

# **CITY OF HEALDSBURG**

## **SB-1 SOLAR PROGRAM GUIDELINE**



**HEALDSBURG ELECTRIC DEPARTMENT**  
**HEALDSBURG, CA**

**FEBRUARY 2011**

**THE HEALDSBURG ELECTRIC DEPARTMENT RESERVES THE RIGHT TO  
MODIFY THIS PROGRAM, AS NEEDED, TO BETTER SERVE THE  
INTERESTS OF OUR CUSTOMERS AND OUR COMMUNITY.**

For more information, please contact us at: 707-431-3122.

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## **GENERAL INFORMATION**

To encourage the installation of high-quality solar photovoltaic (PV) systems, California's Senate Bill 1 (SB-1) set a statewide goal to add 3,000 MW of new PV systems over ten years. Under the guidance of SB-1, Healdsburg's Electric Department (HED) offers incentives for the installation of solar systems.

Funding for HED's SB-1 Program is provided by electric utility customer's contributions to the Electric Public Benefits Fund (EPBF) in accordance with Assembly Bill 1890 (AB-1890). The amount HED collects for the EPBF is tied to the lowest percentage of expenditures of the State's three investor-owned utilities; currently this surcharge is 2.85%. The expenditure of those funds is entirely at the discretion of the utility's local governing bodies so long as the expenditures fit within the described categories of AB-1890. Per the guidelines of AB-1890, HED's solar incentive program is an eligible use of EPBF.

## **APPLICATION PROCESS**

The customer begins the process by submitting a complete SB-1 Solar Rebate Application (see <http://www.ci.healdsburg.ca.us/>). If the application is incomplete, HED will return the Application noting the missing and needed information. If the Application is complete and rebate funds are available, the City will provide a Rebate Reservation Confirmation Letter to the customer. Once the system is installed, customers must schedule a System Interconnection Inspection with the City so that the system can be interconnected and energized. PV system installations must adhere to all applicable Building Permitting processes. The customer must pay all current application, permit and inspection fees prior to calling to schedule their interconnection inspection. The PV System must pass all required City Building Official inspections prior to the Interconnection Inspection.

It is strongly recommended that the customer implement efficiency measures prior to the installation of a PV system. For residential installations, the customer must include the Residential Energy Efficiency Checklist along with their application. For commercial sites, the customer should contact the City to request an energy efficiency audit prior to PV system installation. An energy efficiency representative will visit the facility and make recommendations regarding possible energy efficiency opportunities. Customers may be exempt if their home complies with the 2001 or 2005 CA Title 24 Energy Code, (submit a copy showing compliance with CF-1R Form, prepared by a Certified Energy Plans Examiner).

HED Solar Rebate applications must include a plot plan denoting system location in relation to existing electrical service and existing easements. Additionally, if trenching is required, installers are required to call for an Underground Service Alert (USA) to locate underground utilities. If you fail to “Call Before You Dig,” you may harm yourself and those around you, disrupt service to you and your neighbors, and incur costly repairs. Calling the USA is free and helps prevent undesired consequences. HED reserves the right to reject or disconnect a system from interconnection if it is deemed unsafe by HED or the City of Healdsburg.

Once the PV system is operational, the customer must schedule a post-installation performance inspection of the system. This inspection verifies that the system was installed in accordance with the customer’s application and meets the expected system performance (energy production). HED’s solar incentive program pays incentives based upon the expected performance of the system. Incentives paid under this structure are referred to as Expected Performance Based Buy-down incentives (EPBB). If the system is verified to NOT be installed as submitted, the contractor will be required to submit a corrected EPBB calculation. ***If the system output is reduced as a result, the customer rebate will be adjusted down accordingly.*** Once the system has passed all required inspections, the City will process the rebate.

### **System Changes Affecting Rebate Amount**

Customers must submit in writing any design changes to HED. For changes to the system size, the incremental rebate will be calculated and the rebate amount will be revised, as funding is available, and within applicable limits of the program.

### **Permits and Interconnection Agreements**

A final approved building permit is required to qualify for a SB1 Program rebate. Customers will also be required to enter into an Interconnection Agreement and a Net Metering Payment Agreement with the City. At the start of the net-metering agreement customers will be assigned a 12-month “true-up” period. Throughout this period, the customer will be allowed to carry forward any month’s excess of kilowatt-hours. At the end of a predetermined 12-month period, the customer’s net-generation will be balanced against the customer’s total consumption. Please refer to the Net Metering Agreement for additional details.

