

April 16, 2011

California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814

# DOCKET

02-REN-1038

DATE	April 16 2011
RECD.	April 19 2011

Attn: Small Wind/Fuel Cell Staff

## **Re: Workshop on Proposed Changes to the Emerging Renewables Program (Docket 02-REN-1038) - Follow up Comments, and Recommendations**

Dear CEC Staff Members,

I would like to thank you for your efforts planning and executing the workshop on April 14<sup>th</sup>, at the CEC facility. I believe the discussion was useful, and raised a great many issues which I trust the commission members, and staff will take into consideration while navigating through the many factors and program goals.

I have a few main points I'd like to address, and perhaps emphasize, but I wish to use the bulk of this letter to present, what I feel to be, several realistic and workable revision options for the ERP.

### **Point 1**

Prior to the CEC's March 4 announcement of program suspension and the immediate freeze of application acceptance, many applications had, of course, been forwarded to the CEC according to the program's requirements, applicable at the time. In fact the guidelines, in place prior to the sudden suspension, had been in place, as far as we know, since very early in the program's existence.

The question I have to ask, and one which I feel the CEC urgently needs to address and correct, is why any applications, submitted properly and in accordance with the guidelines then in place, have not been pushed through, separately from those received subsequent to "Black Friday", as we have come to refer to it ?

PLEASE, PLEASE, PLEASE, process and confirm all applications received prior to the surprise March 4 deadline. This request is urgent, and an affirmative response vital, to many hopeful, small wind, power producers who contracted, in good faith, for installation of their new systems. In most cases, these end users paid for all or a significant portion of their systems, up front, with the assurance of prompt repayment by the state of California.

Regardless of ANY issues currently being bandied back and forth by the Commission in regard to possible program changes, such issues should have NOTHING TO DO WITH the rightful completion of customer's, legitimately submitted, rebate applications.

## Point 2

The ERP incentive, dollar amount per watt generated, has not changed in the programs life, except as prescribed within the program guidebook itself. The rebate was \$3/watt in 2001, and it's \$/watt today. What has changed, at least in regard to some innovative and forward thinking wind equipment manufacturers, is the installed cost per watt. It has gone down, way down.

Today, we are able to install a small wind, roof- top system for approximately \$3 per watt, including equipment, labor, documents, permits, programming, and testing. The same items, installed ten years ago, or even today by most small wind power vendors, cost four to five times this amount.

If the goal is to ask potential small wind power hosts to pay far more than they have to, *insuring limited growth in the field*, then by all means reward manufacturers of, over priced, 30-year old, wind technology, and discourage those who endeavor to provide viable, modern and efficient products, for a reasonable price.

The real question the Commission should be asking is, why hadn't the industry, prior to 2011, made any significant progress in small wind system costs? AND why ON EARTH would the Commission not praise those responsible for recent cost reductions, instead of appearing to condemn them? Something seems very backwards.

I have raised this issue in a previous email, and in person at the March 14 workshop, but it is an important point. In fact, I feel, very strongly, that the Commission must make some sort of acknowledgement both to the public, and to the industry itself. The public will eventually discover the truth anyway, and in my opinion, it is always better to be up front about everything rather than allow mis-information to cause more serious damage later on.

## Point 3

The ERP's goal of fostering public interest, industry growth, innovation, and healthy competition in renewable energy, is a good one. However, the road to fruition of this goal is inherently challenging.

As was the case with distributed solar power, small wind needs first to be positively introduced to a diverse, and generally skeptical public, before there can be much hope for greater acceptance.

At the beginning of this century, the public's perception of solar power was something along the lines of, *"it's a nice idea but it can't provide enough power for my home, and besides, no one can afford it."* Some 80,000 installations later, we discovered a public very much interested in solar power, and who were very willing to invest in it...as long as the ERP provided heavy subsidies to help them do it.

To test this simple fact, compare current solar power rebate application volume, with that of 3 or 4 years back. Solar power, and wind power as well, are viewed, by the general public, as prohibitively costly and unrealistic, without strong incentives to overcome them. This does not mean that solar, or small wind, power is not valuable to our society. Clearly, they both are.

It's quite possible, that in order to attain significant levels of distributed power, whether solar, small wind, or fuel cells, there may always need to be a substantial subsidy of some kind. Much like a bridge, or a freeway, heavy initial cost of some public facilities become bearable, and facilities indispensable, after a time.

The undeniable truth is that alternative power is not cheap, and therefore will likely never be a reality (no matter how much our state, the EPA, or the federal government wish it were), without significant subsidy. Happily, this is not necessarily a bad thing. If the desired outcome is ultimately obtained, then the cost to get there may be considered well worth it.

