## Comments and Questions regarding draft NSHP Guidebook, 4<sup>th</sup> Edition – 9/23/11

Docket number 06-NSHP-1

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DOCKET	
06-NSHP-1	
DATE	
RECD	Sept 30 2011

Thank you for the opportunity to comment on the NSHP draft Guidebook and proposed changes. We have been a California installer for over 30 years and target affordable housing developers. We act as applicant for all of our clients that participate in NSHP. We have dedicated staff that work on processing rebate paperwork for the application and claim, and after 3 years still struggle to understand the various levels of details required. Unfortunately, we've have to pass the cost to our clients to process NSHP rebates and we still don't find it viable for smaller installations.

- Thank you for adding more energy efficiency information.
- We strongly oppose the new step decline schedule that eliminates the separate and specific incentive for Affordable Housing Common Area and makes the incentive rate the same as All Other Market Rate Housing per Chapter III.A.1 and Chapter III.A.2.
  - Affordable Housing needs the higher funding as otherwise they have limited resources with which to construct new buildings. Tenants of AH directly benefit from the higher incentives by paying lower rents as the variable cost of electricity is mitigated by the PV systems.
  - o On 9/23/11 NSHP said they couldn't justify it.
    - It <u>can</u> be easily justified, we strongly encourage NSHP to interview the non-profit AH
      developers that build these projects. Sun Light & Power can easily supply a contact list.
  - On 9/23/11 NSHP said they can't verify that the systems are being sized so that the tenants are benefitting
    - Generally we offset common area only, which reduces operating costs which result in lower rents over time. With VNM, production in excess of common area load is distributed to the tenants and again reduces their utility expenses.
- Table 4-1 regarding reservation documentation (page 41)
  - When solar installers sign with General Contractors to install solar on behalf of the host customer, they
    don't like too much equipment specified in the contract. Since the construction industry's behavior
    preceded the NSHP program, this creates challenges.
- H. System Sized to Offset On-site Electricity Load
  - Please also include that affordable housing common area has no sizing cap
- Chapter V.A.1: NSHP-2
  - Please explain whether only applicant original signature is necessary or if BOTH Applicant and Builder have to sign.
- NSHP has said that there are **program requirements** not limited to energy efficiency building standards and there are many rules that are not specifically stated in the Guidebook but that are enforced by the CEC anyway please add these to the Guidebook in order to limit surprises and risks to installers, builders and homeowners.
- Clarify when need CF-1R vs. PERF-1 (page 20)
  - o If the common area is less than 10% then use CF-1R
  - o If common area is more than 10% then use PERF-1
- Change in Incentive Level (page 35) please include more detail and scenarios, such as information included in this previous correspondence with NSHP:
  - 1. If we provide all documents complete and consistent with the checklist provided, there are still other issues/additional document requests that may arise, however since this is often unpredictable can we assume that the client is still be reserved in 1<sup>st</sup> step? The application will be eligible to receive incentives under Step 1 if all the documents are complete and consistent per checklist. We will be sending a correction notice with a specific timeframe if we find any deficiencies on the documents. If the deficiencies are not addressed promptly, the project may re-apply under Step 2.
  - 2. We'll we get 1<sup>st</sup> step if additional documents are requested while in plan check after 9/12? Since we are not certified plans examiners we have no visibility on what a complete plan check package consists of and plan check has proven to take up to 5 months. If any issues arise during plan check, you'll be given 2 weeks to respond with

corrections in order to be eligible to receive incentives under Step 1. After that, the project may re-apply under Step 2

O 3. We'll we get 1<sup>st</sup> step if additional documents are requested <u>after</u> plan check during final review at PGE or the CEC after 9/12? As you know it can take several months to get to this point possibly longer with backlog and has gone under several reviews from multiple parties. We'll we not know for certain until the actual reservation is issued? This could cause issue with build schedules. The Commission has given us a week to address issues that have been overlooked during the initial review.

# NSHP Issues that impact participation – 7/1/10

- 1. Too many program requirements = too much administrative burden. This reduces impact of incentive while increasing headache on new construction projects which are already complicated and bureaucratic.
- 2. Shading impact on calculator is too harsh and arduous.
- 3. HERS Raters do not receive adequate training to competently verify inspections and add hidden costs.
- 4. Increase amount of workshops is great, but there is not enough time for Q&A on agenda and at the two I've attended feedback was never requested. NSHP could benefit from more stakeholder engagement.
- 5. Feedback given is rarely and/or minimally implemented.

I've expanded on my points above below.

