

DOCKET**06-NSHP-01**DATE April 17 2009RECD. April 20 2009

April 17, 2009

California Energy Commission
Dockets Office, MS-4
Re: Docket No. 06-NSHP-01
1516 Ninth Street
Sacramento, CA 95814-5512

Re: Comments Regarding Staff Workshop on the Proposed Changes to the New Solar Homes Partnership Guidebook

PetersenDean Roofing and Solar Systems submits the following comments in response to the April 10, 2009 workshop and the request for comments on the New Solar Homes Partnership Guidebook for the California Energy Commission.

PetersenDean appreciates the opportunity to engage in more detailed discussions with the CEC to improve the overall NSHP program and increase solar adoption by homebuilders throughout the state.

The key recommended changes that we would like to propose are highlighted below. Detailed descriptions of each follow.

1. **New Homebuyer Solar Stimulus** - Introduce new homebuyer stimulus incentive of \$1/watt, capped at \$4,000, for those that buy new homes that come equipped with solar electric systems.
2. **Separation of Energy Efficiency and Solar Rebate Programs** - Create more separation between the Residential New Construction Energy Efficiency Program and the NSHP Solar Rebate Program, such that the application and payment processes don't hinder one another.
3. **Application and Reservation Requirements for 300+ Unit Large Scale Communities** - Introduce specific application and reservation guidelines for builders and developers willing to commit to building large-scale (over 300 homes) solar communities.
4. **Proscriptive List of Energy Efficiency Features by Climate Zone** - Create a proscriptive list of energy efficiency requirements for each climate zone to eliminate a lot of the plan check, inspection, and verification requirements of the Energy Efficiency Program which are causing the most problems within the NSHP framework.
5. **System Size Upgrade Options** - Introduce guidelines for builders wanting to offer solar standard with a base system size with upgrade options for homebuyers wanting to upsize their systems.
6. **Eliminate the Requirement for Builder Sponsored Inspection of the PV System** - Eliminate the requirement for a builder sponsored inspection of the PV system and have the utility company (who is already performing PV inspections for other solar rebate programs) perform the inspection.
7. **Remove Requirement for System Size Justification Letter** - Remove requirement for a "System Size Justification Letter" for systems under 10 kW.
8. **Misc. Guidebook and WebTool Change Recommendations**

PetersenDean looks forward to working closely with the Energy Commission and all industry stakeholders to ensure the success of solar new homes and the New Solar Homes Partnership.

1. New Homebuyer Solar Stimulus

It is critical to get the New Solar Homes Partnership back on track and use this downturn in the housing market to increase market penetration of solar new homes and capture more overall market share. If we are successful in the short term of doing so, as the market picks back up and recovers, solar adoption by builders will be on a trajectory that will get the participation in this program in line with that of the success that has been seen in the California Solar Initiative.

PetersenDean recommends that the Energy Commission introduces a stimulus package for homebuyers of solar new homes. This stimulus should be kept simple – simple to explain and simple to execute. Our proposal is for the Energy Commission to provide any buyer of a new home that comes equipped with solar with a rebate of \$1 / watt (dc), capped at \$4,000 and paid to them upon the close of escrow. We recommend that the Energy Commission adequately funds this stimulus such that it can have a meaningful impact and propose an allocation of \$10 million. This would allow a minimum of 2,500 homebuyers to participate in this program.

With regards to the funding of this program, we see two potential options:

- 1) Use funding from future buckets. The original expectation was that we would go through approximately one bucket per year. Today, we are already almost two and a half years into the program, and we are just finishing up the first bucket. This stimulus package would, in essence, get us back on track to the program's original timeline goals.
- 2) Use funding from the American Recovery & Reinvestment Act

2. Separation of Energy Efficiency and Solar Rebate Programs

PetersenDean recommends that the Energy Commission separate the application approval and payment processes associated with the Residential New Construction Energy Efficiency Program with those of the NSHP Solar Rebate Program. Delays in NSHP application approvals due to pending RNC approvals causes concern for losing or decreasing the solar rebate. This is due to the fact that production builders will not slow their production schedule to wait for the NSHP application to be approved. Therefore, in many situations, we as the solar contractor, are asked to install the system prior to the rebates being secured. This puts us in a difficult situation because we can't control the RNC application process. During times when we are close to reaching the next rebate level, the delay in the NSHP application approval causes additional concern for the rebate level dropping before rebates are secured.

3. Application and Reservation Requirements for 300+ Unit Large Scale Communities

For large projects with expected build out schedules longer than 3 years, PetersenDean recommends that the Energy Commission adopt a special application process. For these builders and developers willing to make such large commitments to solar, it is only reasonable to reward them with the ability to lock up the long term rebates necessary for the build out of their projects.

Accordingly, PetersenDean recommends the following:

Builder to reserve up to 300 units at the then current rebate level (assuming an average build-out of 100 units per year). Thereafter, the rebate would drop down to the next lower rebate level for the next 200 units, and would drop to subsequent rebate levels for each of the subsequent 200 units in question, until all units in the project are accounted for.

