

CALIFORNIA ENERGY COMMISSION
OFFICE OF THE COMMISSIONERS
1516 NINTH STREET
SACRAMENTO, CA 95814-5512



DEAR RESIDENTIAL CEPE-CERTIFIED ENERGY CONSULTANTS:

RE: NEW SOLAR HOMES PARTNERSHIP – AN IMPORTANT ROLE FOR YOU

The purpose of this letter is to make energy consultants who are Residential Certified Energy Plans Examiners (CEPEs) aware of an important role you can play in California's New Solar Homes Partnership (NSHP) and to encourage you to provide your services to program participants.

On January 2, 2007, the California Energy Commission launched its New Solar Homes Partnership (NSHP). The NSHP merges the goals of energy efficiency and solar production through the installation of 400 megawatts (MW) of solar electric systems on energy efficient new homes in California over the next 10 years.

The Energy Commission will partner with builders to create a self-sustaining market for solar homes that incorporate high levels of energy efficiency and high-performing solar energy systems. The NSHP will target new residential construction, including affordable housing.

California's energy policy places great emphasis on energy efficiency because it is the most cost effective means to meet our energy and environmental needs. In establishing the NSHP, the Energy Commission aims to ensure that new residential buildings that are granted an incentive under the NSHP are significantly more energy efficient than required by the California Building Energy Efficiency Standards (Title 24, Part 6). This helps the combined energy efficiency and solar project to be as affordable as possible over the life of the home.

To be eligible for NSHP incentives for the solar (photovoltaic, PV) system, residential buildings must achieve one of the energy efficiency levels shown below:

- 1) Tier I – 15 percent reduction in the residential building's combined space heating, cooling and water heating energy compared to the current *Title 24 Standards*; or
- 2) Tier II – 35 percent reduction in the residential building's combined space heating, cooling and water heating energy and 40 percent in the residential building's air conditioning energy compared to the current *Title 24 Standards*.

Solar water heating may be used to assist in meeting the energy efficiency requirements of either Tier I or Tier II. In addition, for either Tier I or II, each appliance provided by the builder must be *Energy Star* if an *Energy Star* designation is applicable for that appliance. The California investor-owned utilities are expected to provide additional incentives through their new construction programs for meeting these energy efficiency requirements.

The NSHP requires compliance documentation showing that either the Tier I or Tier II levels are met before paying incentives for the PV system. **Only compliance documentation completed by Residential CEPE-certified energy consultants will be accepted.** This same compliance documentation will be useful for qualifying for the additional energy efficiency incentives provided through the utility new construction programs.

Obviously, the Energy Commission places great reliance on Residential CEPE-certified energy consultants to deliver effective and efficient service to the builders who participate in the New Solar Homes Partnership. We encourage you to become thoroughly familiar with the NSHP, and prepare yourself to provide services to assist your current builder clients to participate in it, and to expedite compliance documentation services for any current or new clients who seek your services to participate in the NSHP.

These services are a direct extension of the services you already perform to verify compliance with the Building Energy Efficiency Standards and to demonstrate that utility new construction program requirements are met. You use the same compliance software that you already are familiar with to show the NSHP energy efficiency requirements are met. Please prepare yourself also to use Energy Commission-approved solar water heating calculation methods to aid builders who may seek your services to use solar water heating systems to meet the NSHP energy efficiency requirements.

In addition to achieving high levels of energy efficiency in participating homes, the NSHP also calls for high performing PV systems founded on high quality and reliable equipment (modules, inverters and meters), effective PV system design, and careful attention to effective installation. To facilitate high performing PV systems, the Energy Commission is using an Expected Performance Based Incentive (EPBI). The amount of NSHP incentives paid for the PV system is determined using the CECPV Calculator to evaluate system performance, accounting for those parameters that are under the control of the builder, including the efficiency of the components, the mounting orientation and tilt, and the avoidance of shading. The CECPV determines the estimated annual performance using the weather data and time dependent valuation factors for the climate zone where the home is located. The NSHP also relies upon field verification both by the installer and Home Energy Rating System (HERS) Rater to insure that the PV system is installed as expected by the CECPV calculations.

As you can see, this process is designed to be parallel to the use of compliance software and HERS Raters to field verify energy efficiency measures, which is very familiar to you. Residential CEPE-certified energy consultants may want to extend their current services to offer assistance to your builder clients in the use of the CECPV Calculator to determine the system incentive level and facilitate field verification of the PV system.

We welcome and encourage your active involvement in the New Solar Homes Partnership, and thank you in advance for helping California to move rapidly to highly efficient, high-performing solar homes. For more information go to www.gosolarcalifornia.ca.gov.

Date: April 30, 2007



JACKALYNE PFANNENSTIEL
Chairman



ARTHUR H. ROSENFELD, Ph. D.
Commissioner