer its 2007 Solar Incentive Program. This pilot program is a five-year effort (pending regulatory approval) to gain market-based information on the costs and benefits of a solar photovoltaic buydown program in Utah.

The program goals for this initial launch year will include:

- Speed to market
 - A program launch on Public Service Commission approval.
 - Accessing initial demand through submitted applications
 - Functional Website by program launch date accessible at www.rockymountainsolar.net
 - Toll free customer phone: 866-344-9802
- Establish and manage program caps:
 - 107 kW_{AC} overall cap on installed photovoltaic arrays eligible for program incentives
 - A kW_{AC} limit and cap between residential and non-residential installations of:
 - Residential projects - 57 kW_{AC}
 - Non-residential projects - 50 kW_{AC}
 - Limit of one project per residential owner applicant and one project per non-residential owner applicant
 - Limits between residential and non-residential may be modified to meet demand
- Providing a complete participation process that will:
 - Provide printable forms from Website
 - Provide design spreadsheets
 - Provide a toll free number, 866- 44-9802 for customers and contractors requesting information
 - Provide a contractor database
 - Provide utility standards and requirements
- A program process flow from application to incentive payment
- Complete program guidelines

2. IMPLEMENTATION PLAN OUTLINE

- A. File tariff with Utah Public Service Commission by April 3, 2007
- B. Finalize the Program process, specifications and requirements by April 15.
- C. Respond to any questions from commission staff - by April 22, 2007
- D. Establish contractor licensing requirements for program participants by working with Utah Clean Energy, PacifiCorp and other stakeholders (by April 22)
- E. Develop program Web site (by April 15)
- F. Include state and federal tax credit and other program information
- G. Determine exact guidelines for Generation and/or net metering meter installation and utility standards (by April 15)
 - a. Meet with Rocky Mountain Power representative to discuss meter installations (by April 15)
- H. Develop application (by April 15)
- I. Develop printable forms off on-line program Web site (by April 15)
- J. Develop collateral pieces for launch (start with printable forms off of the Program Web site)
 - a. Contractor List
 - b. FAQ for customers
 - c. Program Information and Requirements
 - d. Contractor Requirements and Information
 - e. Program Process
- K. Publish the program toll free number (by April 15) with:
 - a. Auto answering with message - calls returned within 1 business day. Call management protocol as follows:
 - b. Program specialist to return customer calls
 - c. Program specialist familiar with Utility Standards and program to return contractor calls
 - d. Utility call center will direct customers to toll free number
- L. Develop and communicate the Utility Flow process (by April 22)
 - a. Who does it touch?
 - b. Who needs to know what?
 - c. What information needs to go where and when?
- M. Develop flow chart showing interaction between program and Rocky Mountain Power Billing Department. (by April 15)
- N. Develop public relations opportunities and protocol with Rocky Mountain Power (by April 22)
- O. Establish application beginning date. This is the first day applications will be accepted. It may be different than the program approval date. Update web site.
- P. Program launch
 - a. Open on-line applications on the application beginning date.
 - b. Allow construction starts with program application review and approval
 - c. Pre-inspect approved applicants

- d. Fill program's available 107 kW on "first come first serve basis" reserving the right to re-allocate kW to distribute among categories or among various applicants in the event of multiple application from the same applicant.
- Q. Project installation and completions (by January 30, 2008)
- a. Create and manage waiting list
 - i. Withdraw and move next customer on the waiting list to approved status on a 60 day schedule dictated by installation progress
 - b. Respond to customer and contractor inquiries
 - c. Inspect completed projects and pay incentives
 - d. Enter system size and estimated system production into program data base.

3. PROGRAM GUIDELINES

3.1 Program Effective Dates

Funding for the Rocky Mountain Power Solar Power Incentive Pilot Program is administered on a **first-come, first-served basis**. The effective dates of the Program and application submittal requirements are as follows:

- No project installations are allowed under the Program Guidelines prior to approval of the program tariffs by the Utah Public Service Commission.
- Once the program is approved, no project installations are allowed under the Program Guidelines prior to approval by Rocky Mountain Power.
- For Program Year One, all applications must be received on or after the application beginning date (available on the program web site) and no later than November 30, 2007 to be eligible
- All approved projects must be completed in their entirety no later than January 30, 2008
- Applications for Program Year 2 will be received starting on application beginning date (available on the program web site) through November 30, 2008
- Applications must be received at the program web site and/or program address listed in the contacts section

3.2 Incentives and Caps

The Rocky Mountain Power Solar Incentive Pilot Program offers a cash incentive of \$2.00 per watt_{AC} (W_{AC}) for residential and non-residential buildings of rated alternating current (AC) electricity production on approved projects.