## **ELIGIBILITY AND REQUIREMENTS**

### **Customer/Applicant Responsibilities**

HED's Solar SB-1 Program is available to all City electric customers. The applicant must be the electric customer of record at the location where the generating equipment will be located. Solar retailers/installers may be of assistance when filling out the application. To be eligible for a rebate, the system must be owned by the customer and installed on the customer's side of the meter. Leased systems do not qualify for the City's SB-1 Program rebate. To be eligible for a rebate, the customer must submit a Rebate Application and receive a Rebate Reservation Confirmation letter from the City prior to the beginning of installation and final interconnection authorization.

The Rebate Reservation Confirmation letter will reserve a rebate for a period of six (6) months. Customers will be allowed to file one extension allowing an additional four (4) months. Extensions must be submitted through either email or written letter. If a rebate reservation expires the funds will be released to other active solar projects, and the customer must re-apply in order to reserve solar rebate funds.

The City cannot provide contractor recommendations, but advises customers to obtain more than one contractor bid as well as check references, and contractor licensing status. Customers may search for solar installers, contractors and retailers at:

[www.gosolarcalifornia.ca.gov/retailers/search-new.php](http://www.gosolarcalifornia.ca.gov/retailers/search-new.php)

### **Installer Responsibilities**

To be eligible for a rebate, all systems must be installed by appropriately licensed contractors in accordance with rules and regulations adopted by the State of California Contractors State Licensing Board (CSLB) and City Building Codes. Contractors must have an active A, B, C-10 license, or C-46 license for installing PV systems. Roofing contractors with a current C-39 license may place PV panels in accordance with the limitations of their license. In no case shall a roofing contractor make electrical connections.

Although not required, installation contractors are encouraged to become certified by the North American Board of Certified Energy Practitioners (NABCEP). The City also recommends that the installer be registered with Go Solar California and meet their pre-screening criteria. For more information, visit:

[www.gosolarcalifornia.ca.gov/installers](http://www.gosolarcalifornia.ca.gov/installers)

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

## **Equipment Requirements**

All PV modules, inverters, and meters must be listed on the California Energy Commission's (CEC) Eligible Equipment List and must be new and not previously placed in service in any other location, for any other application. This list is continuously updated by the CEC. The current list for eligible equipment can be found at:

[www.gosolarcalifornia.ca.gov/equipment](http://www.gosolarcalifornia.ca.gov/equipment)

*Modules:* Only PV modules listed on [www.gosolarcalifornia.ca.gov/equipment/pvmodule](http://www.gosolarcalifornia.ca.gov/equipment/pvmodule) are eligible for rebates. In addition, each PV module must be certified compliant with UL 1703.

*Inverters:* Only inverters listed at "[www.gosolarcalifornia.ca.gov/equipment/inverter](http://www.gosolarcalifornia.ca.gov/equipment/inverter)" are eligible for rebates. All inverters shall be certified to UL 1741 standards. Inverters shall also meet IEEE 1547 interconnection standards to be approved as anti-islanding (non-back feeding) devices that automatically disconnect from the grid upon loss of utility voltage or stable system frequency.

*Performance Meters:* All solar energy systems must be installed with a performance meter or an inverter with a built-in performance meter so that the customer can monitor and measure the system's performance and the quantity of electricity generated by the system. All meters shall measure and display cumulative energy produced and retains production data during power outages. Installers are encouraged to make this data easily available to both the customer and utility staff.

*System Size:* The minimum system size requirement for the City's SB1 Program rebate is 1 kW and the maximum system size is 20 kW. Larger systems will be considered but may require additional or special facilities to interconnect to HED's system. All facilities required to facilitate the generator's interconnection will be at the customer's sole cost.

Systems sized between 1 kW and 8 kW, inclusive, shall be assumed to primarily offset the customer's annual electricity needs. For systems larger than 8 kW, the customer must work with HED to justify the system size will not create a net excess of kWhr after a twelve month period.

For new construction, the customer must include an electrical load estimate for proposed systems larger than 8 kW. Suggested methods of substantiating a load estimate include an electric load calculation with corresponding equipment schedules, building simulation program reports, or detailed engineering calculations. All load calculations will be approve or reject at the sole discretion of HED.

### **Shading Analysis**

Minimal shading - A system is considered to have “minimal shading” if no solar obstruction is closer than a distance twice the height it extends above the PV modules. Obstructions can include any roof equipment, neighboring trees, poles, buildings, or other objects. Landscaping should be evaluated at the expected mature height. No shading analysis is required for systems with minimal shading. If, during the performance post-inspection, it is determined that shading obstructions exist, the contractor will be required to re-submit a corrected EPBB calculator, and the customer rebate will be adjusted accordingly. If shading obstructions exist, shading conditions shall be verified using a solar assessment tool, such as a Solar Pathfinder or Solmetric report and submitted with the rebate application. Monthly shading derate factors must be recorded for each system.