4. Proscriptive List of Energy Efficiency Features by Climate Zone

In both SMUD and Roseville Electric service territories the Energy Efficiency Rebate program is based on a proscriptive list of features that were determined by the utility to be fair, cost effective, and achieve the same general level of energy efficiency as the stated goals of the NSHP. Based on discussions with SMUD, in order to qualify for the Energy Efficiency Rebate program, a builder or homeowner must show compliance with baseline T-24 standards before any of the following minimum EE upgrades are made to the home.

Based on discussions with Roseville Electric, the BEST Homes program has a similar program in place with a set of proscriptive energy efficiency requirements that were developed to create a home that exceeds the T-24 standard while being cost effective and relatively easy to implement.

The exact requirements for these two programs do vary, but in general they create a product that exceeds T-24 by a large margin, typically more than Tier I, but less than Tier II, and are acceptable to many builders. In the administration of the program, there is no efficiency plan check per se, as a result of the proscriptive list of energy efficiency requirements. In addition, the utility has direct access to the T-24 Provider Databases to ensure that the inspections and elements have been inspected or modeled for each home. In the case of Roseville Electric, the City has taken the extra step of having the City building inspectors provide the HERS inspections of the various components, but that is above and beyond what we are requesting be included in future versions of the program.

The main benefits of these two programs as compared with the NSHP are:

- Decreased plan check time due to proscriptive list of features rather than full range of options
- Decreased inspection costs as all homes in the program have the same HERS requirements

We recommend to the CEC that the following changes be implemented into the NSHP:

- Create a proscriptive list (which may include options, for example R-13 walls with 1" R-4.2 foam or R-19 walls) for each climate zone that is cost effective for a builder to implement.
 - This may also include two levels of compliance, one targeted at about 15% above T-24 and the other at 35% above
- Allow the use of City building inspectors to verify energy efficiency features rather than forcing HERS only inspections

5. System Size Upgrade Options

As the market for solar new homes gains traction, PetersenDean is seeing more interest by builders for offering a small solar system as standard with the upgrade option for homebuyers to upsize their systems. In light of the current market conditions, the coming requirements associated with SB1, and the newly passed Investment Tax Credits, PetersenDean expects homebuyer and builder interest in bigger systems to significantly increase in the near future. Accordingly, PetersenDean recommends that the CEC adopt guidelines that allow builders to lock up funding for solar system upgrades.

Proposed guideline: If a builder offers solar standard (with a minimum system size of 2.0kW DC) and agrees to offer solar system upgrades, the builder can reserve an incremental 30% of reserved funding to be applied to such upgrades. Once this 30% threshold is reached, a subsequent application will need to be submitted, that upon acceptance, would replenish this "upgrade option fund" back to the original 30% level.

6. Eliminate the Requirement for Builder Sponsored Inspection of the PV System

In every other solar program in California, the utility company provides a no cost inspection of the solar system. This is certainly true in Roseville Electric, SMUD, and the California Solar Initiative programs. Based on this analysis, the New Solar Homes Partnership is aberrant in their requirement for having the builder and/or contractor pay for inspection of the installed PV system. We strongly recommend that the CEC examine the possibility of having the system inspections administered and paid for by the Program Administrator rather than having the costs borne by the builder or integrator.

7. Remove Requirement for System Size Justification Letter

It is difficult to find a qualified person to do the analysis that is necessary to create this letter. Not to mention, the expected electrical consumption is a mere estimate since the home is not fully constructed or lived in prior to this letter being created. PetersenDean recommends that this requirement is removed for systems under 10kW.

8. Misc. Guidebook and WebTool Change Recommendations

8A. Eliminate plan check from NSHP program

The CF-1R is required for the NSHP reservation which will show the % above T24. It is the builder's responsibility to build to the CF-1R. The CF-4R is required for NSHP rebate payment, and again, it is the builder's responsibility to make sure that all of the proper inspections were done to prove their compliance with the CF-1R.

PetersenDean believes that eliminating the plan check step from the NSHP program will save the builder money and time (through fewer revisions required to their construction plans), without sacrificing the checks and balances of ensuring that the T24 requirements are being met.

8B. Eliminate CF-1R-PV signature

The CF-1R-PV can change many times over the course of a project, and it should not be necessary to collect the builder's signature for every revision. PetersenDean recommends that the CF-1R-PV signature requirement is eliminated.

8C. Allow installer to sign NSHP documents on builder's behalf

The time it takes just to get signatures on the NSHP documents can take weeks due to the builder's continually dwindling staff. PetersenDean recommends the introduction of a new document at the inception of the reservation application which the builder signs allowing the installer to sign the remaining documents on their behalf.

8D. Increase the file size to be uploaded to the webtool

Current limit is at 1MB; there are times when the documentation to be submitted online may be 2 or 3 MB. It helps cut down the cost of having to mail these documents to the respective utility companies especially when submitting the documentation for reservation approval.