- Approved customer applications will receive written approval specifying the kW_{AC} and incentive amount approved
- The Program is limited to 107 kilowatts (kW) per program year
 - All applications received after the program cap is reached will be placed on a waiting list for that program year
 - If an approved application is withdrawn, the next application on the waiting list will be moved up to approved status and the customer will be so notified in writing for that program year

3.2.1 Incentive Calculation

The incentive will be calculated based upon the AC wattage (watts_{AC}) production of the PV array. The watts_{AC} is calculated using the following considerations:

- Per the California Energy Commission (CEC) Program list of eligible equipment (<http://www.consumerenergycenter.org/erprebate/equipment.html>), the following two components are used in the calculation of W_{AC}:
- PV module PV USA Test Conditions (PTC) wattage
- Inverter efficiency at 75% of inverter capacity

WAC is then calculated using the following equation (1):

$$(1) \text{ watts}_{AC} = \text{PTC wattage} \times \text{\# of modules} \times \text{Inverter efficiency}$$

The cash incentive is calculated for Program year one using the following equation (2):

$$(2) \text{ Incentive} = \text{watts}_{AC} \times \$2.00 \text{ per watts}_{AC}$$

3.2.2 Incentive Funding Levels and Caps

Incentive funding levels are defined in Table 1.

Table 1 - Funding Levels

Beginning Date	Ending Date	Incentive Level
To be established	December 31, 2007	\$2.00 per watt
January 1, 2008	December 31, 2008	\$2.00 per watt
January 1, 2009	December 31, 2009	\$2.00 per watt
January 1, 2010	December 31, 2010	\$2.00 per watt
January 1, 2011	December 31, 2011	\$2.00 per watt

Table 2 depicts the incentive caps for all residential and non-residential. Participating projects can be larger than the program caps utilized below up to the Net Metering limits of 25 kW, but the program will only pay incentives up to the limits identified below. Incentives are capped at the following size systems:

Table 2 - Project Caps

	Size of PV Array (kWAC)	Max \$ Incentive
Residential Customers	3 kW	\$6,000
Non-Residential Customers	15 kW	\$30,000

4. CUSTOMER ELIGIBILITY

The following rules pertain to customer eligibility for the Rocky Mountain Power Solar Incentive Program:

- Customer must be receiving temporary service from or be an existing grid-connected customer of Rocky Mountain Power, within the state of Utah at the time of the incentive application is submitted.
- Customer's account must be active and current at the site of the installation when the incentive payment is made.
- Customers are only eligible for incentives for one project per program year. Customers may apply for incentives for additional projects, but those will only be selected if there are not enough eligible projects to fill the program's maximum kW amount.

5. PROJECT ELIGIBILITY

5.1 Size Requirements

There is no minimum size of PV system required. Customers participating in the Rocky Mountain Power Solar Incentive Pilot Program follow the company's *Customer Generation* guidelines. For more information on this please go to the following link: <http://www.pacificorp.com/Article/Article62233.html>

Participating customers may be eligible to Net Meter up to the Net Metering limits of 25 kW. For more information on Rocky Mountain Power Net Metering guidelines and requirements can go to the following link: <http://www.rockymtnpower.net/File/File68233.pdf>

You may also contact the Rocky Mountain Power Solar Incentive program at 866-344-9802 for more information. Maximum system size per meter allowed is 25 kWAC. Maximum size requirements for Program incentives are as follows:

- Residential customers – 3 kW_{AC}
- Non-residential customers – 15 kW_{AC}

Incentives will only be paid for that portion of a system that does not exceed the aforementioned maximum size requirements and total PV system size is less than 25 kWAC. Participants can install systems larger than the program maximum size cap, but incentives will be paid only up to the cap amount. Systems larger than 25 kWAC are not allowed to participate in the program and are subject to Net Metering requirements in Rocky Mountain Power's Schedule 135.

Size requirements are specified on a, per facility/campus/residence, and per meter basis for each Program year. Participants are only eligible for one project per program year. Each project must be a new installation. For example, a residential customer could be eligible for incentives or up to a 3 kWAC system, but could install a larger system, up to the net metering cap of 25 kWAC.

