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ENERGY
COMMISSION

**EMERGING
RENEWABLES
PROGRAM**

SEVENTH EDITION

GUIDEBOOK

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I. Introduction

This *Emerging Renewables Program Guidebook* is one of several guidebooks the California Energy Commission (Energy Commission) has adopted to implement the Renewable Energy Program pursuant to Senate Bill 1038¹ and Senate Bill 183.² It describes the requirements for receiving funding for the installation and operation of renewable energy systems under the Emerging Renewables Program element of the Renewable Energy Program.

The Energy Commission has adopted other guidebooks to address the requirements for the other elements of the Renewable Energy Program and guidelines governing the overall administration of the Renewable Energy Program. The *Overall Program Guidebook* describes how the Renewable Energy Program will be administered and includes information and requirements that apply to all program elements of the Renewable Energy Program.

Applicants requesting funding under the Emerging Renewables Program must satisfy the requirements contained in both the *Overall Program Guidebook* and this *Emerging Renewables Program Guidebook*. These guidebooks replace the *Overall Guidelines for the Renewable Resource Trust Fund, Fifth Edition* and the previous guidebook governing the Emerging Renewables Program (*the Emerging Renewables Program Guidebook, Sixth Edition*). Applications for funding approved under the previous program guidebook remain governed by the previous guidebook until the projects are completed, expired, or cancelled.

The Emerging Renewables Program builds on the experience of the Emerging Renewable Buydown Program (ERBP), which began in 1998 and operated through most of 2002. Over 3800 new systems were installed through the ERBP from 1998 through 2002, and a total exceeding 18,000 systems were installed by May 2006. Most of these systems utilized solar photovoltaic (PV) technology, which uses a semiconductor to convert sunlight directly into electricity.

A. Purpose

The Emerging Renewables Program (ERP) was created to help develop a self-sustaining market for renewable energy systems that supply on-site electricity needs across California. Through this program, the Energy Commission provides funding to offset the cost of purchasing and installing new renewable energy systems using emerging renewable technologies.

¹ Stats. 2002, Ch. 515, §§ 15 & 16, as codified in Public Utilities Code §§ 383.5 and 445.

² Stats. 2003, Ch. 666, §§ 1 & 2, as codified in Public Resources Code §§ 25401.6, and 25740 – 25751.

The goal of the ERP is to reduce the net cost of on-site renewable energy systems to end-use consumers, and thereby stimulate demand and increased sales of such systems. Increased sales are expected to encourage manufacturers, sellers, and installers to expand operations, improve distribution, and reduce system costs.

The ERP is one of several program elements within the Energy Commission's Renewable Energy Program. Funding for the Renewable Energy Program is collected from the ratepayers of four investor-owned utilities in California to support existing, new, and emerging renewable electricity generation technologies. For more information about the Renewable Energy Program, please visit the Energy Commission's Web site at [www.energy.ca.gov].

For consumer tips on purchasing a renewable energy system to supply on-site electricity needs please refer to Appendix 2 of this guidebook. Also see *A Guide to Photovoltaic (PV) System Design and Installation*, June 2001, (P500-01-020) and *Buying a Small Wind Electric System*, February 2002 for further information. These and other documents are available on the Energy Commission's Web site at [www.consumerenergycenter.org].

B. Overview

The ERP provides consumers of electricity with a financial incentive to install renewable energy systems on their property. The financial incentive varies based on system size, technology, and type of installation. The incentive is paid once the system is installed and operational. The consumer must apply to the Energy Commission for funding using the protocols in this guidebook.

To qualify for an incentive, both the consumer and the renewable energy system must satisfy a number of requirements. The consumer must receive electricity distribution service at the site of installation from an existing in-state electrical corporation contributing funds to support the program. These electrical corporations are Pacific Gas & Electric Company (PG&E), Southern California Edison Company (SCE), San Diego Gas & Electric Company (SDG&E), and Southern California Water Company (doing business as Bear Valley Electric Service (BVE)). The renewable energy system must utilize an emerging renewable technology, such as solar photovoltaic, solar thermal-electric, fuel cells, or small wind turbines.³ The system must also be interconnected to the utility distribution grid, must use new components that are certified or tested to be reliable, and must come with a five-year warranty. In addition, the renewable energy system must generate electricity to offset the consumer's on-site electrical load.

In most cases, an applicant submits a Reservation Request Form (CEC-1038 R1) and supporting documentation to reserve a fixed amount of program funds. Once the Reservation Request Form is reviewed and approved, the Energy Commission sends the applicant a Payment Claim Form (CEC-1038 R2) that identifies the amount of funds

³ Rebates are available for systems less than 30 kilowatts in size (wind systems up to 50 kilowatts in size may participate, but the rebates for such systems are limited to less than 30 kilowatts.)

reserved and the date upon which the reservation expires. The applicant then proceeds to install an eligible system. When the system is completed and operational, the applicant then submits the Payment Claim Form and supporting documentation to the Energy Commission. If the applicant installs an eligible system, meets all program requirements, and submits a completed Payment Claim Form with supporting documentation prior to the expiration date of the reservation, the Energy Commission reviews the amount reserved and the incentive the applicant is eligible to receive and makes the appropriate payment.

For forms or additional information, contact the Energy Commission's Call Center at: (800) 555-7794 or go to [www.consumerenergycenter.org/erprebate/index.html]

II. Program Eligibility Requirements

Currently, four technologies are eligible for ERP funding. They include the following:

1. Photovoltaic - the direct conversion of sunlight to electricity.
2. Solar Thermal Electric - the conversion of sunlight to heat and its concentration and use to power a generator to produce electricity.
3. Fuel Cell - the conversion of sewer gas, landfill gas, or other renewable sources of hydrogen or hydrogen rich gases into electricity by a direct chemical process.
4. Small Wind Turbines - small electricity-producing, wind-driven generating systems with a rated output of 50 kilowatts or less.

Systems that use the above technologies must satisfy the following eligibility criteria as explained in this chapter. Other technologies may be added to this category if they meet, to the Energy Commission's satisfaction, the criteria identified in Appendix 3.

A. System Ownership

Eligible renewable energy systems may not be owned by an electrical corporation as defined in Public Utilities Code section 218, or by a local publicly owned electric utility as defined in Public Utilities Code section 9604(d).

B. Grid Interconnection

Eligible renewable energy systems must be permanently interconnected to the electrical distribution grid of the utility serving the customer's electrical load. Portable systems are not eligible. The site where the system is installed must receive electrical distribution service from PG&E, SCE, SDG&E, or BVE. The system interconnection must comply with applicable electrical codes and utility interconnection requirements.

C. System Components

The major system components must be certified or approved as described in Appendix 3. Approved major components are on the Energy Commission's lists of eligible equipment and are available at:

1. [www.consumerenergycenter.org/erprebate] or
2. By requesting copies from the Energy Commission Call Center staff at (800) 555-7794.

The applicant should confirm that the components purchased for a system are eligible when applying for ERP funding. The Energy Commission staff will confirm that equipment identified in a reservation application meets eligibility requirements prior to an application being approved. However, if the applicant begins or completes the installation before the Energy Commission has approved the reservation, equipment

lists may have changed, and significant and costly changes may be needed for the system to comply with the eligibility criteria.

D. New Equipment

All major system components (requiring certification per section C) must be new and must not have been previously placed in service in any other location or for any other application. Equipment purchased or installed more than 18 months before applying for a reservation is not eligible.

E. System Sized to Offset On-site Electricity Load

For all eligible systems, regardless of technology, the system must be sized so that the amount of electricity produced by the system primarily offsets part or all of the customer's electrical needs at the site of installation. The expected production of electricity by the system may not be more than twice the historical or expected electrical needs of the electricity consumer at the site of installation. In most cases the system size limitation will not affect systems less than 10 kW because the average annual residential electricity consumption in California is about 7,000 kWh/year. The maximum size of a system that would primarily offset this average load, given conservative system production, is about 13 kW. See Appendix 4 for further details on how to determine the maximum allowed system size.

F. System Installation

All systems, if installed under contract, must be installed by appropriately licensed California contractors in accordance with rules and regulations adopted by the State of California Contractors State Licensing Board. Installation contractors must have an active A, B, or C-10 license, or a C-46 license for photovoltaic systems.

The Energy Commission encourages installation contractors to become certified by the North American Board of Certified Energy Practitioners (NABCEP). See [www.nabcep.org] for additional information.

Systems may also be self-installed by the purchaser (owner). While such installations are eligible for funding without the licensing requirements listed, they will be eligible only for a lesser rebate as described in Chapter III.

In all cases, systems must be installed in conformance with the manufacturer's specifications and with all applicable electrical and building codes and standards.⁴

⁴ For information on restrictions placed on owner-builders or self-installers, contact the Contractors State License Board at (800) 321-CSLB to obtain a current edition of the Contractor's License Law and Handbook.

G. Five-Year Warranty Requirements

All systems must have a minimum five-year warranty to protect the purchaser against system or component breakdown. The warranty must cover and provide for no-cost repair or replacement of the system or system components including any associated labor for five years. The warranty must also cover the major components of the generating system against breakdown or degradation in electrical output of more than ten percent from their originally rated electrical output during the five year period. Major components are defined as photovoltaic modules, wind turbine generators, solar thermal engines and dishes, fuel cell reformers and cells, and inverters. The warranty may be provided in combination by the manufacturer and installer.

Self-installed systems must have a minimum five-year warranty to protect the purchaser against breakdown or electrical output degradation of major system components. In this case, the warranty need not cover the labor costs associated with removing or replacing major components, because any repairs would be done by the self-installer or at the self-installer's expense.

H. System Performance Meter

All systems must be installed with a performance meter⁵ so that the customer can determine the amount of energy produced by the system. The meter must be listed with the Energy Commission and measure the total energy produced by the system in kilowatt hours (or watt hours) and have a manufacturer's uncertainty specification of $\pm 5\%$. The meter must retain the kilowatt-hour production data in the event of a power outage and must provide a display of system output that the customer can easily view and understand. A system need not include a separate meter if the system is installed with an inverter that contains internal metering and display equipment that meets the meter requirements above. The meter requirement also applies to system additions if the existing system does not include a performance meter. A list of eligible performance meters and inverters that have built-in meters is available at: [www.consumerenergycenter.org/erprebate].

If participating in the Pilot Performance-Based Incentive Program, the kWh meter must be a revenue grade meter as described in Chapter VIII.

I. Equipment Sellers

To participate in the ERP, companies who sell system equipment must provide the Energy Commission with the following information on form CEC-1038 R4:

1. Business name, address, phone, fax, and e-mail address
2. Owner or principal contact

⁵ A performance meter is a device which measures and displays the energy output of the renewable energy system.

3. Business license number
4. Contractor license number (if applicable)
5. Proof of good standing on the records of the California Secretary of State, as required for corporate and limited liability entities
6. Reseller's license number

This information must be submitted before a company can become eligible to participate in the ERP. To remain eligible, a company must resubmit this information annually, by March 31, using form CEC-1038 R4. This annual submittal is required even if the information identified in the company's prior R4 submittal has not changed. In addition, a company must submit an updated R4 form any time its reported information has changed. The updated R4 form must be submitted to the Energy Commission within 30 days of the change of any reported information.

The above information must be on file with the Energy Commission before the applicant can receive any reservation confirmation or payment. The Energy Commission will compile the information and make it available to consumers to assist them in making purchase decisions and effectuating remedial action. Information about registered equipment sellers will be posted on the Energy Commission's website at: [www.consumerenergycenter.org/erprebate/database/index.html]

The completed CEC-1038 R4 form may be submitted by FAX to (916) 653-2543 or by mail to:

ERP Seller Registration
California Energy Commission
1516 - 9th Street, MS-45
Sacramento, CA 95814-5512

Payment requests must be mailed, but reservation requests, seller registration, and responses to Energy Commission correction requests may be faxed.

J. Audits and Inspections

The Energy Commission will conduct audits of the applications it receives to verify that the information provided in the applications is true and correct. The Energy Commission may also conduct field inspections to verify systems are operating properly and installed as specified in the reservation request and payment claim applications.

In the event that a contractor, equipment seller, or purchaser provides information in a reservation application or payment request that appears to be questionable, the Energy Commission may take the following steps to clarify the questionable information:

1. Stop review of the application containing the questionable information to investigate further.

2. Require additional documentation from the contractor, equipment seller, and/or purchaser to verify the accuracy of the questionable information.

If the questionable information appears to be false or misrepresented, the Energy Commission will take one or more of the following corrective measures:

1. Reject the reservation application, or if a payment application, reject the payment request and cancel the reservation.
2. Notify the proper authorities, including the Contractors State Licensing Board, so appropriate enforcement action may be taken.
3. Suspend review of all other applications submitted by or associated with the contractor, equipment seller, or purchaser to review whether false or misrepresented information was provided in those applications.
4. Require additional documentation from the contractor, equipment seller, or purchaser to verify if false or misrepresented information was provided with these other applications.
5. Notify purchasers identified in these other applications that additional information will be required to keep approved applications active or to process payment requests, and that the processing of any such applications will likely be delayed.
6. Require supporting documentation for all new applications and payment requests submitted by or associated with the contractor or equipment seller.
7. Require that all payment requests submitted by or associated with contractor, equipment seller, or purchaser be supported by additional verification of payments made by the purchaser, including bank statements, cancelled checks, credit card statements or other similar documentation.
8. Post information on the Energy Commission website which informs consumers that 1) additional information is required when applying for reservations or payments using the contractor or equipment seller, and 2) that any applications submitted by or associated with the contractor or equipment seller will be subject to a more thorough review which will delay the processing of these applications.

III. Incentives Offered Through This Program

This program offers two types of incentives. The first type of incentive is a rebate which is based on the generating capacity of a system and is paid in a lump sum. The second type is a performance-based incentive which is based on the amount of electricity generated by a system and is paid over a three year period. The latter is offered through a pilot program and described further in Chapter VIII.

A. Rebates Offered

The rebates offered through this program vary by system size, technology, and type of installation. The incentive must be used to reduce the purchase or lease cost of the eligible system, or the cost of electricity produced by the eligible system for the on site customer.

The rebates offered for professionally installed new systems are identified below in Table 1. Lower rebates, fifteen percent (15%) less, are also available for owner or self installed systems. Additionally, special rebates may be available for systems installed for affordable housing, and public and charter schools. Because these special rebates target specific groups or classes of customers, they are discussed separately in Chapter VIII of this Guidebook. Under no circumstance will the incentive from the ERP exceed the net purchase price of the system to the final customer (before ERP incentives).

Table 1 lists the rebate levels available as of July 1, 2006 by size category and technology type. These rebate levels are scheduled to decline over time as described in Section E of this chapter.

Table 1: Rebates Available for Emerging Renewable Systems

Technology Type	Size Category	Rebate Offered*
Photovoltaic**	<30 kW	\$ 2.60 per watt
Solar Thermal Electric Fuel Cells using a renewable fuel***	<30 kW	\$ 3.00 per watt
Wind	First 7.5 kW	\$2.50 per watt
	Increments between >7.5 kW and <30 kW	\$1.50 per watt

* Rebates for owner installed systems are discounted by 15 percent.

** Applicants may choose to receive incentive payments based on actual system performance instead of rebates.

*** Fuel cells that operate on non-renewable fuels and are used in combined heat and power applications may be eligible for rebates at a later date when funds from other sources, such as the Self-Generation Incentive Program, are no longer available.

B. Other Incentives May Affect Your Rebate Amount

Incentives received from sources other than the ERP that lower the cost of a generating system may affect the rebate amount you receive from the Energy Commission. No less than five percent of incentives received or expected must be subtracted from the rebate amounts listed in Table 1 if the incentives are from other utility incentive programs, a State of California sponsored incentive program, or a federal government sponsored incentive program, other than tax credits. The percent reduction will be increased as necessary to ensure the sum of all incentives received or expected from all sources, including the ERP, does not exceed the total cost of the system. No applicant may be issued a reservation or receive payment from the ERP for any system or portion of a system that has received payment from the California Public Utilities Commission-approved Self-Generation Incentive Program, the Rebuild a Greener San Diego program, or any other rebate program using electric utility ratepayer funds, or that is participating in and eligible to receive payment under such programs.

See Chapter VIII of this guidebook for information regarding rebate levels for qualifying affordable housing and public and charter schools.

C. Pilot Performance-Based Incentive Program for Photovoltaic Systems

Instead of applying for a rebate based on a system's generating capacity, applicants installing photovoltaic systems may apply for production incentives based on a system's energy production (kWh) over a three year period. Production incentives are offered under the Pilot Performance-Based Incentive Program which is described in Chapter VIII.

