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1516 Ninth Street  
Sacramento, CA 95814-5512

October 12, 2006

Delivered by Electronic Mail  
(docket@energy.state.ca.us)

**Re: Comments for CEC Staff Draft Guidebook of October 5, 2006**

Dear Commissioners,

PV Now, Vote Solar, and ConSol submit these joint comments on the CEC Staff Draft Guidebook of October 5, 2006.

Respectfully Submitted,

David Hochschild  
PV Now  
3857 20<sup>th</sup> Street  
San Francisco, CA. 94114  
(415) 314-8042

Rob Hammon  
ConSol  
7407 Tam O'Shanter Dr. Ste 200  
Stockton, CA 95210-3370

Gwen Rose  
The Vote Solar Initiative  
182 Second Street, Suite 400  
San Francisco, CA 94105  
(415) 874-7435

**STATE OF CALIFORNIA  
ENERGY RESOURCES CONSERVATION  
AND DEVELOPMENT COMMISSION**

Guidebook of California ) Docket No. 06-NSHP-1  
New Solar Homes Partnership )

**JOINT COMMENTS OF PV NOW, VOTE SOLAR AND CONSOL ON THE  
DRAFT NEW SOLAR HOME PARTNERHSIP GUIDEBOOK**

**Introduction**

PV Now, Vote Solar, and ConSol, hereinafter referred to as Joint Solar Parties, appreciate the opportunity to submit joint comments on the CEC Staff Draft Guidebook of October 5, 2006.

PV Now is a coalition of the leading photovoltaic companies joined to expand North American distributed, grid-connected solar photovoltaic (“PV”) market opportunities and eliminate market barriers. PV Now’s members include Sharp Solar, Schott Solar, SolarWorld, Evergreen Solar, SunPower Corp., PowerLight, SunEdison, and Energy Innovations. The Vote Solar Initiative (“Vote Solar”) is a 501(c)(3) non-profit organization with members throughout New York and the country working to bring solar energy into the energy resource mainstream. ConSol has been providing energy solutions to production builders since 1983. Services include Title 24 code compliance, mechanical design, above-code programs, including ComfortWise, and consulting on resource-efficient building. As a Building America team lead, ConSol has assisted builders to build more near-zero energy communities than any other consultant in the U.S. ConSol also serves as technical advisor to CBIA on energy-, and resource-related issues.

**Incentive structure**

Because of the relatively low adoption of solar energy systems by new home builders, California’s sagging housing market and other factors, the Joint Solar Parties believe that it is critical that the New Solar Homes Partnership program be designed in a way that encourages, to the greatest extent possible, a rapid uptake in builder participation in the early years of the program to create the momentum necessary to make the program a success. The Joint Solar Parties believe that if builder adoption of solar turns out to be poor in the early years, the goal of achieving 400 MW of solar will become extremely difficult to achieve.

The two most important program design decisions that will affect builder participation in the early years are the starting incentive level and the size of the megawatt “buckets”. Staff has proposed that the incentive level start at \$2.50/watt which is equal to the starting incentive level in the CPUC’s solar program. However, unlike the incentive program created by the CPUC which overwhelmingly serves retrofit projects, the NSHP’s task is in many ways more difficult because the decision process for a production builder entering the solar market is vastly different than investment threshold for a commercial business or homeowner to retrofit their existing roof

with PV. The challenge facing the NSHP is to jumpstart a market that is not developed, that is being hit with falling home sales and where in many cases electric rates, due to the elimination of the E-7 residential rate by PG&E in May 2006 are now significantly less favorable for solar customers than they were a year ago.

At the New Solar Homes Advisory Committee meeting on September 7, 2006, Committee co-chairs Rob Hammon and David Hochschild presented an incentive structure that had incentive levels slightly higher than those proposed by staff in the draft guidebook. The rationale for this structure was based on the need to encourage stronger builder participation in the early years of the program and in 2007 in particular.