5.2 Equipment Specifications

A complete PV system installation is defined as a having a PV array, inverter, Rocky Mountain Power meter, generation meter socket, grid interconnection, and AC and DC disconnects. The Rocky Mountain Power Solar Incentive Pilot Program specifies the eligible equipment for the PV modules, inverter and generation meter socket. The equipment list for PV modules and inverters is provided by the California Energy Commission's (CEC) Emerging Renewables Program (ERP) certified equipment list.

This list can be found on the following website:

<http://www.consumerenergycenter.org/erprebate/equipment.html>

If a product is removed from the CEC list after approval of application, the product will remain eligible.

Generation Meter Socket

The utility will install a generation meter after project installation. The installation requirements for the generation meter socket are as follows:

- ANSI Standard 4 Jaw socket
- 120/240 Volts
- 100 amps or 200 amps depending on system size (may be larger on business or public building projects)
- Single phase three wire (may be three phase on business or public building projects)
- UL Listed, NEMA 3R
- Ring Design
- No by-pass mechanism
- AC disconnect and generation meter socket must be located with 10 feet of the Revenue Meter

The Net Metering – Design Standards are available for download from the Program website (below) from Rocky Mountain Power Web site or provided in hard copy by written request to the program administrator.

<http://www.rockymtnpower.net/File/File68233.pdf>

5.3 Siting Requirements

Siting a PV system requires many considerations. The most prominent constraint is space and an unobstructed south facing location. Sometimes the ideal location for a system is not the best for producing the maximum output of electricity. It is encouraged to consider the importance in producing peak output during periods of utility peak loads.

The three major factors in determining output amount are:

- Orientation (tilt and azimuth (+/- degrees from true south)
- Shading
- System wiring and inverter programming

Rocky Mountain Power will not inspect the wiring or installation of a PV array. However, local building codes and inspectors will require specific inspections and submittal of plans and other information in order to issue a building permit required under this program. Building inspections and a “signed-off” building permit are required by the Program and must be submitted prior to final inspection by Rocky Mountain Power and setting of the meter.

The siting of a system will be required to meet the standards set forth in this document. Finally, the location of the inverter is a factor in PV system production.

Efficiency diminishes substantially when inverters are subjected to heat. It is advised to locate the inverter in a shaded northerly location or inside a garage or other structure. Direct sunlight is not advised.

Requirements	Recommended
Wiring	
No recommendations or requirements are provided. We highly recommend that the installer be familiar with NEC 690 and good installation practices. The wiring greatly contributes to the performance of a PV system. Contractors should be well versed in electrical codes and utility standards.	
Shading	
The application may be rejected if the total annual production of the PV array has the potential to be reduced by more than 25% relative to an unshaded array.	Shading plays a major role in decreasing the output of a system. PV panels should be exposed to the sun's rays for most or all of the day, with minimal or no shadows from trees, chimneys or cables between 9 a.m. and 4 p.m. To determine actual shading effects, it is recommended to have a good understanding of the percent of shading of the location throughout the year. A contractor may use a <i>Solar Pathfinder</i> (or equivalent) to determine how surrounding objects affect PV output. This calculation can provide a percent reduction in output as compared to an unobstructed system in that latitude and angle of inclination and orientation.
Orientation⁴	
There must be a location on the property for a system facing +/- 90° true solar South.	Ideally, a system should be sited at +/-15o of true solar South.
Tilt	
No Requirement	Ideal tilt angles are: For northern Utah is between 36° and 51°; For southern Utah, between 39.5° and 54.5°.
Inverter Location	
Inverter should be installed according to manufacturer's recommendations.	It is recommended that the inverter be installed out of the sun. For low voltage (48V or less) inverters, it is recommended to minimize the distance from the PV array to the inverter.

⁴ Compasses report magnetic south, +/-13° for Salt Lake City. For west of South, add the correction; east of South, subtract.

5.4 New vs. Old Equipment

All equipment installed must be new to be eligible for an incentive under the Rocky Mountain Power Solar Incentive Program. This must be evident in the documentation (invoice or signed contractor proposal) required by the Program.

5.5 Renewable Energy Credits

The signed Project Application transfers the Renewable Energy Credits (REC) associated with the portion of the array eligible for Rocky Mountain Power incentives to Rocky Mountain Power. For an explanation of REC, please refer to the definitions section at the end of this document. A copy of Project Application can be found at the Solar Incentive Program web site.