D. Available Funds

As discussed in the *Overall Program Guidebook*, approximately \$118,125,000 in funding was allocated to the ERP for 2002 through 2006. Additional allocations are governed by the *Overall Program Guidebook*. Any funding added to the ERP will be allocated to systems less than 30 kW unless otherwise specified. A total of \$10,000,000 is allocated to the Pilot Performance-Based Incentive Program for photovoltaic systems. Periodic updates on available program funding, including the Pilot Performance-Based Incentive Program, can be found on the Energy Commission's Web site at: [www.energy.ca.gov/renewables/emerging_renewables/index.html].

E. Adjustment of Rebate Levels

The rebate levels for all technology types are scheduled to be reduced by 20 cents per watt every six months (every January 1st and July 1st), unless provided otherwise in this

ERP Guidebook or subsequent guidebook revisions. The performance-based incentive level will remain constant for duration of the pilot program.

IV. Reservation Process

Through this program, funding is reserved for applicants who have committed to purchase and install an eligible system at a given site. A funding reservation provides the purchaser assurance that the reserved funds will be available when the payment claim is made. The standard reservation period is for nine months. The reservation period for systems installed on public and charter schools and new construction is 18 months. Multiple systems at each site are treated as a single system for purposes of determining the appropriate rebate. The site is defined as a single parcel of real property plus any improvements on that site.

In cases where multiple systems are installed, all generating capacity on the site is treated as a single system. For example, a 5 kW PV system and a 3 kW PV system on the same property is treated as a single 8 kW PV system for purposes of reserving funds and calculating the rebate payment. However, in cases where there are 5 or more high density dwelling units, such as condominiums or apartments on a single parcel, utility meter numbers will be used to determine the number of reservations that may be granted for systems installed at the site. For example, an apartment complex comprised of 5 separate apartments each with its own designated electric utility meter is eligible to receive 5 separate reservations up to a maximum of 30 kW each.

Applicants with an 18-month reservation period can not reapply for a new reservation during the term of their original reservation period. These applicants may reapply for a new reservation only after the term of their original reservation period expires, and may qualify for rebate levels available at that time.

Funding reservations are made only for complete applications on a first come, first served basis. Applications that are missing application forms or have omissions or discrepancies will not be approved or processed. The applicants that submitted these applications will be notified and directed to submit new applications if interested in applying for program funding. The applications that are rejected will normally be kept by the Energy Commission for approximately 3 months after being rejected. In the case of omissions that do not affect eligibility or the amount reserved, the purchaser and equipment seller, if appropriate, may be asked to provide additional information to clarify the application.⁶ If additional information is requested, the application will not be processed unless the requested information is provided within the time period specified in the request (usually 7 days). If the requested information is not provided within the time period specified in the request, the purchaser will be notified to reapply as specified above.

No payment will be made unless the installed system meets all applicable ERP requirements even if funds are reserved.

⁶ Examples of omissions that do not affect eligibility include situations where the required information is provided in an application, but the information is not legible, or where pertinent information is missing from an application's supporting documentation, as in the case of a partial utility bill that does not clearly specify a street address.

A public entity submitting an application to the ERP must also certify that it is in compliance with the provisions of Civil Code section 714. This law makes void and unenforceable any covenant, restriction or condition in any deed, contract or other instrument affecting the transfer, sale of, or interest in real property that unreasonably restricts the installation of solar energy systems, as defined in the law. This law also requires that the appropriate public entities process and approve applications for installation of solar energy systems in a manner consistent with the entities approval process for architectural modifications, and that the entities not willfully avoid or delay the application review and approval process.

Only one reservation and one rebate payment will be allowed for each site with a standard nine-month reservation period.⁷ The application information and funding reserved can be modified (except for the reservation expiration date) within that nine-month reservation period with supporting documentation and if sufficient funds are available.

A. Reserving a Rebate

This section describes the paperwork that is normally required to reserve funding for a standard rebate. Please be sure to submit a complete reservation application and provide all the supporting documentation as described below to receive your reservation approval. The application will not be reviewed if incomplete and will be rejected. The reservation process will be delayed if incorrect or non-complying information is received. To obtain a rebate reservation, all applicants must submit at minimum the following items:

- A completed Reservation Request Form (CEC-1038 R1)
- Copy of agreement(s) to purchase and install a system
- Evidence that site electricity load is supplied by an eligible utility
- Payee data record (Form STD-204) for the rebate recipient

Please see Chapter V for the documentation requirements to claim a rebate payment.

Chapter VIII covers the special funding requirements for the rebates offered for affordable housing and public and charter schools, and for performance-based incentives offered under the Pilot Performance-Based Incentive Program. Appendix 5 covers new housing developments, new construction, systems installed on property owned by retailers and/or contractors, adding to existing systems, and leased systems.

⁷ An applicant with a standard reservation may only cancel his or her reservation and reapply for a new reservation within the original nine-month reservation period if the rebate level has dropped at least one level from the rebate granted in the original reservation. A letter explaining the request must be submitted with a new reservation request form and signed by the purchaser and seller.

1. Reservation Request Form

The Reservation Request Form (CEC-1038 R1) is a form that identifies most of the information needed about the proposed system and specifies what information must be submitted with the application.

The purchaser of the system must always sign the Reservation Request Form. If the equipment seller is designated as the payee, the seller (retailer or wholesaler) must also sign the Reservation Request Form. The purchaser must use a registered equipment seller. A listing of registered equipment sellers may be found at:

[www.consumerenergycenter.org/erprebate/database/index.html]

Eligible equipment sellers need to have filed business information (the CEC-1038 R4 form) with the Energy Commission to be eligible to participate in the program.

Reservation requests that identify ineligible retailers will not be approved unless the required business information is filed with the Energy Commission.

Detailed instructions are included with the Reservation Request Form (CEC-1038 R1). These instructions also provide information on how the rebate is calculated when the rated system output exceeds the inverter(s) capacity. Appendix 1 includes a blank copy of the Reservation Request Form and accompanying instructions. To obtain additional blank forms, call the Energy Commission Call Center at (800) 555-7794 or download the forms online from the following Energy Commission website:

[www.consumerenergycenter.org/erprebate].

2. Evidence of Agreement to Purchase and Install a System

Evidence of an agreement(s) to purchase and install a system must be demonstrated. How this is demonstrated depends upon whether the system is 1) owner-installed; 2) contractor installed where the equipment seller is a separate entity; or 3) contractor-installed where the same contractor also performs the installation.

In each of these three cases, information concerning the contractual agreements must be provided in the Reservation Request Form (CEC-1038 R1) and must be consistent among agreements and with the Form, or the application may be rejected. Regardless of the situation, agreements for the purchase of a system or system equipment must be in writing and clearly include, at a minimum, the following information:

1. The quantity, make and model number (as shown on the Energy Commission lists of eligible equipment) for the photovoltaic modules, inverters, system performance meters, wind turbines or other generating equipment
2. The total purchase price of the system before applying the rebate
3. Language indicating the purchaser's commitment to buy the system
4. Printed names and signatures of the purchaser and equipment seller's authorized representative

Installation contracts must comply with the Contractors State License Board (CSLB) requirements. In addition, these contracts must contain the following information:

1. Name, address and contractor's license number of the company performing the system installation
2. Site address for the system installation
3. Description of the work to be performed
4. Total agreed price to install the system
5. Payment terms (payment dates and dollar amounts)
6. Printed names and signatures of the purchaser and the company's authorized representative

Please refer to the CSLB website for more information on CSLB guidelines at:
[www.cslb.ca.gov]

Applications with installation contracts that appear to be deficient may be forwarded by the Energy Commission to the CSLB for verification. Entities without a valid A, B, C-10 or C-46 contractor's license may not offer installation services or charge for installation in any agreement.

The above requirements are sufficient evidence of an agreement to purchase and install a system for the case where a contractor sells and installs the system. For the other two cases, the following case-specific requirements must be satisfied.

A. Owner or Self-Installed System

In situations where the system is installed by the system owner, the applicant must provide the following information:

- An equipment purchase agreement as described above, OR
- In cases where there is not a signed agreement to purchase equipment the purchaser may provide invoices or receipts showing that at least ten percent of the system equipment purchase price (generating equipment and inverters) has been paid to the seller(s).⁸

B. Professionally Installed System with Separate Seller and Installer

In situations where the purchaser is purchasing the system from one company and hiring a separate company (licensed contractor) for installation, the purchaser must obtain proof of his or her commitment to purchase and install the system in separate documents as follows:

- an equipment purchase agreement as described above, OR

⁸ An example of this situation is where the purchaser buys new equipment via the Internet or mail order.

- In cases where there is not a signed purchase agreement the purchaser may provide invoices or receipts showing that at least 10 percent of the system equipment purchase price (generating equipment and inverters) has been paid to the seller(s), AND
- an installation contract from the second company as described above

3. Evidence that Site Electricity Load is Supplied by Eligible Utility

If the installation location currently has electrical service, the applicant must submit a recent copy of the utility bill showing the service address of the installation site, the name of the applicant, electric energy usage, and the utility name. Submit all pages of a utility bill to ensure that this information is provided. **The utility bill should be no older than six months from the date of application.** If the customer name on the utility bill is not the same as the applicant's, provide an explanation. This or other documentation must show that the annual on-site electrical load justifies the proposed system size before payment will be made (see Appendix 4).

Exception only for new construction - If the installation location is a new facility without electrical service, the applicant must identify on the Reservation Request Form (CEC-1038 R1) the electric utility that will provide electric service to the site. Documentation to show that the annual on-site electrical load justifies the system size will need to be provided before payment will be made. (See Appendix 4 for program requirements for on-site electrical loads. See also Appendix 5, Section A for additional requirements.)

4. Payee Data Record (Form STD-204)

This form must be completed by the person or business entity identified as the rebate payee on the Reservation Request Form (CEC-1038 R1). The payee data record is still required even if the rebate payee chooses to assign the payment to another party. If the designated payee has submitted a complete STD-204 form with a prior application and has already received a rebate payment within the last two years from the Energy Commission, a new STD-204 is not needed again. In these cases the Energy Commission will use data from the previously submitted STD-204 form. If the data provided in a previously submitted STD-204 has changed, the payee must notify the Energy Commission and submit a new STD-204 form.

Beginning April 1, 2005, only equipment sellers who have a STD-204 on file will be listed as specified in Chapter II. The STD-204 form may be found in Appendix 1 of this guidebook.

5. Submitting Your Complete Reservation Application

The complete reservation request application must be delivered by FAX to (916) 653-2543 or by mail to:

ERP Reservation Request
California Energy Commission
1516 - 9th Street, MS-45
Sacramento, CA 95814-5512

If the application is mailed close to a scheduled rebate level decline, it must be postmarked no later than the last day before the decline to be considered for the higher rebate level. No funding will be reserved if an application is incomplete or illegible, has conflicting information or does not otherwise comply with the program requirements. The application will be approved for a reservation based on the date it is deemed complete and not the date it was first submitted. The rebate level and other program criteria applicable on the date the application is deemed complete will apply.

As described earlier in this chapter, if the reservation request application is missing required forms or has other omissions or discrepancies, the purchaser will be notified that the application will not be approved. Any new application will be subject to the program requirements and funding availability. **Applicants are strongly encouraged to keep copies of all applications and supporting documentation submitted to the Energy Commission.**

The Energy Commission posts information on the Internet so that applicants can check the status of their applications. To check the status of your application(s) on-line, go to: [www.consumerenergycenter.org/erprebate/index.html]

For information on additional requirements for affordable housing projects or school rebates (Solar Schools Program), or the Pilot Performance-Based Incentive Program, please see Chapter VIII.

The available rebate amount changes during the term of the program. Therefore, the Energy Commission recommends that applicants wait to install system equipment until after they receive a confirmation indicating the amount of funding that has been reserved for their rebate.

V. Payment Process

A. Claiming a Rebate Payment

To receive payment of your rebate, you must comply with all program requirements and make a complete claim for payment before the expiration of your reservation.

1. Payment Claim Form

The Energy Commission will send a copy of the Payment Claim Form (CEC-1038 R2) to the purchaser and designated payee to confirm the amount of funding reserved on the purchaser's behalf. In most cases, the parties entering into the purchase and installation agreement(s) (purchaser and equipment seller and/or installer) must read, sign, and date the Payment Claim Form. If the purchaser alone applied for and is to receive the rebate, only the purchaser needs to sign the Payment Claim Form. This form must be returned to the Energy Commission by mail, as original signatures are required to process a payment. Please sign the form so that it is clear the signatures are original. Signing in black ink can make it difficult to distinguish whether the signature is original or a copy. In some cases, a new form with clearly original signatures may be requested. Stamped signatures are not acceptable.

Any changes to the information provided on the previously submitted Reservation Request Form (CEC-1038 R1) must be noted in the space provided on the Payment Claim Form (CEC-1038 R2). Changes from the previously submitted Reservation Request Form, such as changes in equipment, installer or equipment seller must be identified on the Payment Claim Form. If additional space is required to note such changes, additional pages may be attached to the Payment Claim Form. Changes in equipment from that identified in the previously submitted Reservation Request Form or other changes may affect the eligibility and amount of the rebate.

2. Documentation Confirming Final Payment and System Installation

Applicants must submit final system cost documentation clearly identifying the final amount paid or legally incurred to purchase the system and the final amount paid to install the system. The cost documentation must provide proof of the final amount paid or legally incurred by the applicant to the equipment seller and/or installer and provide sufficient information to clearly identify the equipment purchased and the labor paid. The final amount paid or legally incurred to the equipment seller and/or the final amount paid to the installer must match the cost information identified in the Payment Claim Form. To meet this requirement, the applicant must submit final invoices or a copy of the final agreement. The actual amount paid or legally incurred by the purchaser to the equipment seller and/or the actual amount paid to the installer must be clearly indicated. If there is no direct proof of actual payment from the applicant to an appropriately licensed installer, the rebate will be reduced to the owner-installed rebate level.

In addition, the final invoices or agreements should clearly indicate the extent to which the Energy Commission's rebate lowered the cost of the system to the applicant. If the applicant has entered into an agreement to pay the equipment seller over time rather than in lump sum, the final agreement must indicate the terms of payment and the amount of any deposits or payments paid by applicant to the equipment seller to date. The cost of any system installation must be paid by the applicant prior to submitting a payment request to the Energy Commission.

The Energy Commission will conduct spot checks to verify that payments were made as identified in the final invoices or agreements provided by equipment sellers and/or installers. As part of these spot checks, the Energy Commission will require applicants to submit copies of cancelled checks, credit card statements, or equivalent documentation to substantiate payments made to the equipment seller and/or installer. (When submitting this documentation, applicants are encouraged to remove their personal account numbers or other sensitive information identified in the documentation.) Applicants must explain the difference if the final amount paid by the applicant is different from the amount of the purchase or installation shown in any agreement or invoice or in the previously submitted Reservation Request Form (CEC-1038 R1).

3. Final Building Permit and Final Inspection Sign Off

Submit a copy of the building permit and the final inspection signoff for the system installation. The name and address on the final building permit and final inspection signoff must match the name and address shown on the Payment Claim Form (CEC-1038 R2) as well as the previously submitted Reservation Request Form.⁹

4. Five-year Warranty

A standard full five-year warranty form (CEC-1038 R3) must be completed and signed by the appropriate party(ies) and given to the purchaser. Submit a copy of this form with the Payment Claim Form to claim the maximum incentive. If the applicant is unable to obtain warranty coverage for labor, the application will be treated as an owner installed system and will receive a rebate amount fifteen percent lower.

Exception for owner installed systems - Submit copies of the manufacturer's five-year warranties for the inverters and generating equipment.

⁹ Instead of a building permit and final inspection signoff, public schools, community colleges and public buildings subject to the jurisdiction of the Department of General Services, Division of the State of Architect (DSA), must submit documentation from DSA confirming compliance with their standards.

5. Evidence that Site Electricity Load is Supplied by Eligible Utility

If the site of installation was a new facility without electrical service when the reservation request was submitted, a copy of the applicant's utility statement or other proof from the utility must be submitted before payment can be made. Other proof may include written confirmation from the utility that a meter has been installed at the site and verifying that the site had electrical service prior to the expiration of the reservation. In addition, if an electric utility bill is not provided, the applicant must provide a separate letter from a qualified architect, engineer, or electrical contractor (C-10 licensed) that identifies the expected electricity consumption at the site and verifies that the consumption will satisfy program requirements for system size.

