

GreenWatts™ SunShare Hardware Buydown Options

As a part of our commitment to developing renewable resources, Tucson Electric Power Company is proposing to offer our customers an attractive solar electric program. Our goal is to create a program that will provide an affordable, environmentally sensitive solar electric generation system to supplement the customer's electricity needs currently serviced by TEP. While the installation of the supplemental solar electric generating system requires remaining connected to the TEP system, a solar electric system properly matched to a customer's electric use can provide a reduction in electric bills, by using the renewable resources of the sun. The program is named SunShare to reflect our commitment to share the cost of developing solar electric generators with our customers by reducing the cost of photovoltaic systems.

TEP is proposing three related options to work in partnership with our successful, existing renewable program, GreenWatts as follows:

Option One: A direct hardware buydown program. TEP will pay the owner of a qualifying solar electric system \$2,000 per AC kW of qualifying, proven, installed solar generating capacity. The system must meet all qualifications listed in Attachment A "System Qualifications", and Attachment B "SunShare PV Off-Angle & Shading Annual Energy Derating Chart" to the GreenWatts SunShare Program Hardware Buydown Agreement (the Hardware Buydown Agreement). Additionally, the owner must sign an agreement assigning rights to the electrical output and all associated environmental credits to TEP. TEP will return the electric output to the owner at no cost. In addition, while funding under the Arizona Corporation Commission's Environmental Portfolio Standard (EPS) is sufficient, TEP will provide an annual service inspection and normal system repair labor at no charge, as defined in the agreement. The owner will be responsible for the cost of repair materials and shipping if required.

Under Option One, the owner can install any solar electric generating system that meets the qualifications set forth in the preceding paragraph. The owner may be able to use Arizona income tax credits of up to \$1,000 to further reduce the initial cost of the system. TEP will determine by actual test, or from historical data from previous tests, the AC output capacity of the solar electric system. The hardware buydown payment will be determined from the result of that test, as adjusted to PVUSA Test Conditions (PTC) for temperature, solar insolation, shading factors and level of compliance to Attachment B of the Hardware Buydown Agreement. Testing will include PV array DC voltage tracking performed by the inverter at or extrapolated to summer ambient temperatures.

Option Two: A hardware purchase and direct hardware buydown credit program that includes all elements of Option One, and includes solar materials specified and purchased by TEP for resale to the customer. The installed system must meet all qualifications listed in Attachment A “System Qualifications” and is subject to the derating of Attachment B, both of which are attached to the Hardware Buydown Agreement. The owner must sign an agreement assigning rights to the electrical output and all associated environmental credits to TEP. TEP will return the electric output to the owner at no cost. In addition, while funding under the EPS is sufficient, TEP will provide an annual service inspection and normal system repair labor at no charge, as defined in the agreement. The owner will be responsible for the cost of repair materials and shipping if required.

Each nominal 1kW capacity system sold by TEP will include: photovoltaic panels, simple support system, DC to AC inverter, meter and meter socket, and standard interconnection design documentation. Provided all remaining system installation qualification requirements are fully met, the hardware buydown credit to the owner would be \$2,000 as reduced by applying the appropriate prorating factor from Attachment B for each nominal 1 kW system up to a total of \$20,000 for 10 systems. This credit will be applied to the \$6,000 purchase price of each system. Company is limited to selling no more than ten (10) -1 kWac kits to one customer. These system kits are designed in a simple “cookie cutter” configuration and while not suitable for all homes or commercial applications, should provide an inexpensive solar electric installation for most owners. The owner may be able to utilize Arizona income tax credits of up to \$1,000 or Federal Energy Investment tax credits to further reduce the initial cost of the system.

Option Three: A direct hardware buydown program. TEP will pay the owner of a qualifying solar electric system up to \$2,000 per Manufacturer’s rated DC kW at Standard Test Conditions (STC) of qualifying, proven, installed solar generating capacity. The system must meet all qualifications listed in Attachment A, “System Qualifications”, and Attachment B “SunShare PV Off-Angle & Shading Annual Energy Derating Chart”, to the Hardware Buydown Agreement. Additionally, the owner must sign an agreement assigning rights to the electrical output and all associated environmental credits to TEP. TEP will return the electric output to the owner at no cost. Since the Option Three buydown is based on the DC array rating, no maintenance will be provided.

Under Option Three, the owner can install any solar electric generating system that meets the qualifications set forth in the preceding paragraph. The owner may be able to use Arizona income tax credits of up to \$1,000 to further reduce the initial cost of the system.

Scope

All three options are limited in scope. Buydown payments are limited to 200 kW of installed solar electric capacity each year of the program 2004 thru 2006. The free annual inspection and normal repair labor maintenance program offered by TEP, in Options 1, 2 and 3 (inspection only), are dependent upon the sufficiency of funding provided under the EPS. While the EPS program is expected to be fully funded through the end of the year 2012, it could be changed by the ACC in the future. If funding levels provided under the EPS are insufficient to continue the maintenance program, TEP will notify all maintenance program participants at least 12 months prior to the free program's termination. TEP will thereafter offer said participants a paid maintenance and inspection program. In all cases the free or paid maintenance and inspection programs offered by TEP would terminate at the end of 2012.

Metering Reading

TEP would like to have active owner participation continue throughout the Program. It will be the responsibility of the owner of the solar electric system to read the solar production meter once each month and report the reading to a voice recording device at 745-3121, or in some other format as specified by Company. Owners are required to report their name, meter number, and present meter reading. The December meter reading should be taken on December 29, 30, or 31st as a representative end of year reading. TEP reserves the right to also read the meter at its option. Monthly readings will be used to monitor system performance and anticipate service requirements; thus reporting meter readings is to the benefit of all parties.

Qualifications

See Attachment A, "System Qualifications" in the Hardware Buydown Agreement.