5.6 Contractor Requirements

Electrical contractors must be licensed in the state of Utah General Electrical Contractor (S200) or Solar Energy Systems Contractor (S215) license. It is recommended a contractor have experience in the design and construction of PV, and/or possess certification from a nationally recognized program for PV installation.

Several organizations have expressed interest in offering contractor workshops to educate contractors on the installation of PV systems. Check the program web site for available training. Contractors should be well versed in these Rocky Mountain Power Solar Incentive Program Guidelines as set forth in this document.

In addition, a list of contractors and equipment suppliers who have expressed interest in the Program can be viewed on the Rocky Mountain Power Solar Incentive Program website.

The following information is included on the Project Application and is re-stated here so both contractors and customers are familiar with the requirements and limitations.

To receive incentives for solar photovoltaic arrays from the Rocky Mountain Power Solar Incentive program, Rocky Mountain Power requires customers to work with Utah state licensed (General Electrical Contractor (S200) or Solar Energy Systems Contractor (S215)) contractor pursuant to a written contract. In addition, customer shall independently evaluate any advice or direction given by Rocky Mountain Power related to estimates of electricity generated or the cost, selection or installation of photovoltaic systems. In no event will Rocky Mountain Power be liable for the failure of customer to achieve a specified amount of energy generation or savings, the operation of customer's facilities, or any incidental or consequential damages of any kind in connection with this agreement or the installation of photovoltaic systems and in no event shall Rocky Mountain Power's liability exceed any obligation to pay the incentive for which customer is eligible under this application.

5.7 Additional Requirements

The following are additional requirements that must be taken into consideration when applying for an incentive under the Rocky Mountain Power Solar Incentive Pilot Program:

- System must be installed by a Utah General Electrical Contractor (S200) or Solar Energy Systems Contractor (S215) license. (Application must include the contractor in order to verify contractor license)
- Completion and execution of a Net Metering Agreement (two signed copies)
- The inverter must be UL Listed for grid-interactive operation and anti-islanding (but isolated if grid power is lost)
- Install *accessible*, externally operable, lockable, *visible* blade AC disconnect switch within 10 feet of the Utility Revenue Meter.
- Utility may install (at its own expense) additional monitoring of the new PV system with the agreement of the customer
- Systems must meet warranty requirements
 - Panels - 20 years
 - Inverters - 5 years
 - Labor & Materials (other than panels and inverters) minimum warranties as required by Utah State law.
- The Rocky Mountain Power Solar Incentive Program team will conduct pre- and post-installation inspections at up to 100% of the project sites
- Equipment eligible for and receiving incentives from the Rocky Mountain Power Solar Incentive Program may not receive any other equipment installation incentives from any other Rocky Mountain Power incentive program
- Customer must have an account in good standing to receive incentives.
- Systems may not go online until the utility sets the meter. However, a system test may be conducted using a UL listed jumper or customer provided UL rated meter. However credit for over-generation will not be credited to the customers account until the Utility sets the new bi-directional meter and the system information is noted on the billing account

5.8 Projects NOT Eligible for Incentives

The following projects are **not** eligible for an incentive under the Rocky Mountain Power Solar Incentive Program:

- Installations operating prior to the Program start date
- Solar thermal systems
- Off-grid installations
- Systems that utilize equipment not on the list of eligible equipment
- Systems that are rated beyond 25 kW_{AC}

Incentives will not be paid for the equipment capacity beyond the Program caps.

6 HOW TO APPLY

Applications are available on line at the Rocky Mountain Power Solar Incentive Program web page www.rockymountainsolar.net and, once completed, may be submitted by mail, or email. Receipt of the application is responsibility of the applicant. Rocky Mountain Power is not responsible for lost improperly submitted applications.

6.1 Program Participation Steps

Here are the basic steps for participating in the Rocky Mountain Power Solar Incentive Program:

Step 1: Review the Program Guidelines and other information from the Program web page (www.rockymountainsolar.net).

Step 2: Submit a complete Application Form.

Applications can be mailed to:

Rocky Mountain Power Solar Incentive Program
P.O. Box 1381
Salt Lake City, UT 84091

Step 3: Your site is inspected and an inspection form will be completed by a Program team member to ensure compliance with the Program Guidelines.

Step 4: All applications and inspection forms are submitted for review and approval by the Rocky Mountain Power' Program Administrator for compliance with the Program Guidelines.

Step 5: Upon Rocky Mountain Power approval, approved applicants will be notified in writing and should not proceed with their project until they have received written authorization and approval from Rocky Mountain Power. Applications received that are above the Program cap* will be placed on the Program Waiting List.