6. System Interconnection with Utility Grid

The applicant must demonstrate that the system is interconnected to the utility distribution grid and that the utility has approved this interconnection for the system's operation at the site of installation. The applicant must demonstrate this by submitting from the utility a letter of authorization to interconnect the system. The rebate payment may be made prior to obtaining the utility letter of authorization if the applicant provides written authorization to the Energy Commission authorizing the applicant's utility to exchange applicant information with the Energy Commission to verify compliance with the interconnection requirements. Forms for this purpose may be obtained directly from the applicant's utility. The authorization may be provided by submitting a completed California Public Utilities Commission form "Authorization to Receive Customer Information or Act on a Customer's Behalf." A customer's authorization must remain in effect for the lesser of three years or the term of the ERP.

By applying for program funding, purchasers authorize the Energy Commission during the term of the ERP to exchange purchaser information with the purchaser's utility in order to verify compliance with program requirements, including requirements for system interconnection to the utility grid.

7. Payee Data Record (Form STD-204)

If the data provided in a previously submitted STD-204 has changed, the payee must notify the Energy Commission and submit a new STD-204. If the payee originally identified has changed, a STD-204 form must be submitted (if the new payee was not previously paid by the Energy Commission). The STD-204 form may be found in Appendix 1 of this guidebook.

B. Submitting a Payment Claim

Once a system is installed, grid-connected¹⁰ and operating satisfactorily, the following documents must be submitted to claim a rebate payment:

- Rebate Payment Claim Form (CEC-1038 R2)
- Documentation confirming what equipment and labor was purchased including the final amount(s) paid to purchase and install the system
- Final building permit and final signoff
- Five-year warranty for the system and labor, if applicable (CEC-1038 R3 form)
- If not already provided, a copy of a recent utility bill (or in the case of a new home or facility, other proof of utility service and expected electricity consumption at the site).
- A copy of the utility letter authorizing interconnection to utility grid (or if letter not available at time of Payment Claim, written authorization allowing the applicant's utility to share applicant information with the Energy Commission to verify compliance with the interconnection requirements).
- Payee data record (STD-204), if not provided with the initial application or the payee was not previously paid by the Energy Commission within the last two years
- Payment Assignment Form (CEC-1038 R5) with wet signature, if the designated payee is assigning payment to another individual or entity

Mail the complete Payment Claim Form (CEC-1038 R2) and supporting documentation to the Energy Commission at the address shown below on or before the expiration date specified on the Payment Claim Form. The Payment Claim Form cannot be submitted by FAX as original signatures are required on the Payment Claim Form to process rebate payments. The request for payment must be received or postmarked on or before the reservation expiration date. Be sure to keep a copy of the Payment Claim Form together with the purchase and installation agreements, contracts, receipts, evidence of payment, building permit and final signoff, utility bill, etc. for your records. If the payment is being assigned to a third party, an original signature of the payee is also required on the Payment Assignment Form (CEC-1038 R5).

Payment Claim Forms should not be submitted unless a complete application can be provided and all eligibility requirements can be met. The application must document that utility service existed at the site and that the system's installation was signed off by the building department prior to the expiration date of the applicant's reservation, otherwise the system clearly does not meet the conditions of the reservation and the applicant will be required to reapply under the program rules and funding availability in effect at the time of reapplication.

¹⁰ Systems must be permanently interconnected to the electrical distribution grid of the utility serving the customer's electrical load unless the system uses an Energy Commission approved device on the customer side of the meter instead of an inverter.

If the payment request application is incomplete, the Energy Commission may request the provision of all missing or unclear information from the appropriate party (purchaser, equipment seller, or installer) to process the request. In that event, the Energy Commission will allow the submitting party up to 60 days to respond with all the required information to approve payment.

The request for payment will be denied if all the requested information is not received within the time period specified by the Energy Commission. Participants submitting a claim that is not received by the expiration date of the applicant's reservation or is otherwise ineligible will be sent a written notice stating the reasons why the claim was rejected. If the claim is made after the expiration date of the reservation or is otherwise ineligible, the applicant may reapply for a rebate reservation, but will be subject to the eligibility requirements, incentives, and funding available at that time of reapplication.

All required forms and supporting documentation required to claim payment shall be mailed to:

ERP Payment Claim
California Energy Commission
1516 9th Street, MS-45
Sacramento, CA 95814- 5512

The Energy Commission intends to make incentive payments within 6 to 8 weeks of receipt of a complete rebate payment claim application. Payment will be made to the seller or purchaser, as designated on the Reservation Request Form (CEC-1038 R1), unless the payee has assigned the payment to a third party, and will be mailed to the address provided by the recipient on the Payee Data Record (Form STD-204), previously submitted to the Energy Commission.

C. Claiming a Rebate Payment Without a Prior Reservation

If a rebate payment is claimed for a system not previously approved for a rebate reservation, the Payment Claim Form (CEC-1038 R2) and required documentation must also be accompanied by a completed and signed Reservation Request Form (CEC-1038 R1). The submittal should meet all requirements needed for approval and payment as described herein. Applicants without a prior reservation should be aware that program eligibility requirements and rebate levels may have changed since installation and may require the applicant to make significant and costly changes to the system in order for it to qualify for an incentive.

D. Assignment of Rebate Payment

The designated payee of the rebate payment may assign his or her right to receive the payment to a third party by completing the Reservation Payment Assignment Form (CEC-1038 R5) and submitting it with the Payment Claim Form (CEC-1038 R2). The

Reservation Payment Assignment Form may not be submitted by FAX as original signatures are required to process the assignment. Payees that assign their rebate payment to a third party will still be reported as the recipients of said payments for tax purposes.

VI. Modifications or Changes to Reservations

A. Can My Installed System Be Different Than My Reservation?

The Energy Commission expects a system to be installed as described in the Reservation Request Form (CEC-1038 R1), but recognizes that minor changes may result during installation. Minor changes do not require prior approval, but must be documented on the Payment Claim Form (CEC-1038 R2) and may change the rebate amount. Minor changes include decreases in the system size (while staying within the Energy Commission size categories), changes in the equipment seller and/or installer, and changes from one make or model of a certified system component to another. Any changed rebate amount that occurs is subject to availability of funding. Time extensions will not be available for applications submitted on or after January 19, 2005. However, six-month reservations may automatically receive three-month extensions so that these applications receive full nine-month reservations (refer to Appendix 5 for details).

1. How Do Changes Affect the Rebate Amount?

Modifications to an approved reservation may be made prior to a payment claim or when the complete payment claim is submitted. When a modification includes parameters that affect incentive amounts, a new incentive amount will be calculated and the calculation will be based on the program parameters at the time a modification request, with supporting documentation, is deemed complete. Parameters affecting the incentive include the installation type, system size, and technology. If any change results in the installed system differing in its rated electrical output or other parameters from the system originally specified in the Reservation Request Form (CEC-1038 R1), a new rebate payment amount will be calculated.

If any change occurs that would have decreased the original rebate calculation, the amount reserved will also be decreased by the same factor. For example, if the installed system is smaller in output than originally specified in the Reservation Request Form, the new rebate amount will be determined by prorating the amount reserved downward (using the same rebate level that was used to calculate the original rebate amount). Similarly, if the installation type changes from a professional-install to an owner-install the incentive is reduced by fifteen percent; owner-installed systems qualify for 15 percent lower incentive.

Any change that may result in a higher incentive will be recalculated and it will be reserved or paid without requiring a new application to be submitted. For example, if a system's total calculated capacity is increased in size, the incremental increase in capacity will be calculated at the rebate level available at the time the modification request was made. The following table shows how the rebate amount will change if major modifications are made after the rebate amount has been reserved.

<i>Description of application information and resulting rebate calculations after changes are made</i>	<i>Rebate Calculation</i>	<i>Total Rebate</i>
Base Case – Funding reserved for a 2000 watt PV system installed by owner with a \$2.80/watt rebate level (owner-installed systems receive 85% of full rebate)	2000 x \$2.80 x 0.85 =	\$4,760
Change to contractor install during \$2.60 rebate level with no other changes to base case	2000 x \$2.60 =	\$5,200
Add 300 watts during \$2.60 rebate level with no other changes from base case	(2000 x \$2.80 x 0.85) + (300 x \$2.60 x .85) =	\$5,423
Add 300 watts and change to contractor install at \$2.60 rebate level	2300 x \$2.60 =	\$5,980
Reduce size by 100 watts and change to contractor install during \$2.60 rebate level	1900 x \$2.60 =	\$4,940
Change to affordable housing installation and change to contractor install during \$2.60 rebate level	2000 x \$2.60 x 1.25 =	\$6,500
Change to contractor install wind energy system and increase system size by 3000 watts during July 2006 rebate level (\$2.50/watt for wind first 7.5 kW)	5000 x \$2.50 =	\$12,500

The amount reserved will be increased if the incentive calculated for the entire proposed project is higher than that already reserved, provided there is adequate ERP funding for the increased rebate amount. The Energy Commission may not be able to increase the rebate amount reserved if no additional funds are available; or if the project size is increased to 30 kW or greater. See Appendix 5 for additions to existing systems.

VII. Eligible System Costs

In most cases, the system cost will not affect the eligible incentive amount, but is needed for a variety of reasons. First, the Energy Commission is interested in having information about system prices to evaluate future rebate levels and monitor whether the program goals are being achieved. Second, total costs are needed to assure the incentive does not exceed the net purchase price of the system.

A. What System Costs Are Eligible?

In addition to the cost of permits issued by local building departments or appropriate government entities, the labor to install the electricity generation system and sales tax, the program covers only the following specific eligible components and equipment:

Photovoltaics: The photovoltaic modules, mounting or tracking structures, wire, inverters, foundation (for free-standing systems), kWh system performance meters, and utility required interconnection equipment.

Small Wind: The wind turbine, tower, wire, inverter, foundation (for free standing systems), kWh system performance meters, and utility required interconnection equipment.

Solar Thermal: The concentrating and collecting apparatus, tracking and mounting structures, wiring, thermal engines or devices for the conversion of heat to mechanical energy, generator, inverter, support structure and foundation (for free-standing systems), simple kWh system performance meters, and utility required interconnection equipment.

Fuel Cells: The renewable gas pre-treatment equipment (but not the gas collection or production equipment), fuel processor, cell stacks, inverter and power conditioning equipment, cooling equipment, foundation (for free-standing systems), simple kWh system performance meters, and utility required interconnection equipment.

B. What Costs Are Not Eligible?

Many of the system costs included in the purchase or installation contracts may not be eligible. The purchaser or equipment seller must provide details to separate these costs from eligible costs. The cost of any equipment used to store the electricity produced is not eligible (e.g., batteries, charge controllers, battery cables, etc.). The cost of tools is not eligible.

Other ineligible costs include items that are not typically required for the installation of an eligible system. These ineligible costs include, but are not limited to, tree trimming, fencing, re-roofing, roof repairs or reinforcement, landscaping, relocating vent pipes, and moving HVAC or other equipment. Additionally, financing fees or costs incurred by either the purchaser or the equipment seller are ineligible.

VIII. Special Funding

This chapter describes special funding and the corresponding eligibility requirements for applicants who apply for incentives from the Pilot Performance-Based Incentive (PBI) Program or apply for rebates to install systems on affordable housing or on public or charter schools.

A. Pilot Performance-Based Incentive Program

This program offers incentive payments based on the actual electricity generated by photovoltaic (PV) systems participating in this pilot program. This section describes differences in eligibility requirements from what is already identified in these guidelines for standard applications seeking rebate reservations or payments.

The incentive payment is \$0.50 per kilowatt-hours (kWh) for electricity generated by an eligible PV system and will be paid for three years. There is no limitation on the size of an eligible system, but funding is limited as further described below.

1. Measuring System Performance

System performance must be measured using a revenue-grade meter capable of measuring system generation in kWh (meeting ANSI C12.1). The performance meters required for rebates under Chapter II do not meet the measurement standards required for revenue-grade meters and therefore cannot be used as a substitute for a revenue-grade meter. A list of eligible revenue-grade meters is available at: [www.consumerenergycenter.org/erprebate/equipment.html].

Applicants are responsible for all costs associated with the purchase and installation of a revenue-grade meter and must make arrangements with their electric utility for the meter's installation.

2. Collecting and Reporting System Performance

System performance data in kWh may be collected and reported to the Energy Commission in one of two ways – by the applicant's electric utility or by a web-based monitoring system administered by a third-party. Under option one, the electricity produced by the system is collected and reported to the Energy Commission by the applicant's electric utility. This option is available only if the applicant's electric utility is willing to collect and report performance data to the Energy Commission. Applicants wishing to pursue this option must make arrangements directly with their electric utility and enter into any necessary agreements with their utility to ensure performance data is recorded monthly and reported to the Energy Commission on a quarterly basis. Applicants are responsible for all costs associated with their utility's collection and reporting of performance data.

The second option is for performance data to be collected and reported to the Energy Commission using a web-based data acquisition system administered by a third party provider. Web-based data acquisition systems must meet the following criteria:

- Record and transmit system performance data electronically on a website
- Read and display meter output without requiring adjustments or resetting of the system
- Retain and display monthly kWh produced and total kWh produced to date

A list of eligible data acquisition systems (DAS) is available at:
[www.consumerenergycenter.org/erprebate/equipment.html]

Applicants wishing to pursue this option must make arrangements directly with a third party provider and enter into any necessary agreements with the third party provider to ensure performance data is recorded monthly and reported to the Energy Commission quarterly. Applicants are responsible for all costs associated with the purchase and installation of any equipment needed to utilize a web-based data acquisition system and for all costs associated with the third party provider.

3. Reservation Amount

The total amount reserved for a system under the Pilot PBI Program will be calculated based on a 20 percent capacity factor for fixed systems and a 30 percent capacity factor for tracking systems relative to the PTC rating¹¹ of the PV array as follows:

$$\text{Reserved Funds} = (\text{PV Array kW})_{\text{PTC}} \times (8760 \text{ hrs/year} \times .20^{\dagger} \text{ kWh/kW}) \times \$0.50/\text{kWh} \times 3 \text{ years}$$

[†] For tracking systems only .30

The 20 and 30 percent capacity factors are higher than many systems produce in order to ensure that enough funds are reserved to make all payments. It is unlikely that a system can produce more energy than is estimated based on this equation. However, even if a system is shown to produce more energy, its funding will be limited to the amount reserved. Except as provided for tracking systems, the 20 percent capacity factor will be applied to all applications received on or after January 1, 2006.

¹¹ The PTC rating is based on PV USA Test Conditions and includes the efficiency rating of both the PV modules and system inverter (represents 1,000 watts/meter² solar irradiance, 1.5 Air Mass, and 20 degrees C. ambient temperature at 10 meters above ground level and wind speed of 1 meter/second).

4. Limitation on Funding

The amount of funding available for any system or group of systems at one site is capped at \$400,000. In addition, the maximum level of funding available for all systems installed by any corporate or government parent¹² is capped at \$1,000,000.

The incentives and reservation period under the Pilot PBI Program cannot be combined and cannot be used with other funding under the ERP or the Self-Generation Incentive Program (SGIP) or the Rebuild a Greener San Diego program approved by the California Public Utilities Commission or any other rebate program funded with electric utility ratepayer funds. However, an applicant may be issued a reservation and receive payments from the ERP and PBI Program for separate systems at the site if each system is connected to a separate utility meter and meets the program rules.

An applicant may not be issued a reservation for a system under the Pilot PBI Program if the applicant has already applied for or been issued a reservation for that system under the ERP or SGIP. Applicants who have applied for or been issued a rebate reservation under the ERP or SGIP, may apply for a reservation under the Pilot PBI Program only if they first notify the Energy Commission in writing of their desire to cancel their ERP or SGIP rebate application or reservation.

Incentives received from other sources that lower the cost of a generating system may affect the amount of funding an applicant is reserved under the Pilot PBI Program. Twenty five percent of the incentives received or expected from other sources will be subtracted from the amount of funds reserved for a system if these other incentives are from a utility incentive program, a State of California sponsored incentive program, or a federal government sponsored incentive program, other than tax credits.