## Too many program requirements = too much administrative burden.

I have been asked by our Sales department if we should continue selling NSHP projects and I'm not confident it's worthwhile. We do continue to do participate because we want to continue to serve and satisfy our client base, however, we greatly underestimated of the associated costs of obtaining the rebate for our clients and we will have to pass these costs on the client to make our continued participation viable.

For example the requirement is a Title 24, however the real requirement is a Title 24,

- 1. Exceeds 15% energy efficiency of standard buildings,
- 2. related spec sheets to verify above 15% energy efficiency may be required
- 3. signed by a CEPE
- 4. that CEPE must be certified in the concurrent year the building permit was pulled

## Case study: Los Medanos, 2000 Crestview Dr., Pittsburg

Project details:

- common area affordable housing
- 264 modules, 9 inverters
- CEC-AC kw 54.34; TDV 1,413,253;
- Estimated final rebate \$184,308

Estimate of applicant time spent on getting rebate: estimate 50 hours

Received (this is not counting # of emails sent): Total email time *estimate 40 hours*)

- 50 rebate related emails to get reservation confirmation
  - o Includes collecting paperwork from client, interoffice, HERS Rater, and PA communication (missing information and status updates)
- 47 post rebate confirmation rebate related emails (as of 7/7/10 still not completed)
  - Includes collecting paperwork from client, interoffice, HERS Rater, and PA communication (missing information and status updates particularly on .emf and .her files)
- Interconnection: 21 emails for Permission to Operate

Numerous phone calls and interoffice discussion of *estimated 10 hours* Excess costs to client

• HERS Rater cost ~\$1,200

## Shading impact on calculator is too harsh and laborious

New construction is very difficult to accurately estimate the shading (particularly prior to groundbreaking) thus as built shading measurements often vary from the reservation. The impact of this difference can account for up to 15% less that of the rebate reserved amount. This leads to inability to set expectations of funding for the project. Essentially the contractor appears incompetent and system owner loses money or if affordable housing needs additional funding after the project has already completed.

Additionally, the impact of shading is so significant the shaded strings need to be run separately to accurately get the system performance. This has lead to up to 1.5 calculator runs per inverter, not only is this time consuming, but most HERS rater charge per calculator run and this pushes up the cost of the HERS Rater. This creates hidden charges that take away from impact of rebate as there is no way to set the clients' expectations and estimate how many calculator runs will be needed at the beginning of a project. It often causes discrepancy between CF-4R-PV and CF-1R-PV and therefore delay in payment, in our experience mostly at the HERS Rater's error (see competency below). The distance to height ratio of shading is inaccurate, unreliable, and tedious, when a solmetric reading is more accurate, verifiable, and straight-forward.

In conclusion, please reduce the impact of shading on the calculator and accept a solmetric reading for input into the calculator instead of the current shading process.

## HERS Raters do not receive adequate training to competently verify inspections.

**Competence:** I have worked on several NSHP projects that have gone through completion. On those several jobs, I have only worked with one HERS Rater that was familiar with NSHP and familiar with inspecting solar systems. We recommend him to our clients, however, there is often already a HERS Rater appointed to complete Green Point Rating and owners obviously prefer to streamline invoices and communication select already appointed Rater.

**Administrative burden and delay:** The inability to see .her and.emf files and the HERS registry activity creates numerous roadblocks and confusion. Often I'm told one thing from PA's and another from HERS and I have the only invested interest in moving project ahead, yet no visibility. 90% of the time the CF-4R and the CF-4R-PV are what holds up payment of NSHP rebate.

**Hidden cost associated with project**: HERS Raters typically charge by number of calculator runs, due to the high impact of shading on the calculator, shaded strings need to be separated out and individually run. The number of calculators is not imaginable to estimate at the bidding process if there's possibility of shading. This leads to overestimating rebate and unfortunately making contractor look incompetent when the rebate is reduced. Katie has brought this up in her comments from 7/23/08.

Workshops do not provide enough time for Q&A on agenda. Of the two workshops I've attended feedback was never requested. NSHP could benefit from more stakeholder engagement.

I've registered for the July 8 workshop and the Q&A is allotted 15 minutes along with Wrap up. A forum style meeting would be more beneficial to industry and NSHP program.