Step 6: If approved, contract with a qualified Utah General Electrical Contractor (S200) or Solar Energy Systems Contractor (S215) to install the PV system. Contractor may be required to submit a one line electrical diagram for approval and must comply with all applicable Rocky Mountain Power Construction Standards.

Step 7: Inform the Rocky Mountain Power Solar Incentive Program Administrator that your project is completed by calling 866-344-9802 or email to Rocky Mountain Power Solar Incentive Program at solarincentive@rockymountainpower.net The applicant or his contractor must also mail all required final documentation to the Program Administrator. This includes a "signed-off" building permit, invoice from your contractor (consisting of cost of labor and materials including equipment make and model) and Change Order form (if required).

Step 8: The Utility will complete a safety and meter socket inspection and have you execute the Net Metering Agreement specific to your system. To receive the incentive, you are required to sign a Net Metering Agreement. To learn more about Net Metering



please visit the Rocky Mountain web page:
<http://www.utahpower.net/Article/Article44098.html>

Step 9: If your PV system meets Utility Standards the representative will schedule the installation of the new bi-directional meter and Generation meter (see the Utility Standards for more information on the meters).

Once the new meters are set you are ready to turn on your new PV system!

Step 10: After successful verification of the installation, we will mail the incentive check within 4 weeks. Acceptance of the incentive assigns all renewable energy credits (REC) derived from operations of the installed PV system to Rocky Mountain Power.

* The Program provides incentives for up to 107 kilowatts_{AC} (kWAC) of photovoltaic (PV) per Program Year. If more applications are received than can be fulfilled under the program cap, applications received after the cap is reached are placed on a Waiting List. If an approved applicant withdraws from the program, the next application on the Waiting List will be move to approved status and the applicant will be notified in writing. To remain eligible for incentives , customer s on the waiting list cannot begin equipment installations until notified in writing the application is approved.

Still have questions? E-mail: solarincentive@rockymountainpower.net or call: 866-344-9802

6.2 Discrepancies

If it is determined that there are differences from the Application Form and the on-site inspection, the applicant will receive a letter detailing these findings. This letter provides an opportunity for the applicant (or assigned contractor) to dispute the inspection results. After a period of **10 days**, if the applicant has not responded it will be assumed the applicant has accepted the revised incentive level.

6.3 Changes After Application Approval

Any proposed changes to an approved application must be submitted to the Program on an Application Change Form. This form is available for download at www.rockymountainsolar.net

Note: Any change resulting in an increase in the system size will not result in an increase in the incentive. Incentives cannot exceed the approved project size and incentive amount.

The following items may be submitted for change:

- Customer changes contractors
- Change in equipment
- Change in incentive assignment
- Request change in completion date
- **Changes in location of equipment (array, inverter):** In addition to the Application Change Form, contractor must submit a revised sketch (downloaded from www.rockymountainsolar.net with the revised equipment location clearly noted.

- **Changes in location of disconnect or REC meter:** In addition to the Application Change Form contractor must submit a revised sketch (downloaded from www.rockymountainsolar.net with the revised equipment location clearly noted. All such requests must be approved by the Utility before being accepted.

Exceptions to Utility Standards must be submitted to the Program Administrator prior to construction. Rocky Mountain Power has sole discretion to waive any Standard so adherence to this requirement is very important.

6.4 Inspections

In addition to local Building Permit Inspections, both a pre and post inspection will be conducted by either the Program Administrator or Rocky Mountain Power. Inspections may be conducted at up to 100 % of the project sites to determine compliance with Program requirements. Additionally, a Utility Safety Inspection will be conducted at each site prior to final commissioning and operation of the system. All inspections must result in satisfactory approval prior to the project commencing forward through the process. General inspection procedures are detailed below:

Pre-Installation Inspection

The Rocky Mountain Power Solar Incentive Program team pre-installation inspection may include the following:

- Observation of project location
- PV array site
- Inverter placement
- Solar pathfinder measurements for shading percentage
- Orientation
- Photographs of the facility including proposed PV array location and existing utility service
- Other items as necessary to provide a complete report

Any deviation(s) from Program requirements discovered at the pre-installation inspection will accompany a list of recommendations for correcting noted deficiencies. Re-inspection may be required prior to issuing an incentive commitment and authorization to proceed letter from Rocky Mountain Power. Customer may be required to provide evidence from performing a *Solar Pathfinder* inspection to verify compliance with minimum standards for shading.