5. Reservation Period

The reservation period under the Pilot PBI Program is established into two parts – a preliminary reservation, during which the applicant must purchase and install the proposed system, and a final reservation, during which the applicant may submit quarterly invoices to claim incentive payments for their system's generation. Both the preliminary reservation and final reservation are fixed and may not be extended under

¹² For private sector entities, the holding company of the utility customer of record who is listed as the purchaser on the application. In addition, other business relations such as franchises or building associations will be handled as corporate parents and will be held to the same limitations and caps as corporate parents. State Government Parents are defined as: University of California, California State University, Department of Corrections, Department of General Services, the combination of the Department of Developmental Services and CalTrans, the combination of the California Youth Authority and the Department of Mental Health, and all other state agencies and departments. Hence, the sum total of all reservations for a particular state agency, such as the Department of General Services, can not exceed \$1,000,000. Federal Government Parents are defined as Air Force, Army, Navy, Marines, Postal Service, General Services Administration, and all other federal agencies or departments. Local Government Parents (e.g., cities, counties, school districts, or water districts) are treated as Corporate Parents.

any circumstances. If applicants are unable to purchase and install their proposed systems within 12 months of the issuance of their preliminary reservation form their reservation will expire. In this case, the applicant may reapply for a new preliminary reservation by submitting a new preliminary request application, provided funds are still available under the Pilot PBI Program. **Applicants that are unable to claim all of their incentive payments within 3 years of the issuance of their final reservation will lose any remaining funds reserved under the final reservation.**

6. Preliminary Reservation Application Process

To apply for a Preliminary Reservation under the Pilot PBI Program, applicants must submit the following information consistent with the requirements for a standard rebate application as specified in Chapter IV.

- A completed Pilot PBI Program Preliminary Reservation Request Form (CEC-1038 R7) (State the DAS and revenue grade meter to be used)
- Copy of agreement(s) to purchase and install a system
- Evidence that site electricity load is supplied by an eligible utility
- Payee data record (Form STD-204) for the rebate recipient

Completed applications and supporting documentation must be mailed to the following address:

ERP, PBI Preliminary Reservation Request
California Energy Commission
1516 9th Street, MS-45
Sacramento, CA 95814-5512

The Preliminary Reservation Request application will be reviewed and processed in the same manner as rebate applications (refer to Chapter IV). Approved Preliminary Reservation Request applications will be issued a Pilot PBI Preliminary Reservation Confirmation Form (CEC-1038 R8) which identifies the amount of funds reserved for the applicant's identified system and the period of the time for which the funds are reserved (12 months) from the issuance of the Preliminary Reservation Confirmation Form.

7. Final Reservation Application Process

Once the PV system is installed and becomes fully operational, the applicant must complete and file their Preliminary Reservation Confirmation Form and the same supporting documentation required for standard rebate applications. (Refer to Chapter V for description of supporting documentation.) In addition, the applicant must provide written authorization allowing the applicant's utility or web-based monitoring system administrator to share applicant data with the Energy Commission for auditing purposes.

Completed Preliminary Reservation Confirmation Forms and supporting documentation must be mailed to the following address:

ERP, PBI Preliminary Reservation Confirmation
California Energy Commission
1516 9th Street, MS-45
Sacramento, CA 95814-5512

Submitting the Preliminary Reservation Confirmation Form verifies that the system remains eligible for funding and was installed within the 12-month preliminary reservation period, and provides the Energy Commission with the necessary information for collecting energy production data and making payments. The Preliminary Reservation Confirmation Form identifies information about the installed system's specifications and appropriate information to verify the system's first meter reading and start date for purposes of issuing incentive payments.

If the installed system varies from the system identified in the Preliminary Reservation Request Form, the applicant must identify the differences on the Preliminary Reservation Confirmation Form when submitted to the Energy Commission. If the installed system is smaller in size than was identified in the Preliminary Reservation Request Form, the funds reserved for the applicant will be reduced accordingly and reflected on the final reservation. If the installed system is larger in size, the funds reserved under the preliminary reservation will remain the same. If the installed system does not satisfy the requirements for Pilot PBI Program funding, the applicant's preliminary reservation will be cancelled and a final reservation will not be issued.

Upon review and approval of an applicant's Preliminary Reservation Confirmation Form, the Energy Commission will issue the applicant a Pilot PBI Program Final Reservation Confirmation (CEC-1038 R9), which identifies the applicant, the installed system, the amount of funds reserved for the system, and the three-year funding reservation period during which incentive payments may be claimed by the applicant.

8. Payment Claim Process

To claim incentive payments, the applicant must submit quarterly invoices to the Energy Commission using the Pilot PBI Invoice Form (CEC-1038 R10). The monthly, quarterly, and cumulative generation of applicant's system must be separately identified on the Invoice Form. This form must be supported with a statement from the applicant's electric utility or web-based monitoring system administrator verifying the monthly and quarterly generation of applicant's system for the invoice period. In addition, the Invoice Form must identify any changes to the system, the system's ownership, or any system funding the applicant may have received from other sources after issuance of the Final Reservation Confirmation. This information is needed to ensure the system and the applicants remain eligible for PBI funding. If system funding is received from other sources, the PBI funding reserved for the applicant will be reduced in accordance with Section 4 of this chapter and a revised PBI Final Reservation Confirmation issued.

Completed Invoice Forms and supporting documentation must be mailed to the following address:

ERP, PBI Payment Claim
California Energy Commission
1516 9th Street, MS-45
Sacramento, CA 95814-5512

The Energy Commission expects to make payments within 4 to 8 weeks of receipt of complete invoices.

9. System Operation

All applicants assume full responsibility for the operation and funding eligibility of their systems. Incentive payments will only be made to an applicant if their system remains operational and eligible for funding, and the applicant submits the necessary quarterly invoices and supporting documentation prior to the expiration of the three-year final reservation period.

If any equipment is added to or removed from the system during the three-year final reservation period, the applicant must notify the Energy Commission in writing. If the system is reduced in size, the amount of funds reserved will be reduced accordingly and the applicant will be issued a revised Final Reservation Confirmation. If the system is increased in size, the funds reserved will remain the same. In either case, the three-year final reservation period will not change. If, as a result of system changes, the applicant or system is no longer eligible for funding, the applicant's reservation will be cancelled.

10. Program Evaluation

The Energy Commission will monitor participation in the Pilot PBI Program and make a determination on the adequacy of the program design and incentive level. After one year, the Energy Commission will evaluate the pilot program to determine if the objectives outlined for the pilot program have been met.

As a condition of receiving incentive payments under the Pilot PBI Program, applicants must agree to participate in an evaluation process whereby the Energy Commission or its representatives may conduct telephone interviews and/or on-site visits, and analyze data collected from installed system monitoring equipment.

B. Special Funding for Affordable Housing Projects

Pursuant to Assembly Bill 58 (Keeley, Statutes Of 2002, Chapter 836), the Energy Commission has established a higher rebate level for qualifying systems installed on affordable housing projects. Qualifying systems include systems connected to and

serving the energy needs of: 1) residential units subject to affordability requirements, 2) the office and residential unit of the project manager, provided all other residential units in the project are subject to affordability requirements, and 3) the common areas of the project, such as laundry rooms and parking structures, provided all residential units in the project (except the manager's unit) are subject to affordability requirements.

Qualifying systems installed on affordable housing projects will receive a rebate 25 percent higher than the standard rebate level, not to exceed 75 percent of the system cost, if the following additional criteria are met:

- The affordable housing project was undertaken pursuant to section 50052.5, 50053 or 50199.4 of the Health and Safety Code. Applicants must demonstrate this by providing documentation that identifies the statutory basis under which the project was undertaken. In addition, the applicant must provide a copy of the regulatory agreement or approval for the project's development that identifies 1) the project, 2) the number of residential units in the project subject to affordability requirements, and 3) the applicable affordability requirements for these residential units. The regulatory agreement or approval must expressly limit residency in the affordable residential units to persons with extremely low, very low, lower or moderate income persons as defined by the Health and Safety Code section 50052.5, 50053, 50199.4, or regulations adopted by the California Department of Housing and Community Development.
- Each residential unit (apartments, multifamily homes, etc.) for which a system is being installed has an individual electric utility meter. Applicants must provide documentation from the electric utility confirming service and meter number.
- Each residential unit for which a system is being installed is at least 10 percent more energy efficient than the current standards specified in Title 24 of the California Code of Regulations or has already taken or will take measures to reduce the unit's energy use by at least 10 percent as calculated pursuant to Title 24 compliance models (usually C2R model runs). When systems are installed to serve the energy needs of a project's common areas, the entire affordable housing project must be at least 10 percent more energy efficient than the current standards specified in Title 24 of the California Code of Regulations or must have already taken or will take measures to reduce the entire project's energy use by at least 10 percent as calculated pursuant to Title 24 compliance models. Applicants must provide the energy efficiency calculations performed by an individual certified by the California Association of Building Energy Consultants (CABEC). For a list of Certified Energy Plans Examiners, visit the Energy Commission's Web site at: [www.energy.ca.gov/efficiency/cabec_roster.html]

C. Special Funding for Public and Charter Schools

The Solar Schools Program is suspended as of July 1, 2005 for any new applications due to a lack of available funding for the higher rebates. This program may be reopened for new applications if new funding becomes available. The Energy Commission will notify school districts if and when new funding becomes available, and will make any necessary ERP Guidebook changes to restart the program at that time. Applications submitted before July 1, 2005, may be funded to the extent existing funds under the Solar Schools Program become available due to cancellations of existing rebate reservations. Any such funds will be awarded on a first come, first served basis consistent with the requirements in this guidebook.

Pursuant to Interagency Agreement No. R500-02-006, amended February 4, 2004, the Energy Commission and the California Power Authority have established the Solar Schools Program to provide a higher level of funding for public and charter schools to encourage the installation of photovoltaic generating systems at more school sites. In 2002, the Energy Commission was unable to secure budget authority from the Department of Finance to expend the funds from the Attorney General's Alternative Energy Retrofit Account (AGAERA). The additional funds for the Solar Schools Program total \$2.25 million and are now available from the AGAERA. Fifteen schools were granted preliminary reservations in 2002 that could not be funded under the Solar Schools Program. These districts will be given preference until June 21, 2004 to reapply to this program for the sites for which they originally applied.

Installations of photovoltaic systems at school sites totaling less than 30 kilowatts in size per school district may qualify for additional funding from the AGAERA equal to the standard rebate offered to other ERP applicants for photovoltaic systems. If the standard rebate available is \$2.60 per watt, the rebate available for an eligible public or charter school would be \$ 5.20 per watt. However, the total funding incentive (Energy Commission plus AGAERA funds) may not exceed the total installed system cost. To further assist schools, any costs above the total rebate incentive may be financed through a loan from the Energy Commission's Energy Efficiency Financing Program or through a loan from another public agency. Such loans will not be considered in adjusting the ERP rebate level available for the school. Schools approved for the additional incentives will be given reservations of 18 months total, including any preliminary reservation period.

1. Requirements for the Solar Schools Program

To be eligible, schools must show they meet all eligibility requirements for the standard rebate and demonstrate they meet the following additional criteria:

- The public or charter school provides, or will provide, instruction for any grade between kindergarten through 12th grade.

- The school has already installed high efficiency fluorescent lighting (T8 lamps and electronic ballasts) in at least 80% of classrooms or has implemented other energy efficient measures with equivalent or greater energy savings as determined by the Energy Commission.
- The school agrees to establish a curriculum tie-in plan to educate students on the benefits of solar energy and energy conservation.

Schools that do not meet the requirements of the Solar Schools Program may still qualify for the standard rebate offered. Schools with an existing standard rebate reservation may reapply for the higher rebate if the system has not been completed. Schools that were granted preliminary reservations in 2002 may reapply for the higher rebate even if the system has been completed. To reapply, submit a completed Solar Schools Reservation Request Form and a new CEC-1038 R1 form.

2. How to Apply to the Solar Schools Program

To obtain the full reservation for the additional rebate incentive, participating school districts must submit a complete standard application (CEC-1038 R1 and supporting documents) and provide the following additional information for each school where a system is planned:

Solar Schools Reservation Request Form - Complete the Solar Schools Reservation Request Form identifying the planned sites for installation.

Proof of Energy Efficiency - Check the box on the Solar Schools Reservation Request Form indicating that the energy efficient lighting measures already installed comply with the high efficiency lighting requirement (T8 lamps and electronic ballasts) or provide additional documentation to show that other energy efficient measures with equivalent or greater energy savings have been installed. For further information on energy efficiency, please contact the Energy Commission at (916) 654-3838.

School Board Resolution - Provide a signed board resolution clearly indicating all of the following:

- Intent to purchase and install an eligible photovoltaic system at the specified site(s),
- Support to operate and maintain the system for its useful life, and
- School commitment to establish a curriculum tie-in plan to educate students on the benefits of solar energy and energy conservation.

The Solar Schools Reservation Request Form is included in Appendix 1 of this guidebook. The form and attachments may be mailed to:

ERP Solar Schools Program
 California Energy Commission
 1516 9th Street, MS-45
 Sacramento, CA 95814-5512

3. Preliminary Reservation Option

If the funding is not entirely reserved by applicants meeting all of the above criteria, a preliminary reservation may be given to school districts that are initially able to provide all of the following information, but have not yet signed a system purchase and installation agreement(s):

- Solar Schools Reservation Request Form
- Proof of meeting the energy efficiency criteria
- Board resolution
- Electric utility bill for each school

The preliminary reservation would allow the school district six months to solicit bids and contract for a system purchase and to complete their application. This six month period is available to any preliminary reservation issued on or after May 19, 2004.

To secure the full reservation for a participating school, the Reservation Request Form (CEC-1038 R1) must be submitted before expiration of the preliminary reservation. The required attachment to the completed CEC-1038 R1 form is a copy of the agreement(s) to purchase and install the specified system. Preference will be given to those applicants that are able to satisfy the full reservation criteria and do not need preliminary reservations.

Schools that are able to convert their preliminary reservations into full reservations will be issued full reservations for a period not to exceed the difference between 18 months and the length of their preliminary reservation. For example, schools which are able to convert their preliminary reservations to full reservations within five months will be issued full reservations for a period of 13 months from the date of conversion (the date the complete application for the full reservation is submitted.)

No funds will be reserved until all the information and documentation required for the preliminary reservation request and/or standard reservation request is received by the Energy Commission. Applications will not be processed if they are not complete and legible.

4. Payment Requests and Forms

To request the rebate payment once the system is installed, the applicant must submit the Payment Claim Form (CEC-1038 R2) with the same attachments required for any other participant in the Emerging Renewables Program. Instead of a building permit, submit documentation from the Department of General Services, Division of the State Architect (DSA), confirming DSA standards have been met.

Blank forms for requesting a reservation or filing for payment can be obtained by calling the Energy Commission Call Center at (800) 555-7794 or from the Energy Commission Web site at: [www.consumerenergycenter.org/erprebate/index.html]

Appendix 1 - Forms and Worksheets

CEC-1038 R1- Reservation Request Form (All technologies)

STD 204 - Payee Data Record

CEC-1038 R2 - Payment Claim Form

CEC-1038 R3 - Minimum Warranty Form

CEC-1038 R4 - Equipment Seller Information Form

CEC-1038 R5 - Reservation Payment Assignment Form

Solar Schools Reservation Request Form

CEC-1038 R7 - Pilot PBI Program Preliminary Reservation Request Form

CEC-1038 R8 - Pilot PBI Program Reservation Confirmation Form

CEC-1038 R9 - Pilot PBI Program Final Reservation Confirmation Form

CEC-1038 R10 - Pilot PBI Program Payment Claim Form

R1

RESERVATION APPLICATION FORM EMERGING RENEWABLES PROGRAM

- Modify Existing Record # _____
- Affordable Housing Project
- New Construction

1. Physical Site of System Installation

Street Address: _____

City: _____ State: _____ Zip: _____

2. Purchaser Name and Mailing Address

Phone: () _____ Fax: () _____

3. Equipment Seller (Must be registered)

Company: _____

City: _____ CEC ID (if known): _____

Phone: () _____ Fax: () _____

4. System Installation (Write "Owner" if not hiring contractor)

Company: _____

City: _____ License No.: _____

Phone: _____ Fax: _____

5. Electric Utility (Attach all pages of monthly statement)

PG&E SCE SDG&E BVE Service ID: _____

Billing Period: _____ KWh Used: _____

Note: If new construction attach building permit. Permit No. _____

8. Declaration

The undersigned parties declare under penalty of perjury that the information in this form and the supporting documentation submitted herewith is true and correct to the best of their knowledge and that the following is true:

- All system equipment is new and unused and has been purchased within the last 18 months,
- The generating system is intended primarily to offset Purchaser's electrical needs at the site of installation
- The Purchaser's intent is to operate the system at the above site of installation for its useful life or the duration of the lease agreement and
- The generating system will be interconnected with the distribution system of the electric utility identified above.

The undersigned parties further acknowledge that they are aware of the requirements and conditions of receiving funding under the Emerging Renewables Program (ERP) and agree to comply with all such requirements and conditions as provided in the Energy Commission's ERP Guidebook and Overall Program Guidebook as a condition to receiving funding under the ERP. The undersigned Purchaser authorizes the Energy Commission during the term of the ERP to exchange information on this form with the Purchaser's electric utility to verify compliance with the requirements of the ERP.

