Comments on: ***Staff Workshop on Possible Changes to the Emerging Renewables Guidebook***

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Introduction: I was in the Webex as an online attendee for the entire meeting on Tuesday July 21, 2009. I commented near the end, saying that the RISK of loosing a conditional use permit application fee is a huge deterrent to small wind sales in some counties. This deterrent is omitted in the KEMA report. I also noted that permitting and financing were the biggest obstacles to small wind sales. Since the CEC can not do very much to correct these, then they should make wind power a much better deal than solar so that public demand will address these two issues. If they do not, then as people come to the renewable energy market they will continue to buy solar instead of wind.

Issue: KEMA conclusion to keep rebate the same – This conclusion is based on poor logic. I very much agree with Mike Bergey on this topic. The KEMA report missed the main point. The program goals are not being satisfied. The bad logic is that the new Fed tax credit allows wind power to have a better payback than solar and therefore sales should increase. I market in the windy part of LA County. Wind power has always been a better deal than solar in windy areas. People call us looking for quotes on wind turbines and we end up selling them PV because there is no risk of loosing $2,500 application fee if the neighbor does not like my dog. (This may sound absurd, but this happened. One neighbor objected in a CUP process and killed the project because they did not like the home owner's dog.) We have been through the CUP process 15 times with 9 successes. Many have switched to solar rather than start such a risky process. Solar does not have this barrier. Wind power has to be significantly better to beat solar.
Another barrier to sales that wind has and solar does not is financing. There are several solar distributors who offer financing to home owners if the equipment is purchased from the distributor. No wind manufacturers offer such financing. The KEMA report mentions that wind has an unknown or lesser known energy production than solar. It mentions other barriers that wind has and solar does not. When several of these barriers are logically considered solar is purchased even though wind has a much better simple payback. I offer this logic: If wind power is a significantly better deal than solar and we have hundreds of wind power sales in windy areas then the market will attract financing and the permit process will be streamlined. The program will never get to hundreds of sales unless the incentive is increased because the program does not have the authority to correct the two biggest sales obstacles, financing and permitting.

Issue: Property Tax – Actually two issues. State wide exemption was addressed in the KEMA report, but standard practice of how turbines are currently assessed was not. In LA County several of the turbines loose half of their benefit to property taxes While the turbine saves $1,400 per year, LA County increased property taxes $700 per year. Please write a statement in the new guidebook related to property tax. This statement should cover 3 issues: Valuation, type of equipment, and tax on CUP. Valuation should be based on the cost less rebate, not the total cost. The county should not tax the incentive because it was collected as a tax. It is like taxing a tax. Also, value is always less than the total cost because there has always been an incentive program. If there were no incentive program then there would not be any sales.

Type of equipment should be defined as equipment so the added value to the property can depreciate with time. In LA County and others the wind turbine is categorized as real-estate and the value goes up forever.
The CUP should not be part of the valuation of the property. The CUP has risks and liabilities for the customer. It does not add to the value of the property. It reduces the value of the property because it obligates the owner to defend the county in legal disputes and in several other ways.
If these three property tax issues were addressed then property taxes would be about half of what they are now and going down to zero. It is senseless to take half of the benefit of a wind turbine by taxing it. BOE advises counties on how to apply property taxes. Please write the BOE and address this issue. Please include a statement that can be used by home owners to present with their property taxes.

Issue: Permitting Solutions – 1) Change the R2 form to ask if a Conditional Use Permit was required and if so then how much did it cost the customer to comply with the CUP requirements and what was the risk to apply? The risk to apply is a bigger factor than the cost. The cost would include added requirements by the counties like: painting the turbine grey, FAA lighting, special fencing, signage, and other costs associated with paper work required the Planning Dept. You should note that CSI requires the permit cost documentation. Then these figures can be used to identify counties that charge too much or make unreasonable rules. Later this information can be used to "shame" these counties into a less restrictive permitting. 2) Reward counties that offer wind turbines by right. If there are certain conditions then they should not have to go through the CUP process. The reward should be $/kW paid to the County or authority having local jurisdiction. This form should be in the new guidebook.