Post-Installation Inspection

The Rocky Mountain Power Solar Incentive Program team post-installation inspection may include the following:

- Observation and verification of project installation:
- Compliance with application and pre-inspection
- PV array site
- Inverter placement
- PV Module model and quantity verification and documentation
- Inverter(s) model, quantity and serial number verification and documentation

- Execution of the Net Metering Agreement

Any deviation(s) from Program requirements or approved design discovered at the post-installation inspection will accompany a list of recommendations for correcting noted deficiencies. Re-inspection may be required prior to issuing a request for Safety Inspection.

Utility Safety Inspection

- Safety inspections will include the following checks:
 - AC Disconnect and Generation Meter Socket located within 10 feet of the Utility Revenue Meter
 - AC Disconnect is accessible, lockable, visible-blade type, and is manually operated from outside the enclosure
 - AC Disconnect actually operates
 - Meter and disconnects are properly wired for interface with the Utility grid
 - Generation Meter Tag is installed properly
 - AC Disconnect Tag is installed properly
 - Transformer Tag is installed properly, if applicable

Meters will be set and final system operation may commence only after all required inspections have received final approvals.

6.5 Forms

The following forms will be required during the incentive application process.

A. Rocky Mountain Power Solar Incentive Program Application Form

The **Rocky Mountain Power Solar Incentive Program Application Form** acts as the enrollment form for the Program funds. The form will provide details on the proposed PV system and provide a basis for the inspection. If the inspection is passed, the form will be the guidance for the reservation of funds.

B. Site Pre-Inspection Form and Site Sketch

The **Site Pre-Inspection Form Site Sketch** provides detailed information about the proposed site for the PV system. The sketch should show the location of major PV equipment on a building site plan (if ground mount, then show the array relative to the building).

C. Net Metering Agreement

The **Net Metering Agreement** defines the rules for utility and customers for operation of the PV system and the associated interconnection requirements. It also assigns the appropriate renewable energy credits to the utility.

The Net Metering Agreement will be delivered with the final inspection and must



be executed by the customer in order to connect to the Rocky Mountain Power grid and be eligible to receive the incentive.

7. Incentive Payment Process

The Rocky Mountain Power Solar Incentive Program incentive will be paid directly to the applicant or to their designated assignee as directed by the applicant as noted on the assignment of incentive on application. The incentive will be paid within 60 days of the new PV systems connection to the electrical grid. Payment of the incentive is contingent upon a site inspection confirming the project installation and eligibility, execution of a Net Metering Agreement as well as upon the receipt of all required documentation (see Section 8).

8. PROJECT documentation requirements

8.1 Project Application Requirements

Required documentation includes:

- Rocky Mountain Power Solar Incentive Program Application Form
- Site Pre-Inspection Form
- Site Sketch of proposed installation

8.2 Final Documentation Requirements

Required documentation includes:

- Net Metering Agreement
- Building permit "signed-off" by appropriate municipal authority
- Copies of electrical contractor's itemized invoice(s)
- Application Change Form (when applicable)

Additional documentation requirements include detailed invoices listing specific equipment types and quantities purchased. Invoices must be marked as paid, and are to be itemized with the costs for equipment, labor, supplies and other costs. Location or business name on the invoice must be consistent with the application information. Only expenses incurred during the term of the Program that are directly related to PV equipment purchases can be reimbursed through an incentive payment.

8.3 Invoice Requirements

As with the applicant, a third party contractor must submit documentation of their costs (including labor), not the charges to be invoiced to the host customer. Program staff must approve all invoices and final documentation.

Eligible system costs may include cost of labor, permits, sales tax, PV modules, inverters, any performance meter, meter socket, disconnect box, mounting or tracking structures, and interconnection equipment. Costs incurred for equipment used to store electricity (e.g., batteries), tree-trimming, re-roofing, roofing repairs, relocating vent pipes, financing fees, etc. are not eligible.

10. 1099 Filing and reporting

The project costs paid by this Program (incentives) may have tax implications for customers who receive incentives from the Rocky Mountain Power Solar Incentive Program. Participating customers are encouraged to consult their tax experts.