Submit complete application by fax at (916) 653-2543 or by mail to:

California Energy Commission
Emerging Renewables Program (MS-45)
1516 Ninth Street
Sacramento, CA 95814-5512

6. Equipment (PV modules, turbines, inverters, meters)

	Quantity	Manufacturer, Model (see CEC lists)
Generating Equipment		
Inverters, Meters		

Estimated annual energy production _____ kWh/Year

7. Rebate and Other Incentives

System Rated Output _____ watts

Total System Cost: \$ _____

Expected Rebate: \$ _____

Pay Rebate to: Purchaser Seller

Other Incentives: \$ _____

Source/Record No.: _____

Purchaser Signature

Print Name: _____

Signature: _____ Date: _____

Equipment Seller Signature

Print Name: _____

Signature: _____ Date: _____

- Necessary Supporting Documentation.
- All pages of a monthly electric utility bill.
 - Agreements to purchase and install equipment.
 - Payee Data Record (Form STD-204) if payee identified has not previously been paid by the Energy Commission.
 - If not a standard rebate application, attach other required documentation as specified in the ERP Guidebook.

INSTRUCTIONS FOR THE RESERVATION REQUEST FORM (CEC-1038 R1)

Title Box: Indicate if the request is to modify an existing reservation application, is for affordable housing, or new construction.

Section 1. Physical Site of System Installation

Provide the complete address for the site (parcel) of installation. Note that the site is the legal parcel of land on which the system is installed.

Section 2. Purchaser

Provide the purchaser name, company name if appropriate, and complete mailing address (as it would be written on a letter to be mailed). Enter the site address information even if it is the same as the site of installation address. Also enter the phone number and fax number of the purchaser.

Section 3. Equipment Seller Information

Provide the name of the equipment seller's company and city where located. If known also enter the CEC ID number for the seller available from the list of eligible equipment sellers [www.consumerenergycenter.org/erprebate] for most companies. Also enter the phone number and fax number. The equipment seller must register with the Energy Commission each year for the application to be considered. If not already registered provide a filled out Seller Registration Form (CEC-1038 R4) with the application. The seller must also sign and date the application form if the seller is the designated payee of the rebate. Enclose a copy of the purchase agreement with the application form.

Section 4. System Installation

Identify the name of the company hired to install the system or write in "owner install" (if a contractor is not hired and paid by the purchaser to install the system, the application will qualify for a 15% lower rebate). If installed by a licensed contractor, provide the contractor's license number, phone and fax number. All contractors must have an active "A", "B", "C-10" or "C-46" license. A standard five year warranty form (Form CEC-1038 R3) must be submitted when payment is requested for systems installed by a contractor to qualify for the full rebate amount. Enclose a copy of the signed contract with the application form.

Section 5. Utility Bill

Identify the Purchaser's electric utility provider at the site where the system will be installed. Also identify from a monthly billing statement the service ID number, billing start and end period, and the energy usage in kWh for that monthly period. Provide all pages of the monthly billing statement with the application.

Section 6. System Equipment (PV modules, turbines, inverters, performance meters and other)

Provide the quantity, name of the manufacturer and exact model number for the eligible equipment as identified at [www.consumerenergycenter.org/erprebate]. Clearly identify the generating equipment such as PV modules or wind turbines in the upper section. Also identify the inverters and system performance (kWh) meters (some inverters contain eligible performance meters). Eligible generating equipment, inverters and rating information is located on the Commission's website [www.consumerenergycenter.org/erprebate]. Calculate and include the system output by multiplying the inverter efficiency rating by the quantity and rating of the generating equipment used (for PV modules use the PTC rating in watts).

Section 7. Rebate and Other Incentive Information

Calculate and include the system output by multiplying the inverter efficiency rating, the quantity of generating equipment, and the generating equipment rating in watts (PTC rating for PV).

$$\text{Quantity} \times \text{Equipment Rating} \times \text{Inverter Efficiency Rating} = \text{System Output (watts)}$$

If the sum of the inverter rated output is less than the system output (watts), the inverter rated output will be used to calculate the rebate. Where more than one type of inverter is used the average inverter efficiency will be weighted based on inverter rated capacity. The sum of the inverters' continuous rated output capacities will specify the maximum system output for determining the rebate.

Provide the system installed cost (before the ERP rebate). The ERP requires that incentives from other sources be accounted for before determining the rebate from the ERP. Five percent of any incentive received or expected from a utility incentive program, a State of California or federal government sponsored incentive program, other than tax credits, must be subtracted from the ERP rebate amount requested. The "Total Request" should therefore be based on the ERP rebate level in place at the time the application is received by the Commission and the system cost after subtracting other incentives.

Check the box indicating whether the incentive is to be paid to the purchaser or seller. If any, identify incentives expected or received from other sources. If an incentive from the ERP was received previously for this site, include the incentive amount and, if known, the reservation number, for the prior application.

Signatures:

The purchaser must always print and sign his or her name on the form. If the seller is designated as the payee, the seller must also sign his or her name on the form.

Submit your request by fax (916) 653-2543 or by mail to:

ERP, Reservation Request
California Energy Commission
1516 9th Street, MS-45
Sacramento, CA 95814-5512

R2

REBATE PAYMENT CLAIM FORM EMERGING RENEWABLES PROGRAM



Mail complete payment claim to:
California Energy Commission
ERP, Payment Claim
1516 Ninth Street (MS-45)
Sacramento, CA 95814-5512

Record Number _____

Payee Number _____

[CEC use only]

[CEC use only]

Total Eligible Cost: \$ _____ Date CFA: _____

SRO watts: _____ Rebate @ _____ = \$ _____

1. Confirmation of Reservation Amount

_____ has been granted a reservation of \$ _____ for a _____ kW renewable energy generating system. The reservation will expire on _____. The system is being installed at _____ and is expected to produce _____ (kWh per year). The payment will be made to the _____.

The generation system must be completed and the claim submitted with the appropriate documentation by the deadline. Claims must be postmarked by the expiration date or the reservation will expire. This reservation is non-transferable. System must be installed at the installation address and sold to the above.

2. System Equipment (Modules, Wind Turbines, Inverters, kWh Meters)

Number	Manufacturer	Model
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

Total System Price \$ _____

Amount paid by purchaser to date: \$ _____

Orientation: (Circle One) W, SW, S, SE, E, Other

Tilt: (Circle one) None, 1-15, 15-30, >30 Degrees

Tracking system type: _____

3. Modifications

Has any of the information in section 1 or 2 above changed? Yes No

If yes note the changes before claiming payment.

The undersigned parties declare under penalty of perjury that the information in this form and the supporting documentation submitted herewith is true and correct to the best of their knowledge. The parties further declare under penalty of perjury that the following statements are true and correct to the best of their knowledge:

- (1) The electrical generating system described above and in any attached documents meets the terms and conditions of the Energy Commission's Emerging Renewables Program and has been installed and is operating satisfactorily as of the date stated below.
- (2) The electrical generating system described above and in any attached documents is properly interconnected to the utility distribution grid and has or will be issued utility approval to operate the system as interconnected to the distribution grid.
- (3) The rated electrical output of the generating system, the physical location of the system, and the equipment identified were installed as stated above.
- (4) Except as noted above, there were no changes in the information regarding the seller, installer, purchaser, generating system specifications, installation location, or price from that information provided in the Reservation Request Form originally submitted by the undersigned.

The undersigned parties further acknowledge that they are aware of the requirements and conditions of receiving funding under the Emerging Renewables Program (ERP) and agree to comply with all such requirements and conditions as provided in the Energy Commission's ERP Guidebook and Overall Program Guidebook as a condition to receiving funding under the ERP. As specified in the ERP Guidebook, the undersigned Purchaser authorizes the Energy Commission during the term of the ERP to exchange purchaser information on this form with the Purchaser's electric utility in order to verify compliance with the ERP requirements. If a copy of the utility "letter of authorization to operate" the system is not submitted with this payment claim form, the undersigned Purchaser understands that he/she is obligated to submit a copy of this letter to the Energy Commission once it is received.

Purchaser
Print Name: _____
Signature: _____
Date: _____

Seller
Print Name: _____
Signature: _____
Date: _____

Is payment assigned to another party? Yes No
If yes, attach the payment assignment form (CEC-1038 R5) with original signatures.

IMPORTANT - Necessary Supporting Documentation

1. Final building permit and final inspection signoff;
2. Final invoice(s) confirming the total amount paid for the system equipment and installation;
3. Five-year warranty (CEC-1038 R3 form);
4. Utility letter of authorization to interconnect the system or the "Authorization to Receive Customer Information or Act on a Customers Behalf" form to access the Purchaser's utility data;
5. Utility bill or other proof of electrical service and consumption at the site of installation if not previously provided;
6. Payee Data Record (STD-204)

INSTRUCTIONS FOR THE REBATE PAYMENT CLAIM FORM (CEC-1038 R2)

The CEC-1038 R2 form is used to request payment for a completely installed and operational renewable energy system. The form specifies information about the renewable energy system that was to be installed at the time the reservation request was initiated. It also serves as a means of documenting what changes occurred from the time the reservation request was processed until the time the system was installed. The payment claim form must be submitted before the reservation expires.

Section 1. Confirmation of Reservation Amount

Self explanatory.

Section 2. System Equipment Installed

Fill in the equipment information requested including the number of units, the make, complete model number, and voltage (if applicable). Enter the total system price and the amount paid by purchaser to date. If the system is a PV system, identify the system's orientation, tilt, and type of tracking system, if any.

Section 3. Modifications

Check the "yes" box if changes were made to the system and note any changes in the information from the previously submitted Reservation Request Form. If more space is required to note changes, additional pages may be added to the form. Changes in equipment from the original application may affect its eligibility and the amount of the rebate. If no changes were made, check the "no" box.

Signatures:

The purchaser must always print and sign their name on the form. If the seller is the rebate payee, the seller must also print and sign their name on the form. Enter the date of each signature. Original signatures are required on the form.

Please indicate whether the rebate payment is to be assigned to a third party. A third party is an entity other than the purchaser or seller. If yes, please fill in the name and address in the space provided and attach the original of the assignment form (CEC-1038 R5). The assignment form must contain original signatures. Payees that assign the rebate payment to a third party will still be reported as the recipient of the payment(s) for tax purposes.

Attachments:

Several attachments to the form must also be submitted before the claim will be processed. These include:

- A copy of the final building permit and final signoff
- A copy of the final invoices confirming the total amount paid for the system equipment and installation
- A copy of the completed and signed CEC-1038 R3 form (attach equipment warranty forms, if required)
- Letter of authorization from the utility to interconnect the system or purchaser's authorization to access utility data.
- A copy of the utility bill or other proof of electrical service and consumption at the site of installation if not previously provided.

Building Permit and Final Signoff:

The name and address on the building permit must match the installation address on the payment claim form.

Invoices:

The invoices must clearly identify the work that was done and the amount paid. This includes identifying the quantity, make and model numbers of major equipment installed and the labor charge for installation. To meet this requirement you may submit a copy of the final invoice(s) or a copy of the final contract(s) showing a zero balance or the amount paid by the purchaser. The invoice or contract should also indicate the extent to which the Commission's rebate lowered the cost of the system. Copies of bank statements, cancelled checks, or credit card statements may also be requested by Energy Commission staff. The final system price paid by the purchaser should match the price shown on any contract or invoice previously submitted. Any differences must be explained.

Warranty:

Complete and attach the CEC-1038 R3 form. See instructions on form for details.

Proof of Utility Interconnection:

Utility letter of authorization to interconnect the system or the "Authorization to Receive Customer Information or Act on a Customers Behalf" form to access Purchaser's utility data (Three year duration required). The address in document must match the address of the installed system.

Claiming a Rebate Without a Prior Reservation

To claim a rebate without a previously approved reservation, you must also submit a completed and signed Reservation Request Form (CEC-1038 R1).

Submit your request only by mail to:

ERP, Payment Claim
California Energy Commission
1516 9th Street, MS-45
Sacramento, CA 95814-5512

Allow at least 6 to 8 weeks from receipt of a complete payment claim application for payment. Payment will be mailed to the retailer or purchaser as indicated on the Reservation Request Form at the address indicated on the Payee Data Record form (STD-204), unless you have assigned payment to a third party.

R3**MINIMUM WARRANTY FORM
EMERGING RENEWABLES PROGRAM****System Information**

This warranty applies to the following _____ kW renewable energy electric generating system

Description: _____

Located at: _____

What is Covered

This five year warranty is subject to the terms below (check one of the boxes):

- All components of the generating system AND the system's installation.** Said warrantor shall bear the full cost of diagnosis, repair and replacement of any system or system component, at no cost to the customer. This warranty also covers the generating equipment against breakdown or degradation in electrical output of more than ten percent from the originally rated output (PTC rating for modules, manufacturers rating for wind turbines); or
- System's installation only.** Said warrantor shall bear the full cost of diagnosis, repair and replacement of any system or system component, exclusive of the manufacturer's coverage. (Copies of five-year warranty certificates for the major system components (i.e., solar modules, wind turbines, etc. and inverter- MUST be provided with this form).

General Terms

This warranty extends to the original purchaser and to any subsequent purchasers or owners at the same location during the warranty period. For the purpose of this warranty, the terms "purchaser," "subsequent owner," and "purchase" include a lessee, assignee of a lease, and a lease transaction. This warranty is effective from _____ (date of completion of the system installation).

Exclusions

This warranty does not apply to:

- Damage, malfunction, or degradation of electrical output caused by failure to properly operate or maintain the system in accordance with the printed instructions provided with the system.
- Damage, malfunction, or degradation of electrical output caused by any repair or replacement using a part or service not provided or authorized in writing by the warrantor.
- Damage malfunction, or degradation of electrical output resulting from purchaser or third party abuse, accident, alteration, improper use, negligence or vandalism, or from earthquake, fire, flood, or other acts of God.

Obtaining Warranty Service

Contact the following warrantor for service or instructions:

Name: _____

Phone: ()

Company: _____

Fax: ()

Address: _____

Signature: _____

Date: _____

R4**EQUIPMENT SELLER INFORMATION FORM
EMERGING RENEWABLES PROGRAM**

This information must be submitted before a company can become eligible to participate in the ERP. To remain eligible, a company must resubmit this form annually, by March 31. This annual submittal is required even if the information identified in the company's prior R4 submittal has not changed. In addition, a company must submit an updated R4 form any time its reported information has changed. The updated R4 form must be submitted to the Energy Commission within 30 days of the change of any reported information. Registered companies are listed at [www.consumerenergycenter.org/erprebate/database/]

Business name:

Phone: ()

Address:

Fax : ()

Email:

Website:

Owner or principal, Title:

Select one of the following:

Business license number:
 Corporate, LLC, LLP or other that is registered with the California Secretary of State (or appropriate state attached)
Reseller's license number:
 Not a corporation, LLC or LLP
Contractor license number (if applicable):

The above information applies solely to the business identified above:

Print Name: _____

Title: _____

Signature: _____


Date: _____

Send this completed form by telefax to (916) 653-2543 or by mail to:

ERP Seller Registration
California Energy Commission
1516 9th Street, MS-45
Sacramento, CA 95814-5512

Reminder:

This form must be on file with the Energy Commission for a rebate application with the above company to be considered. It must be resubmitted annually by March 31 for sellers to remain eligible from year to year.

<h1>R5</h1>	RESERVATION PAYMENT ASSIGNMENT FORM EMERGING RENEWABLES PROGRAM
 <small>RENEWABLE ENERGY PROGRAM</small> <small>CALIFORNIA ENERGY COMMISSION</small>	Record Number _____ Payee ID Number _____
<p>Reservation Information</p> Payee Name: _____ Payee Address: _____ _____ Payee Contact: _____ Payee Phone #: _____	
<p>Assignment Request</p> <p>I, _____, the designated payee or authorized representative of the payee, hereby assign the right to receive payment for the above noted reservation under the Emerging Renewables Program to the following individual or entity:</p> <p style="margin-left: 40px;">Name: _____</p> <p style="margin-left: 40px;">Address: _____</p> <p style="margin-left: 40px;">_____</p> <p style="margin-left: 40px;">Phone #: _____</p> <p>I request that payment be forwarded to this individual or entity at the address noted. Upon request proof of payment will be forwarded to me.</p> <p>Acknowledgement</p> <p>As the designated payee or authorized representative, I understand that I remain responsible for complying with the requirements of the Emerging Renewables Program and will remain liable for any tax consequences associated with the reservation payment, despite the payment's assignment. I further understand that I may revoke this payment assignment at any time prior to the Energy Commission's processing of the payment by providing written notice to the Energy Commission's Renewable Energy Office. Such notice shall be provided to: Emerging Renewables Program, California Energy Commission, 1516 9th Street, MS-45, Sacramento, CA 95814-5512.</p> <p>Executed on: _____</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Signature: _____</p> <p>Name: _____</p> <p>Title: _____</p> </div> </div>	

This completed form may be submitted with either the Reservation Request Form (CEC-1038 R1) or the Payment Claim Form (CEC-1038 R2) for standard rebates. This form may not be submitted by telefax, as original signatures are needed to process assignment requests.