In addition to a starting incentive level \$0.10 higher than that proposed by staff, the New Solar Homes Advisory Committee Proposal also advocated for bigger MW buckets in early years of the program. Both the incentive levels and the size of the MW buckets received strong support from stakeholders present at the meeting. The New Solar Homes Advisory Meeting includes 18 members representing the full spectrum of stakeholders including new homes builders, developers, utilities, solar manufacturers, solar installers and environmental groups. The committee has been meeting throughout the year to discuss program design and implementation issues. Not a single organization or stakeholder present at the September 7 presentation opposed the proposal or offered an alternative incentive structure.

As the comparison below illustrates, the differences between the two proposals are not enormous but the Joint Solar Parties believe they could be significant enough to make a meaningful difference in builder adoption in 2007.

NSHP Committee Proposal		CEC Staff Proposal		
Reserved MW	Incentive	Reserved MW	80% MW	Incentive
15	\$2.60	10	8	\$2.50
18	\$2.30	13	10	\$2.25
22	\$2.00	18	14	\$2.00
25	\$1.75	24	19	\$1.75
30	\$1.50	31	25	\$1.50
35	\$1.25	41	33	\$1.25
40	\$1.00	56	45	\$1.00
50	\$0.75	75	60	\$0.75
75	\$0.50	100	80	\$0.50
100	\$0.25	134	107	\$0.25
410		500	400	

**Energy-efficiency incentives payments.** To maximize the consumer and societal value of this program, it is important that the PV systems be accompanied by energy-efficiency. The best method to do this is to coordinate IOU residential energy efficiency and new construction programs with the NSHP. The utilities have indicated their willingness to do this and have suggested a \$500 Tier I incentive and \$1,200 for Tier II. However, to achieve the desired positive cash-flow for the consumer, the Tier II incentive should be \$2,000 rather than the

proposed \$1,200. The IOU-proposed \$1,200 Tier II incentive is based on their programmatic TRC calculations using the annual kWh and kW produced by the Tier II efficiency measures. Joint Solar Parties recommend that the CEC, IOUs and CPUC work together to develop a mutually agreeable method to use the energy and demand reduction benefits of the entire solar and efficiency elements achieved in Tier II to increase the incentive for Tier II to \$2,000 from the current IOU-proposed \$1,200.

**Title 24.** The staff proposal requires that any builder applying for an incentive under the NSHP exceed Title 24 by at least 15% (under Tier I). Most of the builders that invest in solar on new homes also voluntarily include heightened energy efficiency to improve the savings and quality for their customers. A value that solar brings to the marketplace is a heightened interest in energy efficiency, in that when investing in PV systems it is compelling to consider energy consumption. In order to promote their investment in solar to prospective buyers, builders need to present savings. This has been a success largely due to the voluntary nature of the energy efficient investment. Added requirements to Title 24 may discourage a percentage of builders from moving forward with solar home projects and this is particularly true for communities where the builder's design has been completed prior to consideration of solar. Therefore, Tier I should be allowed for code compliant homes, while ensuring that the full \$2,000 incentive is available to provide the maximum incentive for a builder to include as many efficiency measures as possible.

### **Conclusion**

In conclusion, the Joint Solar Parties believe the success or failure of this program depends to a great degree on program adoption by new home builders in the first two or three years of the program. Without early adoption, it is very difficult to develop the momentum necessary to achieve the program's goals. So the priority of the NSHP should be to provide an incentive sufficiently enticing to ensure strong builder participation. The Joint Solar Parties believe the proposal made by the co-chairs of the New Solar Homes Advisory Committee on September 7 and referenced above is the appropriate structure and incentive level.

The Joint Solar Parties appreciate the opportunity to comment on the proposed guidebook and to participate in the New Solar Homes Partnership Committee. We applaud the Energy Commission's efforts to seek input on program design from a diversity of stakeholders and look forward to helping create a residential new construction solar program that will serve as a model for other states.