### **Warranty**

All systems must have a written 10-year warranty provided in combination by the manufacturer and installer to protect the purchaser against defective workmanship, system or component breakdown, or degradation in electrical output of more than fifteen percent from their originally rated electrical output during the 10-year period. The warranty must cover the PV modules and inverters, and provide for no-cost repair or replacement of the system or system components, including any associated labor during the warranty period.

### **Performance and Permanency**

Equipment is intended to be in place for the duration of its useful life. Only permanently installed systems are eligible for rebates. PV system must demonstrate adequate assurances of both physical and contractual permanence prior to HED issuing a rebate.

### **Metering and Data Collection**

HED shall, at the customer’s expense, install, own, and maintain an electric meter applicable to the customer’s rate schedule that is capable of registering bidirectional flow of electricity. In addition, the customer is responsible for all fees associated with the solar application, permitting, inspections and special facilities that may be required to complete the interconnection. Modifications to the service panel must be inspected and approved by the City of Healdsburg’s Building Department. All service panels must comply with applicable Electric Utility Service Equipment Requirements Committee (EUSERC) standards.

All net-metering customers may be required to self-read their City meter and provide meter readings on a monthly basis. Additionally, customers may be required to provide cumulative production data from their performance meter on an annual basis. A separate performance meter must be installed on the customer-side of the system (see “System Equipment” above). Utilizing inverters that have a built-in performance meter is acceptable.

### **Site Inspections and System Verification**

To be eligible for the HED's SB-1 Program rebate, customers must agree to provide the City, and/or third parties contracted by the City, access to the site and any available data and information collected on the system. The City will conduct a System Interconnection Inspection in order to verify that the PV system is installed as represented in the application, is operational, interconnected and conforms to the eligibility criteria of the City's SB1 Program and the Interconnection Agreement. At the City's discretion, the installer may be required to be present at the interconnection inspection. The City reserves the right to disqualify installers from future program participation for failed inspections due to gross negligence, fraud, or uncorrected mechanical failures.

## REBATE STRUCTURE

Rebate funds are reserved on a first-come, first served basis until all available funds have been allocated **OR** the program has installed an aggregate of 540kW **OR** the program has been active for a period of ten years. To increase the potential for broad participation in Healdsburg’s SB-1 program, rebates are limited to a maximum system size for each customer class. Residential customer rebates are limited to a maximum system size of 4,000 watts-ac and commercial rebates are limited to a maximum system size of 20,000 watts-ac. Customers may install solar systems larger than the rebates allow, but in no case shall a participant of the SB-1 program install generation exceeding their existing on-site load.

### Declining Incentives

Per SB-1, solar incentives shall be offered on a declining basis. HED solar program reduces the incentives through progressive steps. Each step is allowed a total payout of \$95,000. Once the allowed payout for the current step has been allocated, the next step with a lower rebate will be started. Solar projects that span steps will be provided a prorated rebate. Steps 8, 9, and 10 have not been approved by the City Council and may change due to economics or program needs.

STEPS & REBATES PER CUSTOMER CLASS										
	1	2	3	4	5	6	7	8	9	10
<b>RESIDENTIAL REBATE/WATT</b>	STEP CLOSED	\$0.49	\$0.44							
<b>COMMERCIAL REBATE/WATT</b>	STEP CLOSED	\$0.47	\$0.42							
<b>ACTUAL KW INSTALLED</b>	14.6	53.3	91.23	74.84	90.85	69.67	264.31	191.40		

**Table 1: SB-1 solar incentive per step. Step incentives may change at any time due to a lack of funding, economics, and/or program needs.**

### **Project Costs**

No project can receive total combined incentives that exceed total eligible project costs. The customer must submit project cost details to report total eligible project costs and to ensure that total incentives do not exceed out-of-pocket expenses for the customer.

### **Rebate Payments**

Beginning with fiscal year 2010, capacity-based incentives are no longer available. All rebates will now be calculated according to the expected performance of the system, EPBB. Please see Rebate Application instructions for more information on calculating rebate amounts.

Rebate Payments will be made to the customer or their designee. The City shall process the rebate and send a check within 45 days of passing the final system performance inspection, and submission of all required attachments. Rebates cannot be paid retroactively for systems installed in previous years. Each customer is eligible for one rebate for each property owned, on a first-come, first-served basis. Rebate recipients are responsible for determining if their rebate is taxable by checking with a qualified tax advisor. In exchange for the SB-1 Program rebate and annual payments to net-producers of energy, the customer agrees that the Renewable Energy Credits (RECs) generated by the system belong to HED. HED may use or sell the RECs at their discretion.