Any customers that directly receives an incentive payment from the Program may be required to fill out Form W-9 (Request for Taxpayer Identification Number and Certification). Based on the information provided on Form W-9, a determination will be made as to whether a Form 1099 will be sent out. Generally, all non-corporations with total payments of \$600 or more will receive a Form 1099 by January 31 of the next year. Program staff will also submit a Form 1096 (Annual Summary and Transmittal of U.S. Information Returns) to the IRS, summarizing the total dollar value of all 1099 forms issued, along with copies of all 1099 forms mailed out.

The Rocky Mountain Power will not be responsible for any tax liability imposed as a result of incentive payments.

11. DEFINITIONS

Alternating Current (AC) is the current received by the utility. AC current is the output from the inverter.

Direct Current (DC) is the current produced by the photovoltaic array and is the input to the inverter.

Disconnects (AC or DC) may either be a breaker in a distribution panel or a fusible switch. Both may be required. Utility personnel must have access to this box.

Generation Meter is the display required for metering to indicate the system production in terms of kWh over time and will be provided by the utility.

Grid is the distribution network of the utilities.

Incentive is the amount to be paid to the customer, contractor or supplier (see Section P.2 for amounts) once the required project documentation has been received and the completed installation is approved.

Inverter is a device that converts DC power from the PV array into AC electricity for use at the facility where the PV system is located or to sell back to the utility. Only grid-interactive inverters are eligible for participation in the Rocky Mountain Power Solar Incentive Program. This type of inverter operates in parallel with the grid only when the utility grid is available. In event of a power outage, the system is designed to disconnect from the grid until the utility power is restored. This function is to provide protection for field personnel.

Multi-family means separately metered residences in a multi-unit complex.

Net Metering measures the difference between the electricity you buy from your utility and the electricity you produce using your own generating equipment. Your electric meter keeps track of this "net" difference as you generate electricity and take electricity from the electric grid.

Non-Residential customers are those served by non-residential meters.

Photovoltaic (PV) array is made up of PV modules electrically connected together; creating an electrical supply circuit to power an inverter. Several PV modules can be attached together onto a panel. One or more panels make an array.

PV USA Test Conditions (PTC) is stated to be 20°C ambient temperature, 1000 W/m² solar intensity, and wind speed at 1m/s.

Photovoltaic (PV) module is the equipment that directly converts energy from the sun into DC electricity. The module can be made of several different types of solar cells. Common cell types are: Single Crystalline Silicon (Mono-Csi), Poly Crystalline Silicon (Poly-Csi), Amorphous Silicon (Asi), Cadmium Telluride (CdTe) and Copper Indium Diselenide (CIS). An eligible module must be UL listed and found on the California Energy Commission's website of eligible products.

Renewable Energy Credits (RECs) also known as green tags or green certificates or tradable renewable certificates represent the environmental attributes of the power produced from renewable energy projects and are sold or traded separately from commodity electricity. A REC represents the non-power or environmental attributes of one kilowatt hour (kWh) of energy that is generated by a renewable energy resource and is physically metered and verified.

Residential Customer is a utility customer served by a residential meter.

Solar Pathfinder is a device used to assess the percent of time where shading is present at the location of measurement.

Standard Test Conditions (STC) is defined by module (cell) operating temperature of 25°C and 1000 W/m² solar intensity.

True Solar South is the true cardinal direction for south. A compass points to the magnetic position but not to the true position. In determining the ideal position for an array, it is important to know the position in relation to True South. True South is approximately 13° East of Compass South for the State of Utah.

Utility Interconnection is the physical connection between the utility grid and the customer generation. An Interconnection Agreement (or a Net Metering Agreement) is needed for a customer to have on-site electric generation connected to the Utility Grid.

12. CONTACT INFORMATION

- Toll-Free Rocky Mountain Power Solar Incentive Program: 866-344-9802
- Email Address: solarincentive@rockymountainpower.net
- Website: www.rockymountainsolar.net

Rocky Mountain Power Program Manager

Dave Taylor at 801-220-2923
Don Jones, Jr. at 503-813-5184

Program Administrator

Blake Howell at 866-344-9802

APPENDIX A: ROCKY MOUNTAIN POWER SOLAR INCENTIVE PROGRAM GUIDELINES

This section will be adapted from main body of Implementation Plan.

APPENDIX B: PROGRAM GUIDELINES AT-A-GLANCE

Rocky Mountain Power
Solar Incentive program

Guidelines At-A-Glance

Applications for the Rocky Mountain Power Solar Incentive program are open on a “first come, first serve basis” up to the yearly program allowance of 107 kilo-watts (kWAC). For Program Year One, applications will be received from the beginning application date through November 30, 2007. All Year One projects must be complete in all respects by January 31, 2008. Please check the program web page (www.rockymountainsolar.net) for more information.