Solar Schools Reservation Request Form



The ERP guidebook is available at
 [www.consumerenergycenter.org/erprebate]
 or by calling the Renewables Call
 Center at **(800) 555-7794**

Completed forms must be mailed to:
ERP Schools
California Energy Commission
1516 9th Street, MS-45
Sacramento, CA 95814-5512

<p>Payee Designation: Reserve rebate for: <input checked="" type="checkbox"/> School District</p>	<p>3. Utility Provider Electric Utility Provider: <input type="checkbox"/> PG&E <input type="checkbox"/> SCE <input type="checkbox"/> SDG&E</p>
<p>1. School District District Name: Contact Person: Mailing Address: Business: () Fax: () Email:</p>	<p>4. Program Information How did you hear about our program? Have you previously applied for funding rebates from the ERP? <input type="checkbox"/> yes <input type="checkbox"/> no If yes, reservation # _____</p>
<p>2. Participating Schools School Name: Address: Business: () Fax: () Email: Estimated size of photovoltaic system: _____watts. School Name: Address: Business: () Fax: () Email: Estimated size of photovoltaic system: _____watts. School Name: Address: Business: () Fax: () Email: Estimated size of photovoltaic system: _____watts.</p>	<p>5. Statement of energy efficient measures For each of the participating schools identified on this form check the appropriate box: <input type="checkbox"/> At least 80% of the classrooms use high efficiency fluorescent lighting (T8 lamps and electronic ballasts). <input type="checkbox"/> Other energy efficient measures with equivalent or greater energy savings to Item 1 (as determined by the Commission) are in use (documentation attached).</p> <p>6. Incentive Requested Sum of Total watts _____ Total Incentive Requested \$ _____ <input type="checkbox"/> Full reservation request (CEC-1038 R1 and supporting documentation for each site attached) or: <input type="checkbox"/> Preliminary 6 month reservation request NOTE: Sum of all new systems installed in school district may not exceed 30 kW.</p>
<p>7. Information for Additional Schools <input type="checkbox"/> See attached for information on other schools submitted with this application (name, address, phone, estimated size of system, signature of school official).</p>	
<p>Declaration: On behalf of the school district, the undersigned declares under penalty of perjury that 1) the information provided in this form and the supporting documentation submitted herewith is true and correct to the best of his/her knowledge, 2) the above described generating system is intended primarily to offset part or all of the school's electrical needs at the site of installation, 3) the site of installation is located within service territory of an eligible electric utility. The undersigned acknowledges that he/she is aware of the requirements and conditions of receiving funding under the Emerging Renewables Program (ERP) and agrees, on behalf of the school district, to comply with all such requirements and conditions as provided in the Energy Commission's ERP Guidebook and Overall Program Guidebook as a condition to receiving funding under the ERP. As specified in the ERP Guidebook, the undersigned, on behalf of the school district, authorizes the Energy Commission during the term of the ERP to exchange school district information on this form with the school district's electric utility in order to verify compliance with the ERP requirements.</p>	
<p style="text-align: center;">School District representative</p> Print Name _____ Signature _____ Date _____	<p style="text-align: center;"><i>CEC Review</i></p>

IMPORTANT: Attach the following minimum documentation: (1) a signed copy of the board resolution(s) indicating support for the solar project and intent to purchase a photovoltaic system; (2) a copy of a monthly electricity statement; (3) evidence that energy efficient measures equivalent to the use of high efficiency fluorescent lighting in 80 percent of the school's classrooms. This form will not be processed without the required attachments.

R7

**PILOT PERFORMANCE-BASED INCENTIVE PROGRAM
PRELIMINARY RESERVATION REQUEST FORM
EMERGING RENEWABLES PROGRAM**

1. Physical Site of System Installation

Street Address: _____

City: _____ State: _____ Zip: _____

2. Purchaser Name and Mailing Address

Phone: _____ Fax: _____

3. Equipment Seller (Must be registered)

Company: _____

City: _____ CEC ID (if known) _____

Phone: _____ Fax: _____

4. System Installation (Write "Owner" if not hiring contractor)

Company: _____

City: _____ License No.: _____

Phone: _____ Fax: _____

5. Electric Utility (Attach all pages of monthly statement)
 PG&E SCE SDG&E BVE
 Service ID: _____

Billing Period: _____ KWh Used: _____

8. Declaration

The undersigned parties declare under penalty of perjury that the information in this form and the supporting documentation submitted herewith is true and correct to the best of their knowledge and that the following is true:

1. All system equipment is new and unused and has been purchased within the last 18 months,
2. The generating system is intended primarily to offset Purchaser's electrical needs at the site of installation
3. The Purchaser's intent is to operate the system at the above site of installation for its useful life or the duration of the lease agreement and
4. The generating system will be interconnected with the distribution system of the electric utility identified above.

The undersigned parties further acknowledge that they are aware of the requirements and conditions of receiving funding under the Emerging Renewables Program (ERP) and agree to comply with all such requirements and conditions as provided in the Energy Commission's ERP Guidebook and Overall Program Guidebook as a condition to receiving funding under the ERP. The undersigned Purchaser authorizes the Energy Commission during the term of the ERP to exchange information on this form with the Purchaser's electric utility to verify compliance with the requirements of the ERP.

Purchaser Signature

Print Name: _____

Signature: _____ Date: _____

Equipment Seller Signature

Print Name: _____

Signature: _____ Date: _____

Submit complete application to:

ERP, PBI Preliminary Reservation Request
California Energy Commission
1516 Ninth Street (MS-45)
Sacramento, CA 95814-5512

6. Equipment (PV modules, inverters, meters)

Generating Equipment	Quantity	Manufacturer, Model (see CEC lists)
Inverters, DAS, Meters		

7. Incentive Amount

System Rated Output _____ watts

Total System Cost: \$ _____

Expected Incentive Rate: \$ _____ /kWh

Make Payments to: Purchaser Seller

Other Incentives: \$ _____

Source/Record No.: _____

IMPORTANT - Necessary Supporting Documentation.

1. All pages of a monthly electric utility bill.
2. Agreements to purchase and install equipment.
3. Payee Data Record (Form STD-204) if payee identified has not previously been paid by the Energy Commission in the last 2 years.

INSTRUCTIONS FOR THE RESERVATION REQUEST FORM (CEC-1038 R7)

Section 1. Physical Site of System Installation

Provide the complete address for the site (parcel) of installation. Note that the site is the legal parcel of land on which the system is installed.

Section 2. Purchaser

Provide the purchaser name, company name if appropriate, and complete mailing address (as it would be written on a letter to be mailed). Enter the site address information even if it is the same as the site of installation address. Also enter the phone number and fax number of the purchaser.

Section 3. Equipment Seller Information

Provide the name of the equipment seller's company and city where located. If known, also enter the CEC ID number for the seller available from the list of eligible equipment sellers [www.consumerenergycenter.org/erprebate] for most companies. Also enter the phone number and fax number. The equipment seller must register with the Energy Commission each year for the application to be considered. If not already registered provide a filled out Seller Registration Form (CEC-1038 R4) with the application. The seller must also sign and date the application form (R7) if the seller is the designated payee of the rebate. Enclose a copy of the purchase agreement with the application form.

Section 4. System Installation

Identify the name of the company hired to install the system or write in "owner install." If installed by a licensed contractor, provide the contractor's license number, phone and fax number. All contractors must have an active "A", "B", "C-10" or "C-46" license. Enclose a copy of the signed contract with the application form.

Section 5. Electric Utility Bill

Identify the Purchaser's electric utility provider at the site where the system will be installed. Also identify from a monthly billing statement the service ID number, billing start and end period, and the energy usage in kWh for that monthly period. Provide all pages of the monthly billing statement with the application.

Section 6. System Equipment (PV modules, inverters, data acquisition system, revenue grade meter)

Provide the quantity, name of the manufacturer and exact model number for the eligible equipment as identified at [www.consumerenergycenter.org/erprebate]. Clearly identify the PV generating equipment in the upper section. Also identify the inverters and system revenue-grade (in kWh) meters. Eligible generating equipment, inverters and rating information is located on the Commission's website [www.consumerenergycenter.org/erprebate]. Calculate and include the system output by multiplying the quantity and rating of the generating equipment used (for PV modules use the PTC rating in watts). Identify the utility or third party data provider to be used.

Section 7. Incentives

The total amount reserved for a system under the pilot PBI program will be calculated based on either a 20 percent or 30 percent capacity factor relative to the PTC rating of the PV array as follows:

$$\text{Reserved Funds} = (\text{PV Array kW})_{\text{PTC}} \times (8760 \text{ hrs/year} \times .20^{**} \text{ kWh/kW}) \times \$0.50/\text{kWh} \times 3 \text{ years}$$

The 20/30 percent capacity factors are high for most systems to ensure that enough funds are reserved to make all payments. It is unlikely that a system can produce more energy than is estimated based on this equation. However, even if a system is shown to produce more energy, its funding will be limited to the amount reserved. The amount of funding reserved for a system or group of systems at any one site is capped at \$400,000. In addition, the maximum level of funding for all systems installed by any corporate or government parent is capped at \$1,000,000.

Provide the system installed total cost (before expected ERP incentive). The ERP requires that incentives from other sources be accounted for before determining the rebate from the ERP. Twenty-five percent of any incentive received or expected from a utility incentive program, a State of California or federal government sponsored incentive program, other than tax credits, must be subtracted from the ERP rebate amount requested.

If an incentive from the ERP was received previously for this site, include the incentive amount and, if known, the reservation number for the prior application.

Section 8. Declaration and Signatures

The purchaser must always print and sign his or her name on the form. If the seller is designated as the payee, the seller must also sign his or her name on the form.

Submit your request only by mail to:

ERP, PBI Preliminary Reservation Request
California Energy Commission
1516 9th Street, MS-45
Sacramento, CA 95814-5512

* The PTC rating is based on PV USA test conditions and includes the efficiency rating of both the PV modules and system inverter (represents 1,000 watts/meter² solar irradiance, 1.5 Air Mass, and 20 degrees C ambient temperature at 10 meters above ground level and wind speed of 1 meter/second).

** .30 (or 30 percent capacity factory) will be used for tracking systems only. Documentation regarding the tracking system must be provided.

R8

PILOT PERFORMANCE-BASED INCENTIVE PRELIMINARY RESERVATION CONFIRMATION FORM EMERGING RENEWABLES PROGRAM



*RENEWABLE
ENERGY
PROGRAM*

CALIFORNIA ENERGY COMMISSION

Mail completed form to:
ERP, PBI Preliminary Reservation Confirmation
California Energy Commission
1516 Ninth Street (MS-45)
Sacramento, CA 95814-5512

**Record
Number** _____

**Payee
Number** _____

[CEC use only] Eligible Cost: \$ _____ Date CFA: _____ SRO watts: _____
Date for LTR: _____ Incentive Rate _____ \$/kWh

1. Confirmation of Preliminary Reservation Amount

_____ has been granted a 12-month preliminary reservation in the amount of \$ _____ for a _____ kW photovoltaic generating system to be installed at _____. This generating system is configured and comprised of the system equipment described in Section 2 below. The 12-month preliminary reservation will expire on _____. This Preliminary Reservation Confirmation Form must be completed by the applicant and submitted to the Energy Commission once the system is installed and becomes fully operational. The Preliminary Reservation Confirmation Form must be submitted with the necessary supporting documentation prior to the noted expiration date. In addition, the applicant must provide written authorization allowing the applicant's utility or web-based monitoring system administrator to share applicant data with the Energy Commission for auditing purposes. Upon review and approval of an applicant's Preliminary Reservation Confirmation Form, the Energy Commission will issue the applicant a PBI Final Reservation (CEC-1038 R9), which identifies the applicant, the installed system, the amount of funds reserved for the installed system, and the three-year final reservation funding period during which incentive payments may be claimed by the applicant.

2. System Equipment (PV Modules, Inverters, kWh Meters and DAS)

Number	Manufacturer	Model	Total System Price
_____	_____	_____	\$ _____
_____	_____	_____	Amount paid by customer to date: \$ _____
_____	_____	_____	Orientation: (Circle One) W, SW, S, SE, E, Other
_____	_____	_____	Tilt: (Circle One) None, 1-15, 15-30, >30 Degrees
_____	_____	_____	Tracking system type: _____

3. Modifications

Has any of the information in section 1 or 2 above changed? Yes No
If no, skip to the next section. If yes, note the changes below before submitting this form.

4. Reporting Method

Monitoring System Administrator*:

Reporting method:

Date of first meter read: _____ Initial reading (kWh): _____

*Monitoring system administrator refers to either the utility or web based third party provider that tracks the electrical production of the system on a monthly basis.

5. Declaration

The undersigned parties declare under penalty of perjury that the information provided in this form and the supporting documentation submitted herewith is true and correct to the best of their knowledge. The undersigned parties further declare under penalty of perjury that the following statements are true and correct to the best of their knowledge:

- (1) The electrical generating system described above and in any attached documentation meets the terms and conditions of the Energy Commission's Emerging Renewables Program and has been installed and is operating satisfactorily as of the date stated below.
- (2) The electrical generating system described above and in any attached documents is property interconnected to the utility distribution grid and has or will be issued utility approval to operate the system as interconnected to the distribution grid.
- (3) The rated electrical output of the generating system, the physical location of the system, and the equipment identified were installed as stated above and in any attached documentation.
- (4) Except as noted above, there were no changes in the information regarding the seller, installer, purchaser, generating system specifications, installation location, or price from that information provided in the Preliminary Reservation Request Form originally submitted by the undersigned.

The undersigned parties acknowledge that they are aware of the requirements and conditions of receiving funding under the Emerging Renewables Program (ERP) and agree to comply with all such requirements and conditions as provided in the Energy Commission's ERP Guidebook and Overall Program Guidebook as a condition to receiving funding under the ERP. The undersigned Purchaser authorizes the Energy Commission during the term of the ERP to exchange Purchaser information on this form with the Purchaser's electric utility in order to verify compliance with the ERP requirements. If a copy of the utility "letter of authorization to operate" the system is not submitted with this Reservation Confirmation form, the undersigned Purchaser understands that he/she is obligated to submit a copy of this letter to the Energy Commission once it is received.

<p><i>Purchaser's Signature</i></p> <p>Print Name: _____</p> <p>Signature: _____</p> <p>Date: _____</p>	<p><i>Equipment Seller's Signature</i></p> <p>Print Name: _____</p> <p>Signature: _____</p> <p>Date: _____</p>
--	---

IMPORTANT - Necessary Supporting Documentation

Also Attach: 1. Final building permit and final inspection signoff; 2. Final purchase and installation invoice(s) confirming the total amount paid for the system equipment and installation; 3. Five-year warranty (CEC-1038 R3 form); 4. Utility letter of authorization to interconnect the system or the Purchaser's authorization form to access Purchaser's utility data; 5. Utility bill or other proof of electrical service and consumption at the site of installation if not previously provided; 6. Purchaser's authorization allowing the Purchaser's electric utility or web-based monitoring system administrator to share generation data from Purchaser's system with the Energy Commission for auditing purposes; 7. Payee Data Record (STD-204), if not provided with initial application or the payee was not previously paid by the Energy Commission in the last two years.

INSTRUCTIONS FOR THE PBI PRELIMINARY RESERVATION CONFIRMATION FORM (CEC-1038 R8)

The CEC-1038 R8 form is used to request final reservation confirmation for a completely installed and operational renewable energy system. The form specifies information about the renewable energy system that was to be installed at the time the preliminary reservation request was initiated. It also serves as a means of documenting what changes occurred from the time the preliminary reservation request was processed until the time the system was installed. The Preliminary Reservation Confirmation Form must be submitted before the preliminary reservation expires.

Section 1. Confirmation of Preliminary Reservation Amount

Self explanatory.

Section 2. System Equipment Installed

Fill in the equipment information requested including the number of units and the make and complete model number. Enter the total system price and the amount paid by purchaser to date. Identify the system's orientation, tilt, and type of tracking system, if any.

