

# DOCKET

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One problem I see was here before you froze everything. It is putting turbines in areas with no wind. We have several in the north state here in 4m/s wind according to the wind maps. . A turbine will never pay for itself in that kind of wind. Id say you need a minimum of 4.7m/s to make it work.

The average mean wind speed that the maps show, is based on just that: the average. So...a big storm with 60mph winds will drive that average up. Fine, if the turbine can run in that kind of wind, but most of them shut down way before that.

Many wind calculators have a cut in and cut out speed. It would be best if the CEC developed a wind calculator and ask that everyone use the same one. Just like we do for the solar rebates.

Having the rebate application done on line much like the one for the solar ones would be best, all using the same wind map and same calculator provided by the CEC.

The procedure: Log on to CEC, bring up wind map. Spot your location to receive a wind speed. Then on to the calculator where all your machine parameters can be entered. Establish some minimum annual KW to get the full rebate, and reduce the rebate on some kind of scale for expected production less than that minimum. Just like how the solar program works, We have to figure in azimuth,, tilt angle and all possible shading. The rebate is then calculated on what you will produce.

Many of the sellers dont even realize when they are looking at wind map speeds at 50 meters above the ground. They will calculate the production based on that and get two to three times what will actually be produced at a tower 20m above the ground.

WE at EcoAdvantage have results for some of our Orland area turbines after a year in operation. Hitting the 20,000kw per year mark is attainable! Our new line of machines have variable pitch blades, which make them much more efficient at low speeds, and they keep going in a 60mph wind. I don't know how to accurately program in this advantage to a wind calculator other than to put in a higher efficiency number.

Of course the best and most sensible way to save energy would be to take all this rebate money and provide education about overpopulation. Offer cash incentives for getting fixed!! Five thousand spent there would save much more energy than \$50,00 in wind rebates!!! Getting 20% better mileage doesnt accomplish much if we have 100% more cars. Tax cuts, best schools, diamond lanes., camping permits...all should cater to those who are NOT the root cause of nearly every environmental problem: OVER POPULATION.. Sustainability is what we need.

Cliff Johnsen

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