## Feedback is rarely and/or minimally implemented.

7/23/08 Katie Branagh feedback already submitted 7/1/10see notes in red, I believe only two points were integrated

### **Program Issues**

#### **CECPV** calculator:

- The sales person always performs an initial site visit before preparing a bid and signing a contract, however asking them to take an accurate shade reading from the ground (not the roof as it is not built yet in most cases), identify trees and calculate the height to distance ratio from the non-existent roof to the top of the obstruction in order to come up with an accurate estimate of the incentive amount is unrealistic. This means that the project administrator will have to do an additional visit, re-calculate the incentive, have the client sign the revised CF-IR-PV, and send the updated form with electronic files to NSHP. The incentive will almost always be lower than estimated due to actual shading. In short, the current calculator creates more work for installers and generates a number that is not very accurate and could mislead the host-customer by setting their expectations too high. 7/1/10 estimates being oversized is an issue due to the various unknowns of new construction and detail to the calculator.-LT
- Because of the complicated nature of the calculator, generating a CF-1R-PV for large, multi-array affordable housing projects is time consuming and frustrating for sales people. It takes about an hour to complete the various calculations necessary for a system with multiple inverters, tilts, and azimuths. In comparison, a similar CSI EPBB calculation would take about 15 minutes. 7/1/10 this is still an issue.-LT
- ✓ If you make an error, you can not click back because it is not web based. You must start the calculation all over again. 7/1/10 This has been addressed-LT
- ✓ There have been so many upgrades and NSHP will not accept old versions, so sales has had to go back and recalculate the incentive using the new version and then go back to the client to have them re-sign the CF-1R-PV form. 7/1/10 this does not occur as often-LT

#### **Electronic file for Title 24 (CF-1R)**

• Some of the CEPE's that have authored the Title 24 reports are not comfortable releasing the electronic files to us. They have said that if the CEC contacts them directly, they will email the file. This means that our application will technically be incomplete and may cause delays in processing. 7/1/10 I have not dealt with this in the program, but imagine it is still an issue.-LT

#### **Third Party Verification**

• The handbook offers little guidance for installers trying to navigate the HERS rating process. For a solar company that has no experience interpreting Title 24 reports, trying to determine when the HERS rater needs to be onsite to check the energy efficiency measures, how many visits are necessary, how much it will cost the homeowner, and how long the visits will last, is absurd. We contacted all of the solar certified HERS raters found on the CHEERS, CalCERTS, and CBPCA websites that are located within a 1.5 hour drive from our client base midway through the first year of the program and not one had performed a NSHP HERS inspection to date. (7/1/10 this is no longer true, but few have the experience/knowledge to competantly navigate an inspection-LT) We have no idea what basis the HERS raters are using to check for energy efficiency in the homes. We are going into this experience completely blind. How can we answer our clients' questions about this program if we can't get clear answers from the CEC? We understand why the CEC wants the homes to be tested for energy efficiency. Energy efficiency first, solar second. But some clarification and guidance is needed if you want installers to participate in this program.

#### CF-6R

According to 2 different General Contractors, the CF-6R form is not required by every jurisdiction and therefore
they do not always fill it out. SLP is not familiar with CF-6R's, and the guidebook does not provide an
explanation of this document or give any indication that this may prove complicated to acquire. 7/1/10 this is still
an issue-LT

#### NSHP-2

• At the bottom of the NSHP-2 where the required items are listed, there is no explanation of when you need to submit the CF-4R. I understand now that is only required in cases where the Title 24 report stated "HERS VERIFICATION REQUIRED" but was also told by Diana that it is also required for projects participating in the California Multifamily New Homes Program. (Either the CF-4R or the letter from HMG stating that the EE dollars have been paid). The guidebook is not clear on this 7/1/10 this is still not clear-LT

#### Subdivision Map vs. Permit

• It is not clear that permits are acceptable instead of subdivision maps as part of the NSHP-1 application packet. We build systems mostly for custom homes and affordable housing, not major subdivisions. 7/1/10 I'm not sure if this is clear in the guidebook, but I know that SLP does not provide subdivision maps-LT

**From:** Diana Chong [mailto:Dchong@energy.state.ca.us]

**Sent:** Tuesday, June 29, 2010 3:16 PM

To: Diana Chong

Subject: Soliciting Input to Increase NSHP Activity

Fellow NSHP Stakeholder:

As you may know, the NSHP Guidebook was revised and adopted in January 2010 to streamline the application process and clarify program requirements.

Understanding that you have been actively participating in this program for the last few years, Energy Commission staff highly values your input, since you work directly with the homeowners/builders and all the challenges involved in the program. To further increase NSHP participation and activity, Energy Commission staff would like to solicit high level program-related suggestions from you. It could be about the process. It could be about the program requirements. Whatever you think is causing applicants major barriers from participating in the program, please state the issue and provide suggestions on how to resolve those barriers. Your suggestions will be utilized when the Commission revisits the program requirements and processes to increase activity.

We know your time is very valuable and we thank you in advance for any input you can send me by July 9.

Regards, Diana

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