Section 3. Modifications

Check the "yes" box if changes were made to the system and note any changes in the information from the previously submitted Reservation Request Form. If more space is required to note changes, additional pages may be added to the form. Changes in equipment from the original application may affect its eligibility and the amount of the rebate. If no changes were made, check the "no" box.

Section 4. Reporting Method

System performance data in kWh may be collected and reported to the Energy Commission in one of two methods – by the applicant's electric utility or by a web-based monitoring system administered by a third-party. Indicate who will be reporting the electricity usage and include initial meter reading and date. See the ERP Guidebook Section VIII for more information.

Section 5. Declaration and Signatures:

The purchaser must always print and sign their name on the form. If the seller is the rebate payee, the seller must also print and sign their name on the form. Enter the date of each signature. Original signatures are required on the form.

Attachments:

Several attachments to the form must also be submitted before the claim will be processed. These include:

- A copy of the final building permit and final signoff
- A copy of the final invoices confirming the total amount paid for the system equipment and installation
- A copy of the completed and signed CEC-1038 R3 form
- Purchaser's authorization allowing the purchaser's electric utility or web-based monitoring system administrator to share generation data from purchaser's system with the Energy Commission (for auditing purposes).
- Letter of authorization from the utility to interconnect the system or Purchaser's authorization to access utility data.
- A copy of the utility bill or other proof of electrical service and consumption at the site of installation if not previously provided.

Building Permit and Final Signoff:

The name and address on the building permit must match the installation address on the payment claim form.

Invoices:

The invoices must clearly identify the work that was done and the amount paid. This includes identifying the quantity, make and model numbers of major equipment installed and the labor charge for installation. To meet this requirement you may submit a copy of the final invoice(s) or a copy of the final contract(s) showing a zero balance or the amount paid by the purchaser. The invoice or contract should also indicate the extent to which the Commission's rebate lowered the cost of the system. Copies of bank statements, cancelled checks, or credit card statements may also be requested by Energy Commission staff. The final system price paid by the purchaser should match the price shown on any contract or invoice previously submitted. Any differences must be explained.

Warranty:

Complete and attach the CEC-1038 R3 form.

Proof of Utility Interconnection:

Utility letter of authorization to interconnect the system or the "Authorization to Receive Customer Information or Act on a Customers Behalf" form to access Purchaser's utility data. The address in document must match the address of the installed system.

Submit your request only by mail to:

ERP, PBI Preliminary Reservation Confirmation
California Energy Commission
1516 9th Street, MS-45
Sacramento, CA 95814-5512

R9

**PILOT PERFORMANCE-BASED INCENTIVE PROGRAM
FINAL RESERVATION CONFIRMATION
EMERGING RENEWABLES PROGRAM**



*RENEWABLE
ENERGY
PROGRAM*

CALIFORNIA ENERGY COMMISSION

To claim payments mail invoices to:

ERP, PBI Payment Claim
California Energy Commission
1516 Ninth Street (MS-45)
Sacramento, CA 95814-5512

**Final Reservation
Number** _____

Payee Number _____

1. Final Reservation

_____ (Purchaser) is hereby granted a final reservation in the amount of \$ _____ at an incentive rate of \$0.50 per kilowatt-hour of energy produced. This Final Reservation is issued pursuant to the Energy Commission's Emerging Renewables Program (ERP) Guidebook and based on Purchaser's previously submitted Preliminary Reservation Request and Preliminary Reservation Confirmation applications and the supporting documentation submitted therewith. This Final Reservation is specific to the _____ kW_(PTC) photovoltaic generating system (System) installed at _____ and described in Section 2 below, and may not be transferred to another generating system or system location. This Final Reservation expires on _____ and will not be extended under any circumstances. Payments under this Final Reservation will be made to _____ as specified in the Purchaser's preliminary Reservation Request application. Payments under this Final Reservation may be claimed at any time prior to the expiration date by submitting a proper payment claim using Invoice Form (CEC-1038 R10) and attaching the necessary supporting documentation to verify the actual energy produced by the System. Notwithstanding the expiration date of this Final Reservation, payment claims may be submitted for energy produced by the System during the reservation period for a period of 90 days after the expiration date of the reservation. Payment claims submitted after this 90-day period will be denied. Under no circumstance will the incentive payments made under this Final Reservation exceed the amount reserved under the reservation.

Purchaser assumes full responsibility for the operation and funding eligibility of the System. Incentive payments will only be made if the System remains operational and eligible for funding, and the necessary payment claims and supporting documentation are submitted to the Energy Commission. If any equipment is added to or removed from the System during the three-year final reservation period, the Purchaser must notify the Energy Commission in writing. If the System is reduced in size, the amount of funds reserved will be reduced accordingly and the Purchaser will be issued a revised final reservation. If the system is increased in size, the funds reserved will remain the same. In either case, the three-year final reservation period will not change. If, as a result of system changes, the Purchaser or System is no longer eligible for funding, this Final Reservation will be cancelled.

As a condition of receiving incentive payments under the Pilot Performance-Based Incentive Program, Purchaser agrees to participate in an evaluation process whereby the Energy Commission or its representatives may conduct telephone interviews and/or on-site visits, and analyze system performance data.

2. System Equipment (PV Modules, Inverters, Revenue Grade Meter, and Data Acquisition System)

Number	Manufacturer	Model	
_____	_____	_____	Orientation: _____
_____	_____	_____	Tilt: _____
_____	_____	_____	Tracking system type: _____

3. Initial Meter Reading and Data Collection Information

Monitoring System Administrator:	_____
Reporting Method:	_____
Date of first meter read:	_____ Initial reading (kWh): _____

**Please note the Final Reservation Number for future use.
The above information is based on applicant submitted information. Please review this form and promptly report any mistakes to the ERP Call Center at (800) 555-7794 or fax (916) 653-2543.**

R10

PILOT PERFORMANCE-BASED INCENTIVE PROGRAM INVOICE FORM EMERGING RENEWABLES PROGRAM



RENEWABLE
ENERGY
PROGRAM

CALIFORNIA ENERGY COMMISSION

Please submit invoices to:

ERP, PBI Payment Claim
California Energy Commission
1516 Ninth Street, MS-45
Sacramento, CA 95814-5512

Instructions for completing this form are provided on the reverse side. Please print or type.

1. Final Reservation

3. Invoice Period (Check one)

- January-March April-June
 July-September October-December

2. Purchaser Information

4. System Information

Name:
Address:

Phone ()
Fax ()

Nominal System Size:

Installation Address:

5. System Production During Invoice Period (in kWh)

Month	Meter Read Dates	Monthly Totals (kWh)
First Month		
Second Month		
Third Month		
Total Generation:		

6. Declaration

I, (print name and title) _____, as an authorized officer of the above identified Purchaser hereby declare under penalty of perjury that the information provided in this invoice is true and correct to the best of my knowledge and that I am authorized to submit this invoice on the Purchaser's behalf. I further declare under penalty of perjury that I have reviewed the electricity production data included in the attached statement(s), and, to the best of my knowledge, that it does not overstate the amount of electricity that was produced by the above identified System during the invoice period. I further declare under penalty of perjury that the following statements are true and correct to the best of my knowledge: (a) the above identified System had not been changed or altered from the system as described in Purchaser's Final Reservation; (b) at all times during the invoice period the above identified Purchaser and System were eligible for funding under Purchaser's Final Reservation and the Pilot Performance-Based Incentive Program of Energy Commission's Emerging Renewable Program; and (c) Purchaser has complied with the requirements and conditions of receiving funding under the Pilot Performance-Based Incentive Program as set forth in the Energy Commission's Emerging Renewables Program Guidebook and Overall Program Guidebook

Dated this _____ day of _____, 20____, at _____.
(day) (month) (year) (place of execution)

Print Name: _____

Signature: _____

Attach invoice from Monitoring Administrator to form. Allow at least 6 to 8 weeks for payment.

INSTRUCTIONS FOR THE INVOICE FORM (CEC-1038 R10)

The CEC-1038 R10 form is used to request payment for a completely installed and operational renewable energy system. The form specifies the amount of energy produced in the given quarter. The invoice form must be submitted before the payment can be made.

Section 1. Final Reservation Number

Fill in the final reservation number provided to you in the upper right hand corner of the final reservation confirmation form R9.

Section 2. Purchaser Information

Provide the purchaser name, company name if appropriate, and complete mailing address. Enter the site address information even if it is the same as the site of installation address. Also, enter the phone number and fax number of the purchaser.

Section 3. Invoice Period

Check the appropriate box for the corresponding months.

Section 4. System Information

Under nominal system size fill out the rated system output provided to you by the Energy Commission in the R9 form. Also, provide the complete physical address of the system.

Section 5. System Production During Invoice Period

Identify the meter read dates and total energy produced (kWh) by the system for each month in the reporting period. Add the three monthly amounts and fill in the Total Generation box.

Section 6. Declaration and Signature

Read, print and sign the form. If the seller is the rebate payee, the seller must also print and sign their name on the form. Enter the date of the signature. Original signatures are required on the form.

Invoices:

Invoices from the Monitoring System Administrator must be submitted before the claim will be processed. Invoices must clearly identify the amount of energy produced. In addition, the name and address on the invoices must match the installation address on the payment claim form.

Submit your request only by mail to:

ERP, PBI Payment Claim
California Energy Commission
1516 9th Street, MS-45
Sacramento, CA 95814-5512

Allow at least 6 to 8 weeks from receipt of a complete payment claim application for payment. Payment will be mailed to the purchaser or retailer as indicated on the Reservation Request Form at the address indicated on the Payee Data Record form (STD-204).

Appendix 2 - Tips for Consumers

This Appendix provides some basic guidelines for those who are not familiar with renewable energy systems and may be interested in learning more. The Energy Commission has a variety of sources of additional information about choosing a renewable energy system, finding retailers or estimating a system's energy output. This information can be obtained by calling (800) 555-7794 or visiting the Energy Commission's Web site at [www.consumerenergycenter.org].

A. Choosing a Contractor

Make sure you hire a contractor licensed by the Contractors State License Board. State law specifies that any job that costs \$500 or more (labor and materials) requires the services of a licensed contractor. As with any large purchase decision, the Energy Commission recommends that you obtain at least 2 or 3 bids before selecting an installer or agreeing to purchase a renewable energy system. Your final selection should be based on various factors including company reputation, warranty service, and installed system price. The Contractors State License Board [www.cslb.ca.gov] provides helpful consumer information, has a process to address complaints against contractors, and maintains information about the status of contractor licenses. The Energy Commission recommends that you check the status of the installer's contractor license for your own protection.

B. Choosing a Retailer

The Energy Commission maintains a list of renewable energy system retailers to make it easier to find products in your area. The list is available by contacting the Energy Commission or visiting its web page.

C. How Much Energy Does a System Produce?

The annual amount of energy from an eligible renewable energy system can be estimated and in most cases can be guaranteed by the system retailer or installer. For photovoltaic systems, the annual amount of sunlight energy (insolation) at a given location in California is predictable and typically does not vary more than five percent (5%) from year to year; however, the annual energy produced by a specific solar system is influenced by many factors. These factors include the orientation (tilt and direction) of the system, wire length and size, shading, module output mismatch, inverter efficiency, module cleanliness, and other factors. A qualified solar system installer should be able to evaluate these factors and estimate an average energy output in monthly or annual kilowatt hours (kWh) for a given system at a specific location. Similarly, the annual amount of wind energy at a given location can be estimated, but is somewhat difficult to predict accurately without sufficient site wind speed data. It is important to note that wind turbines are rated at a wind speed of 28 miles per hour and some wind turbines do not produce any energy until the wind speed exceeds 12 miles per hour.

Battery backup systems are an option when purchasing a solar or wind energy system and have the advantage of providing power during a utility outage. However, adding battery back-up significantly increases the cost of the generating system, requires additional maintenance, and reduces the useful energy output of the system by about ten to twenty percent (10-20%) compared to a similar system without batteries.

Be sure to compare the energy output that contractors prepare before choosing a contractor. The energy output from a system is a much better indicator of the system performance than is the systems rated output. Also, be sure to verify that your installed system has an easy to read meter installed that measures the energy produced in kilowatt hours. A meter is required by the ERP so that you will be able to determine if your system is operating properly. The utility meter only provides the net energy used at your home but does not tell you how much energy your system produces.

You may wish to consider purchasing a pre-designed packaged system to reduce the chance of safety or performance problems with mismatched equipment. Of course, all systems are not the same and may not suit your particular situation. Also, be sure that your system warranty clearly identifies the responsible party for repairing your system in the event of a malfunction or break down. Although you may be able to obtain lower prices by purchasing system components and equipment separately, keep in mind that the money you save may be more than offset by increased installation costs and lower energy output because of mismatched equipment. This, in turn, could affect your warranty coverage.

System prices vary depending on the technology used, equipment type, local labor rates, site conditions, and other factors. The following table lists a range of system prices and annual energy production that are typical for photovoltaic and wind energy system installations.

**Table 2 - Typical Photovoltaic and Wind Energy System
Prices and Energy Production**

Technology Type	Typical Energy Production (kWh/year)	Typical Installed System Prices¹
Photovoltaic Systems ²		
1 kW	1,200 to 1,400	\$7,000-12,000
2 kW	2,410 to 2,810	\$12,000-20,000
10 kW	12,050 to 14,050	\$60,000-90,000
Wind Energy Systems ³		
3 kW	4,990 to 8,500	\$12,000-18,000
10 kW	8,400 to 16,440	\$30,000-50,000

1. Price examples are for 2002. The incentives will decrease to promote similar reduction in price.
2. Manufacturer ratings at standard test conditions. PV calculations based on (STC kW*5.5 hrs/day)*(365 day/yr.)*(0.6 or 0.7 discount factor). The discount factor is a rough estimate of various loss factors. See: *A Guide to Photovoltaic (PV) System Design and Installation*, June 2001, (P500-01-020) for further information.
3. Wind calculations based on manufacturer's predicted monthly energy production for a site with average wind speeds of 11 mph and 14 mph.

Appendix 3 - Criteria for Listing Components as Eligible

This Appendix summarizes the criteria used for listing which components can be used to create a renewable energy system that is eligible for a rebate from the Emerging Renewables Program.

The equipment must meet national or internationally recognized electrical standards or other appropriate criteria. Until the equipment is listed it is not eligible and no funding will be reserved. Equipment that has not met the aforementioned requirements will not be placed on the lists.

Systems using components that are not listed as eligible will not be issued a reservation or a payment. If a component becomes decertified according to the testing requirements described below, and is removed from the Energy Commission's lists of eligible components, applicants may be required to modify their systems by replacing the decertified component with a certified component before a payment is issued.

Generating equipment (e.g. solar modules and wind turbines), inverters, and performance meters are periodically added and removed from the lists of eligible equipment.

A. Photovoltaic Modules

All flat plate photovoltaic modules must be certified by a nationally recognized testing laboratory as meeting the requirements of the Underwriters Laboratory (UL) Standard 1703. For concentrator modules, manufacturers of concentrator photovoltaic systems must provide acceptable evidence to the Energy Commission for each model of system they wish to sell under this program that the module model is listed by UL, or other nationally or internationally recognized testing institution, using test procedures and requirements as appropriate for the intended use.

B. Solar Thermal Electric

No standards exist at present for solar thermal electric generating systems. In lieu of certification, manufacturers of solar thermal systems must provide acceptable evidence to the Energy Commission of one year of reliable operation for each model of system they wish to sell under this program.

C. Fuel Cells

All fuel cells must be certified as meeting the requirements of American National Standards Institute (ANSI) standard z21.83-199 for fuel cell power plants.

D. Small Wind

There are two options to achieve ERP eligibility for small wind systems:

1. Small wind turbines must be certified as meeting the requirements of a small wind turbine-specific safety and/or performance standard adopted by a national or international standards setting body, including, but not limited to IEC (International Electrical Code) 61400-2.

OR

2. Manufacturers of small wind systems must provide monthly data of average energy produced (kWh) and average wind speed for one consecutive year for each model of system they wish to be considered eligible for this program to demonstrate reliable operation of that model of equipment at a site with average annual wind speeds of at least 12 mph.

