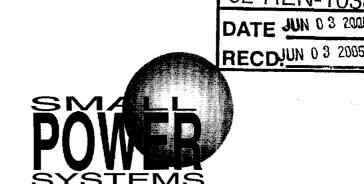June 3, 2005

SMALL
POWER
SYSTEMS

California Energy Commission
Re: Docket No 2-REN-1038
Docket Unit, MS-4
1516 Ninth St.
Sacramento, CA 95814-5504

Dear Sirs;

I'd like to begin by thanking you for the pilot Performance Based Incentive program. From our perspective this is an improvement in California's renewable energy program. Small Power Systems is a solar tracker manufacturer in Covelo, CA. The incentive program will give us a level playing field.

I would make a few comments that I hope will be helpful. According to our experience and the data we have collected, residential installations using trackers will indeed find the incentive program attractive if the cost of monitoring is reasonable. According to the Clean Energy Estimator our location does not have such good insolation but even here the tracker systems we have monitored produce more power than anticipated by your formula using the original 0.25 capacity factor. In especially good locations tracker system output can exceed the formula by 40 per cent.

Taking the risk of stating the obvious, two aspects of the pilot program seem to me to depart from the ideal.

First, because it will run concurrent with the existing up front rebate program, which offers a better financial option to residential customers installing stationary systems, these customers will not participate—and you will not get an accurate picture of the effect a performance-based incentive can have on residential installations.

Would it be possible to test the incentive program's effect on the residential market by piloting it in a county or other area where only the incentive program is available?

Second, as I'm sure you're aware, the limit on reservation amount created by the capacity factor is an artificial distortion of real world economics. An alternative might be to remove the limit and reduce the amount paid per KWH. We are not opposed to leaving the limit in the pilot program given the new capacity factor of 0.30 instead of 0.25. We support removing the limit in a permanent program but realize there are issues that need to be considered such as how it would effect the distribution of installations in the state.

For your information in regard to monitoring we have not been able to get a response from PG&E as to their intent to provide a monitoring service for the PBI. I would also like to say that in our experience there is a need for a way for solar systems to let the customer know the system is down. Periodic inspections can usually deal with minor problems, but too many systems are down completely for an extended time because the customer is unaware there is a problem.

A couple of general comments about trackers and your programs: In our previous comments to the CEC we noted that trackers are a cost effective way to produce PV power and therefore deserve consideration by your program. To that end I hope that you will include mention of tracker technology in your educational materials and either include a tracking option in the Clean Power Estimator or refer people to PVWATT for such information.

And incidentally, we believe the Clean Power Estimator understates insolation for our area. I'll be glad to supply local data if it will help to confirm the accuracy of the Estimator. PVWATT Version 2 gives a more realistic result in our experience.

Thank you for instituting this program, providing material on the rationale behind its development, and for the opportunity to comment. Please contact us if you would like to discuss any of these points, or if I can be of help to you in any way.

Sincerely,

George Helmholz
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Covelo, CA 95428
800-972-7179
George@smallpowersystems.com

From: George Helmholz <George@smallpowersystems.com>
To: <docket@energy.state.ca.us>
Date: 6/3/2005 2:19:51 PM
Subject: Re: Docket No. 02-REN-1038

Dear Sirs,
    Please accept the attached file as comments on the hearing by the
California Energy Commission on Wednesday, June 1 regarding the Emerging
Renewable Program. A single paper copy will be mailed today also.
    Thank you.

George Helmholz