Issue: Risk of loosing an application fee is an obstacle to sales. The KEMA report mentions several obstacles to wind power sales. I think it is right to consider the solar economics because if a customer has room for wind then they also have room for ground mounted solar. I commented near the end on saying that the RISK of loosing the conditional use permit application fee, which in our case in LA County is $2,500, is a obstacle to wind power sales and is very effective in swinging a buyer from wind to solar even when wind has a better payback. Many counties have risk associated with the CUP. One of the reasons why Gausti Construction is so successful at selling wind turbines is that in San Bernardino county there is no risk associated with the CUP. The Guastis live only a few miles from the LA County boarder, but they have no sales in LA County because of RISK and other restrictive practices of LA County.

Issue: LA County – The northern part of LA County is the single largest high wind resource in the state. Logically there should be thousands of small wind turbines there, but there are very few. There are thousands of PV systems mostly because the permit path is easier. I know this because I sold several PV systems to folks who asked for wind power. Since the program goal is to promote small wind then the high wind areas should be targeted with special attention. Look at the wind map. The large area of purple and orange should be home to thousands of small wind turbines. This is NOT an educational problem. LA County knows exactly what it is doing. They do not want to cooperate with the State's goals for wind power, especially for large wind. I realize that ERP can not target LA County directly, so I recommend an indirect approach with five tacks. 1) Collect the cost and risk of permitting in the R1 form. 2) Publish the costs and risks of permitting per county. 3) Include an appendix in the guidebook with guidelines for permitting. 4) Include an appendix in the guidebook for property tax 5) At the end of each year counties should be graded as to how well they supported the state's green energy goals and complied with the guidelines in the two appendices. The grade should be based on how well the wind potential was used. These grades should be published and public officials should be held accountable. I know this is a little radical. Please consider it anyway because LA County is radically against wind power. I have excellent documentation, even public officials

breaking state law in order to make permitting more difficult. Counties that score well should be rewarded.
If you redraw the state based on people who live in high wind areas then the northern portion of LA County is more than half of the state. It is logical that ERP should address the unique issues in LA County by writing state wide rules that can be apply pressure to LA County and take advantage of the HUGE windy area. Is the wind a county resource or a state resource?

Issue: Typos and unclear language –
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> *Table 1 lists the rebate levels available as of January 1, 2007 by size category and technology type. These rebate levels are scheduled to decline over time as described in Section D of this chapter.*

There is no section D.

Instruction for R2 form

> ***Section 2. System Equipment Installed***
> *Fill in the equipment information requested including the number of units, the make, complete model number, and voltage (if applicable). Enter the total system price and the amount paid by purchaser to date. If the system is a wind system, identify the system's orientation, height, and site wind class.*

"System's orientation" is left over from Solar program.

Pager 12 part of section C This is unclear

> *No less than five percent of incentives received or expected must be subtracted from the rebate amounts listed in Table 1 if the incentives are from other utility incentive programs, a State of California sponsored incentive program, or a federal government sponsored incentive program, other than tax credits. The percent reduction will be increased as necessary to ensure the sum of all incentives received or expected from all sources, including the ERP, does not exceed the total cost of the system.*

I am not sure what you want to do with it, but please make it clear how much the ERP incentive will be reduced.

Turbine Equipment Listings have a column heading "Manufacturer" but actually many of these companies are only importers. This affects other parts of the Guidebook. Century Wind Turbine offers only the warranty supplied by the Chinese manufacturer even though Century Wind Turbines are listed as the "manufacturer".

By the way, the vertical axis wind turbines from API, Century Wind and WePower are all the same turbine. I just thought you should know. None of these three are manufacturers.

R3 form "Installation only" means that only the installation (labor to install) is covered, but the text says the system components are covered. This is unclear
System's installation <u>only.</u> Said warrantor shall bear the full cost of diagnosis, repair and replacement of any system or system component, exclusive of the manufacturer's coverage. (Copies of five-year warranty certificates for the major system components (i.e, wind turbines, etc. and inverter- <u>MUST</u> be provided with this form.)

The list of Fuel Cells still shows last update as Dec 4, 2008, but many of the listed fuel cells are more recent than that.