E. Inverters

All inverters must be certified as meeting the requirements of UL 1741. In addition, for each model of inverter further testing is required to be done by a qualified Nationally Recognized Test Laboratory¹³ to remain eligible for this program. Beginning April 1, 2005, only inverters that have completed the testing will be listed as eligible equipment. Inverter ratings for each model will be determined according to sections of the test protocol entitled, *Performance Test Protocol for Evaluating Inverters Used in Grid-Connected Photovoltaic Systems*, prepared by Sandia National Laboratories, Endecon Engineering, BEW Engineering, and Institute for Sustainable Technology, October 14, 2004 version¹⁴ and the “Guidelines for the use of the Performance Test Protocol for Evaluating Inverters Used in Grid-Connected Photovoltaic Systems.” This version of the test protocol and guidelines are available on the Energy Commission website at [www.consumerenergycenter.org/erprebate/equipment.html]. The tests must be performed in accordance with sections 3, 4, 5.1 and 5.2 of the test protocol, as further clarified in the guidelines. The following tests are required:

- **Maximum Continuous Output Power.** Section 5.4 shall be performed in its entirety for test condition A of Table 5-2 with the following exceptions: 1) the test shall be performed at an ambient temperature of 40 °C, rather than 45 °C, and 2) the dc

¹³ Nationally Recognized Testing Laboratories shall be those laboratories that have been recognized by the U.S. Department of Labor, Occupational Safety & Health Administration (OSHA), in accordance with Title 29 of the Code of Federal Regulations, section 1910.7, and are approved to conduct test UL 1741 under the scope of their OSHA recognition. A list of all current Nationally Recognized Testing Laboratories is available on OSHA’s web page at [www.osha.gov/dts/otpca/nrtl/index.html]. Please note, not all of the Nationally Recognized Testing Laboratories identified on OSHA’s list are approved to conduct test UL 1741.

¹⁴ This version of the test protocol is identified by the file name “InvertrTestProto_041014.doc” as shown in the left-hand side of the footer on each page of the protocol.

Vnom may be selected by the manufacturer at any point between Vmin +0.25*(Vmax-Vmin) and Vmin+0.75*(Vmax-Vmin). It is not necessary to perform Section 5.4 for test conditions B through E of Table 5-2.

- **Conversion Efficiency.** Section 5.5 shall be performed for test conditions A, B and C of Table 5.3, subject to the following: 1) the tests shall be performed with dc Vnom equaling the same voltage as selected above for the Maximum Continuous Power Output test, 2) steps 1 through 8 of the test procedure (Section 5.5.1) shall be performed at 25 °C, and not at 45 °C, and 3) to reduce time for each test condition, begin at the highest power level and go to the lower power levels. If done in this order it will only be necessary to wait for temperature stabilization at the 100 percent power level. In addition, the unit only needs to be operated at full output power for one hour, rather than 2.5 hours, and no preheating is necessary if the Conversion Efficiency test is performed within 1 hour of full operation under test 5.4, provided the unit has not been exposed to ambient temperature of less than 22 °C.
- **Tare Losses.** Section 5.7.1 shall be performed in its entirety. It is not necessary to perform the tests under Section 5.7.2 or Section 5.7.3.

Please note that the tests for Power Foldback (Section 5.8) and Inverter Performance Factor/Inverter Yield (Section 5.9) are NOT required.

The data and reports resulting from the tests for Maximum Continuous Output Power (Section 5.4), Conversion Efficiency (Section 5.5) and Tare Losses (Section 5.7.1) must be provided to the Energy Commission and will be made public. The inverter tested must utilize the same hardware and software configuration evaluated during the UL 1741 certification test.

The methodology for rating inverters on the Energy Commission list is based on the weighted inverter efficiency measured at various load points. Weighting inverter efficiency will be determined with the following weighting factors:

DC Input Power Level	Weighting Factor
10%	0.04
20%	0.05
30%	0.12
50%	0.21
75%	0.53
100%	0.05

The Energy Commission also plans to consider if changes should include adjusting the ratings for inverters with battery-backup to account for losses inherent in battery back-up systems.

F. Metering Criteria

Meters must retain the kilowatt-hour production data in the event of a power outage and must be easy to read for the customer's benefit. The meter must measure the total energy produced by the system in kilowatt-hours (or watt hours) and have a manufacturer's uncertainty specification of plus or minus five percent.

For payments in the Pilot Performance-Based Incentive Program, where payments will be made on actual energy produced, meters and associated data acquisition systems must be able to read and report revenue grade kWh.

G. Other Technologies

New technologies may be added by petitioning the Energy Commission, through the appropriate Committee. Applicants must submit the proper documentation satisfying all of the following criteria:

- 1) Financial assistance is required for these technologies to become commercially viable.
- 2) The technology must be commercially available with at least one vendor available for the sale of the system.
- 3) Vendors of any generating systems employing the technology must offer at least a five-year full warranty on the entire generating system.
- 4) The technology must show at least one year of demonstrated reliable, predictable, and safe performance by a full-scale facility using this technology under field conditions.
- 5) The available data must show that generating systems using the technology have a useful design life of at least 20 years.
- 6) The technology must be designed so that it can produce grid-connected electricity.
- 7) The technology represents a new electricity generating process not well represented among existing grid-connected renewable generating facilities, rather than some evolutionary or incremental improvements to renewable technologies used in existing renewable resource technology generating facilities (examples of such evolutionary or incremental improvements will be: a) an improved blade design for wind turbines, b) less expensive well drilling techniques for geothermal, or c) a more efficient burner design for a biomass plant).
- 8) The project must be designed exclusively for the purpose of producing electricity for on-site use or sale (excluding demonstration projects that may sell to one specific customer), in contrast to a research or demonstration facility, which is designed primarily for collecting additional research data.

Appendix 4 - Maximum System Size Calculations

This Appendix describes the methodology used to determine the maximum system size eligible for incentives from this program. The system size limitation will not affect systems less than 10 kW because the average annual residential electricity consumption in California is about 7000 kWh/yr. Commercial loads are almost certain to be higher. The maximum size of a system that would primarily offset this average load, given conservative system production, is about 13 kW [$200\% * 7000 \text{ kWh} / (.12 * 8760)$].

A. Maximum System Size Calculations

The Energy Commission will determine the maximum size of eligible systems as follows:

1. New or Expanded Site Electrical Load

In the case of applicants with new or expanded facilities, where there is no electricity bill to attach or where the existing electricity bill does not reflect the applicant's expected expanded consumption, the applicant must submit an electricity bill when the system is complete or submit a signed statement by an architect, engineer or electrical contractor that the requisite electricity consumption is occurring or will occur at the site.

Applicants who are awarded reservations based on new or expanded loads will only be paid the full amount of their requested reservation once they have submitted a bill that is consistent with their new or expanded estimated consumption and have otherwise satisfied the requirements for requesting a rebate payment. In most cases, applicants with systems 10 kW or less need only submit a bill verifying grid connection at the site of installation.

The Energy Commission will check the submitted electricity bill(s) for usage consistent with the expected load, and calculate the appropriate incentive payment as described above. If the Energy Commission calculates a reduced rebate amount, the applicant may submit subsequent utility bills within the following three months to receive their full reservation amount, provided there are sufficient program funds available at that time to make an additional payment.

2. Peak Load Capacity Option

A customer may submit documentation that the proposed system is not greater than 200 percent of on-site peak demand (in kW) during any month. Documented historical information can be a utility statement within the last 12 months. For a new customer load or addition to present load, appropriate documentation can be a detailed energy use calculation, signed by a licensed electrical contractor.

The Energy Commission will calculate a “benchmark” production for the system using the following formula:

$$\text{Benchmark Energy Produced} = \text{System Capacity (kW)} \times 1050 \text{ kWh/kWyear.}^{15}$$

This Benchmark Energy Produced (BEP) will be compared to the estimated annual consumption based on the utility bill submitted with the application. If the BEP is less than 200 percent of the estimated annual consumption, the full rebate requested will be reserved. If the BEP is greater than 200 percent of the estimated annual consumption, then the rebate reserved will be reduced by an amount equal to the ratio between the estimated annual consumption and the BEP.

The Energy Commission will compare the estimated annual consumption to the consumption reflected on the electricity bill submitted with the reservation form. In cases where the estimated annual consumption appears to be inconsistent with the electricity bill submitted (for example, when the monthly consumption shown on the electricity bill is less than 8.5 percent of the estimated annual consumption), the Energy Commission will request additional information from the applicant, and will not process the reservation until satisfactory information is received.

If the installed system exceeds the size limits justified by the applicant, then the incentive would be calculated based on the maximum allowable system size.

¹⁵ The annual energy produced by a photovoltaic system is influenced by many factors, including the amount of insolation (sunlight) at a particular geographic location, the orientation (tilt and direction) of the system, the degree of cloud cover, any shading that affects the system, and cleanliness. The BEP calculation above estimates the amount of energy produced by a system with a relatively low 12% capacity factor; that is, a system with relatively poor location, orientation, etc. This represents a conservative estimate of the energy that will be produced by a system. Most systems, with more favorable characteristics, will produce a greater amount of energy. However, a system installed in a relatively poor location with the intent of offsetting the onsite load should not be rejected through the use of an optimistic or even an average estimate of energy production. Therefore, using the BEP calculation for a relatively poorly performing system allows these systems to be eligible, consistent with the intent of SB 90. Using this calculation for all systems minimizes the administrative cost of predicting the energy produced by the system in relation to the load at the site.

Appendix 5 - Atypical Incentive Applications

A. New Construction (Building Permit)

For sites that currently do not have electrical service, a copy of the building permit for the new home or major site improvement must be included with the reservation application (not remodeling projects). For new housing subdivisions, the master permit for the subdivision meets the building permit criteria. Identify the future electric service provider on the reservation form (CEC-1038 R1). All approved applications for new construction will receive 18 month reservations.

B. New Housing Development

New home developers may purchase and install renewable energy systems as part of a new development before selling the home. The renewable energy system is often a feature that is included in the new home price. In most cases it is unclear who will purchase the home, when it will be sold, and how much the end-user pays for the system. Unlike individuals, developers will often purchase the system equipment in bulk and have an agreement with a subcontractor to install systems on various homes in the development.

New building construction projects (not remodeling projects) will receive an 18-month reservation period, but applicants must include a copy of the building permit or master permit for the subdivision with the reservation request.

New construction reservation requests for systems greater than 30 kW in aggregate are not required to include an installation labor contract when installation is being performed by the builder's employees, but must still submit a purchase agreement for the equipment and separately list installation labor costs.

To obtain a rebate reservation for a new housing development where the sum of individual installed systems will total 30 kW or more, the developer may submit the following items instead of submitting separate documentation for each address:

- **One Reservation Request Form (CEC-1038 R1) for the entire new housing development.** The Reservation Request Form must be signed by the homebuilder (purchaser) and the seller (retailer, wholesaler or other supplier) of the electricity generation system. The reservation request must be accompanied by a detailed summary sheet containing the same information requested on the Reservation Request Form for each site (i.e., the physical addresses, generating system information, and system cost for each of the systems to be installed). This information may be listed directly on the form or incorporated by reference to the summary sheet or to the master purchase agreement.

- **One master purchase agreement for the entire new housing development.** The master purchase agreement(s) for the equipment and installation labor must contain the following information: signature of homebuilder (purchaser) representative, seller of the generating equipment, and installer (unless a letter or installation agreement for each subcontractor stating the price charged for specified homes in the housing development is provided); a list of the physical addresses of the system installations; the quantity, make and model of the electricity generating equipment and inverters to be installed at each address; the total cost of the equipment and/or labor; total eligible system cost and rebate requested for each address.
- **Payee Data Record (STD-204) for the recipient of the rebate payment.**
- **Utility Interconnection.** As with other new construction, identify the electric utility on the reservation application form.
- **Building Permit.** Include a copy of the building permit (or master permit for the subdivision).
- **Final inspection signoff.** (at time of payment) - submit documentation showing final inspection signoff for the housing development or an interconnection agreement listing all of the addresses at which the utility confirms that an eligible electricity generation system was correctly installed. See "Reservation and Payment Process" for additional paperwork required at the time payment is claimed.

1. Reservations for Systems Sold as Options

Developers who are interested in offering systems as an option to future home purchasers may obtain reservations for 10 percent of the lots in the proposed subdivision without identifying the specific lot in advance if all of the following conditions are met:

- The developer commits to the purchase of at least one system to be installed on one of the model homes and obtains a reservation at that site
- The developer offers systems for sale as an option to new home purchasers
- The reservation remains limited to homes in the same subdivision

The amount reserved for 10 percent of the unspecified lots will be based on the same information as on the reservation application for the largest system on the model homes (equipment and amount reserved).

With the reservation application for the model home, provide a statement identifying that the developer meets the above criteria and will sell systems as an option to buyers. Also, clearly identify the subdivision name, city and zip code, and the total number of homes to be built in the subdivision.

C. Systems Installed by Sellers or Contractors for Their Own Personal or Business Use

Renewable energy system sellers (e.g., retailers, wholesalers, manufacturers) or contractors who arrange to have a system installed by a separate company on their own home or place of business may qualify for the full rebate. To receive a reservation, the applicant must submit documentation consistent with that of an individual independently buying a system. When an equipment seller purchases equipment for the seller's own use, the purchase agreement (or proof of purchase) must be between the purchaser and the generating equipment supplier, in most cases the wholesaler.

The supplier must be identified as the seller on the application form and must be registered with the Energy Commission. If the labor installation is done by a contractor on his own home or place of business, the application will be treated as an owner installed system unless the contractor hires an independent company to do the system installation and is able to document payments to the independent company. The purchase and installation agreements must be between two independent entities. Documentation of a purchase between two principals or owners within the same entity or between spouses is not acceptable, nor is a purchase agreement if signed by the same individual.

D. Adding to Existing Systems

Additions to existing systems will only be allowed for systems that met past program requirements and were partially funded by participating in the Energy Commission's program. For these projects, the Energy Commission has the records and documentation identifying the equipment that was installed previously, the program warranty, and system equipment standards and warranties that were met by the originally installed equipment. The newly added generating equipment must be selected from the current lists of eligible equipment and meet the current guidebook requirements. All of the current program eligibility criteria and documentation requirements apply to the added equipment.

For all other situations the rebate calculation will be based on the incremental rated capacity of the added equipment. Under no circumstances will the rebate for the added equipment exceed the current rebate for the incremental watts added.

Sample Calculation:

Existing reservation for \$6,860 @ 2.80 per watt (2,450 watts)

Adding 1000W (no inverter capacity limitation)

Current rebate level is \$2.60

Additional rebate available in this case:

1000W x \$2.60/W (for contractor installation) = \$2,600

Because the rebate for wind decreases with the system size the incremental calculation will be based on the incremental system size above the pre-existing system.

Sample Calculation – Incremental Calculation for Wind Systems

Existing System paid \$12,500 @ 2.50 per watt (5,000 watts)

Adding 6000W for total of 11,000 watts (no inverter capacity limitation)

Current rebate level is \$2.50/W for first 7.5 kW and \$1.50 per watt for increments above 7.5kW

The rebate available for the new addition is:

$2,500 \text{ W} \times \$2.50/\text{watt} + 3,500 \times \$1.50/\text{watt}$ (for contractor installation) = \$11,500

E. Special Requirements for Leased Systems

To ensure that leased systems are not prematurely removed from the site of installation, leased systems must remain at the original site of installation for a period not less than five years. The lease agreement must specify a lease term of no less than five years and must limit the lessor's remedies in the event of breach to monetary damages. The lease agreement may not permit the lessor to remove the system from the original site of installation because of the lessee's default or breach of the lease agreement. In addition, the lease agreement must clearly demonstrate that the program rebate or incentive benefits the lessee by directly and exclusively reducing the lease payments for the eligible system.

In determining the total cost of leased systems, the Energy Commission will not consider any finance, interest, insurance, maintenance costs, or any lease processing fees.

The rebate or incentives for leased systems will be paid to the retailer of the system or to the lessor as the system purchaser. The rebate will not be paid to the lessee.

The proof of agreement to lease must contain two sections. It must contain the proof of agreement by the lessor to purchase the system from the seller as described above. It must also contain the lease agreement between lessor and lessee and identify the physical address of the system, the quantity, make, and model of major system components, the lease term or duration, terms of payment, the total cost of the lease itemized so as to identify the capital cost and any financing, interest, insurance or maintenance cost and any fees, the total amount to be paid by the lessee over the term of the lease, indication that the rebate benefits the lessee by directly and exclusively reducing the lease payments for the eligible system, and the signatures of both the lessor and lessee.

F. Time Extension Requests

Time extensions to a reservation will not be available for any new applications submitted on or after January 19, 2005, with the exception of applicants that have active

six-month reservations. Beginning January 18, 2006, applicants with active six-month reservations will be granted an automatic, one time three-month extensions. Applicants with expired reservations must reapply by submitting a new signed CEC-1038 R1 form.

Time extensions for applicants with pending 18-month reservations may be granted up to six months under the conditions specified in the version of the ERP Guidebook applicable at the time the complete reservation application was submitted.