The Rocky Mountain Power Solar Incentive Program (Program) At-A-Glance

Here are the basic steps in participating in the Rocky Mountain Power (Company) Solar Incentive Program:

Step 1: Review the Program Guidelines and other information from the Rocky Mountain Power web page.

Step 2: Submit a complete Application Form.

Step 3: Your site is inspected and an inspection form will be completed by a Program team member to ensure compliance with the Program Guidelines.

Step 4: All applications are submitted for review and approval to the Rocky Mountain Power’ Program Administrator for review and compliance with the Program Guidelines and Utility Standards.

Step 5: Upon Rocky Mountain Power approval, approved applicants will be notified in writing and should not proceed with their project or purchase equipment or other materials until they have received written approval from Rocky Mountain Power. Applications received that are above the Program cap will be placed on the Program waiting list. To be eligible for incentives, customers with applications on the waiting list cannot purchase or install equipment until the application is approved in writing.

Step 6: If approved, applicants should contract with a qualified Utah Electrical Contractor (S200) or Solar Energy Systems Contractor (S215) to install the PV system. Contractors may be required to submit a one line electrical diagram and other information as required for approval and must comply with all applicable Rocky

Mountain Power Construction Standards.

Step 7: Inform the Program Administrator that your project is completed by calling 866-344-9802 or email to Rocky Mountain Power Solar Incentive Program at solarincentive@rockymountainpower.net. The applicant or his contractor must also mail all required final documentation to the Program Administrator. This includes a “signed-off” building permit, invoice from your electrical contractor (consisting of cost of labor and materials including equipment make and model) and Change Order form indicating any changes from the original application (if required).

Step 8: The Company will complete a safety and Utility Standards inspection and have you execute the Net Metering Agreement specific to your system. To receive the incentive, you are required to sign a Net Metering Agreement. To learn more about Net Metering please visit the Rocky Mountain web page:

<http://www.utahpower.net/Article/Article44098.html>

Step 9: If your PV system meets Utility Standards the representative will schedule the installation of the new bi-directional meter and Generation meter (see the Utility Standards for more information on the meters).

Step 10: After successful verification of the installation, we will mail the incentive check usually within 8 weeks or less. Acceptance of the incentive assigns all renewable energy credits (REC) derived from operation of the installed PV system eligible for Rocky Mountain Power incentives to Rocky Mountain Power.

Once the new meter (meters) is (are) set you are ready to turn on your new PV system!

* The Program provides incentives for up to 107 kilowatts (kWAC) of photovoltaic (PV) per Program Year. If more applications are received than can be fulfilled under the program cap, applications received after the cap is reached are placed on a Waiting List. If an approved applicant withdraws from the program, the next application on the Waiting List will be move to approved status and the applicant will be notified in writing of approval. Customers receiving notice of approval must provide evidence of completing the project

Still have questions?

E-mail: solarincentive@rockymountainpower.net or call: 866-344-9802

To download sample Rocky Mountain Power Net Metering Agreements click here:

<http://www.pacificpower.net/File/File68226.pdf>

Net Metering Explained:

<http://www.pacificpower.net/Article/Article39589.html>

http://www.eere.energy.gov/solar/net_metering.html

http://www.eere.energy.gov/solar/grid_connect.html

Changes to approved applications

Any proposed change to an approved application must be submitted to the program administrator on an approved Application Change Form. The Change Order form may be downloaded from the Rocky Mountain Power Solar Incentive Program web page. In addition to the Change Order form, any installations that require an exception to Rocky Mountain Power Standards must be submitted to the program administrator with a minimum of three (3) weeks notice for review and approval prior to starting construction. The submittal for exception must include a plan view of the proposed installation showing the PV array, inverter, disconnects and meter locations plus a one-line electrical diagram showing the proposed wiring. Approved exceptions may require additional signage or other components for an acceptable installation. Systems installed that do not meet Rocky Mountain Power Standards and have not received an approved exception can neither be approved nor connected to the Rocky Mountain Power grid and the incentive will not be paid to the customer.

Approved equipment lists

Please note that the following links will direct you outside the Rocky Mountain Power Solar Incentive Program Web site to a site operated by the California Energy Commission (CEC):

[Click here](#) for a CEC approved list of photovoltaic modules.

[Click here](#) for a CEC approved list of inverters.