Caution: if the incentive is not strong enough, the program will not progress.

#### **Point 4**

My previous points made, I feel very strongly that small wind, along with continued development of fuel cell technologies, and photovoltaics, are all extremely important to Californians, and the rest of the nation. As California leads, so follows the rest of the nation, and often the rest of the world. Small wind is good; it just has a cost.

#### **Point 5**

Lastly, but certainly not leastly, renewable technologies represent a significant portion of our country's future job market. Small wind alone was, prior to "Black Friday," on track to generate several thousand California jobs in 2011, and as much as three to four times that amount the following year. We can not easily afford to lose these jobs, and potential jobs.

#### **Recommendations**

I have given a great deal of thought to the problem of how best to move the small wind ERP forward without sacrificing undue momentum, innovation, industry growth, jobs, and most of all willing end users. While I can not say I have worked out each and every detail, I do feel the following ideas, at least as working concepts, have considerable merit, and I hope the Commission feels likewise.

*Note: The ideas described herein are intended for general consideration by the CEC only, at this time. Should the Commission find merit, in part or in whole, with the ideas and concepts proposed, further discussion and/or development of same must include Synergy Corp, and myself (Marlin Alvis). As indicated, substantial effort has been expended and a our involvement in some manner is desired. To this end, Synergy, in collaboration with other appropriate industry professionals, and the CEC themselves, would propose to execute the installation portion of, herein presented, program recommendations.*

#### **The Synergy Method: A Multi-Pronged Approach**

**1** We propose the establishment of a simple, but robust, statewide wind data capture grid, to be installed over next 3 to 5 years, using existing small wind dealers, with 100% CEC funding. Initially, we would propose a minimum station resolution of at least one data site per square mile of sufficiently populated area. The installed field cost per station would be between \$500 and \$1000, depending on the level of sophistication, and/or features desired. Installation time frame, for each station, is projected at 1 hour per site (not including prep and drive time). Assuming no major equipment acquisition, nor major weather delays, a single 4-man crew, should be able to install approximately 4,500 to 5,000

stations per year. In 4-years time, and with only (3) install crews working, we could have 60,000 stations up and running across the state. Our initial calculations indicate sufficient coverage, of major population areas (towns and cities with populations of 5000 or higher) is attainable at this level.

Of course, we realize this is a substantial investment, however over a 5-year period we believe it is reasonable, and well worth the cost. A working and reliable wind data grid of this magnitude, available to all, would be unprecedented in the world (we think). We believe a data grid of this type to be highly desirable, and definitely obtainable, within a relatively short time. A reliable, and constantly improving, wind data resource could be available, online, within 3 to 6 months of start-up. From then on, the data resolution will continue to improve, as more and more stations are brought online.

**2** In addition to the master grid installation, described in item 1 above, we recommend incorporation of an optional wind data station at every proposed customer site. This will serve to enhance the grid's resolution, and in many cases should serve to offset equipment placement via the master grid install.

We would propose a 90/10 incentive when customer's allow installation of permanent site data logging at their site. Minimal maintenance will be required, if any, by the property owner, who might even be prompted for same via email reminders. Alternatively, maintenance could be built into installing vendor protocol. Some type of state drafted legal covenant may also be needed in order to insure equipment survives property ownership changes. Customer's who do not agree to data station at their small wind site, will receive a reduced incentive amount of 80/20, or thereabouts.

We recommend this incentive level to remain in place for a one year minimum period (1 ½ to 2 years would be preferable), to give the program needed momentum, and to create a positive, industry "buzz". Step 2 might drop to 80/20 but maintain the data station installation option. The more data stations we have operating, the better.

**3** All gathered data to be streamed live to a public website (probably the CEC's main site) and processed/analyzed and stored for use by wind enthusiasts, manufacturers, installers, and the general public. If wind is to be considered, incentivized, and accepted, as a TRUE renewable resource, accurate, non-extrapolated data is essential.

**4** Years 3 through ?? will be evaluated for "best course" in order to dial-back program cost while maintaining sufficient incentives for reasonable market continuation.

We hope the CEC gives the above proposed program modifications serious consideration, and ultimately adopts it as a solid means to for creation of a robust small wind industry here in California, complete with thousands of new jobs and yes, millions in new sales and income tax revenues.

Sincerely,

Marlin Alvis, CEO/President

***Synergy Corp***

Energy Efficient Products, Revolutionary Ideas