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Gridnot's comments and request for changes to the  
Emerging Renewables Program Draft Guidebook, Eleventh Edition

The CEC has released a new Draft Guidebook that benefits the largest stakeholders (see attachment A) in the Emerging Renewables Program and hampers the efforts of most other vendors from participating in the program.

The Draft Guidebook proposes to limit the rebate amount to 50% of the cost of an installed Small Wind System. This directly benefits the two largest stakeholders in the program by giving them unfair price protections. There is no good reason why a 10kw turbine system that can be installed for \$30,000 should only be eligible for a rebate of \$15,000 or \$1.50 per watt, while a 10Kw turbine system that sells for \$64,000 to \$69,000 (see attachment B) receives a rebate of \$30,000 or \$3 per watt. The rebate should be \$3.00 per watt for everyone. This is price fixing, is unfair, and will stifle innovation.

The Draft Guidebook proposes that the "Small Wind Certification Council" (SWCC) become a testing and certification body for listed CEC/ERP equipment, however the SWCC is populated by members of the largest ERP stakeholder company and should be disqualified. This is an obvious conflict of interest and an unfair business practice. The SWCC has not certified a single product according to their website. The SWCC appears to be a paper organization with only preliminary approvals of equipment previously approved by another certification body - the MCS, a British testing agency. The SWCC appears NOT to have verifiable field experience, therefore the CEC should not be recommending them for use in the program due to lack of experience and an obvious conflict of interest.

Members of the High Desert and Wind Energy community are working in collaboration with California Colleges and have formed a Nonprofit Renewables Testing and Certification organization called RTC Labs. The mission of this Nonprofit is to promote high quality, low cost testing and certification of wind and other renewable technologies. A major goal of the program is to develop a performance standard for wind technologies based on the entire spectrum of wind. This new standard would expand and improve upon the AWEA 9.1-2009 standard which is based mainly on a wind speed of 25 mph. The AWEA standard is too narrow and limited for the newly emerging wind technologies and needs to be expanded to include low and mid-range wind speeds and actual grid tie power production.

Victor Valley College, centrally located in the windy Mojave Desert region of California (aka the Saudi Arabia of renewable energy), is interested in hosting this program at its multiple locations. Industry experts including Paul “Tony” Malone, who works for the Mojave Desert AQMD on wind statistics, has expressed his interest to share his extensive knowledge with RTC Labs and participate in the program. Paul Gipe, a well respected scientist, wind expert and veteran in the wind industry has been contacted for his support, advanced methodology and participation.

This program is being proposed as an alternative to the SWCC and NRTL bodies.

The introduction of a “Feed-in-tariff” system would be an excellent solution to the problem of determining actual power production and is the standard around the world. A Feed-in-tariff keeps it honest because there is payment or credit only for the power actually produced. However, if a performance rating is required for the CEC to establish a standard upon which it's rebates are based, it should be a fair standard and include power production across the entire wind spectrum.

A program such as the one being developed at Victor Valley College will benefit wind energy development in California by providing real world testing data based on actual performance. Additional benefits include a low cost, in State certification path for emerging wind turbines, a renewables education program, and job creation for Californians.

The Draft Guidebook has several new provisions that limit access to funds and make the program less effective and less user friendly. The CEC should be helping applicants and vendors to navigate the process. Adding more rules or cumbersome regulations, especially ones that appear to have been designed to disqualify and delay applications and viable projects, goes against the intent and will slow the successful implementation of the program.

Federal Treasury Grants available for Renewables from the Federal Government's “American Recovery and Reinvestment Act” (ARRA) will expire at the end of this year. The suspension of the Emerging Renewables Program from March to September or beyond?? has damaged Californians by shortening the timeframe available to access these funds. The ARRA grants pay up to 30% of a project's cost. In addition to the potentially lost ARRA grants, in the tens of millions of dollars, the Federal government is allowing, this year only, 100% depreciation of renewable energy equipment. This depreciation may also have been lost due to the extended and unnecessary CEC

shutdown and subsequent delay. The CEC had the power, and the right to Audit Dyocore, under section K of the ERP Guidebook, without suspending the Emerging Renewables Program. It looks like the Military was brought in to perform the job of a single policeman. In this case, instead of using its powers to correct the program, the CEC suspended the program and caused the loss of tens of millions of dollars in Federal funds and thousands of jobs to Californians who so desperately needed them.

## Overview

### Request for changes to the Draft Guidebook:

#### 1) Delete 50% price fixing limitation.

By limiting the Emerging Renewables Program rebate to 50% of the cost of an installed wind system, less cost effective solutions are encouraged. For example, the cost to install a 3Kw small wind system, as presented in the Guidebook, should be between \$12,000 and \$18,000. If a small system can be installed for \$12,000 and produces 3Kw of power, its owner should receive the same rebate as someone who installs a system for \$18,000 and also produces 3Kw of power. By limiting the rebate to 50% of job cost, legitimate efforts to be cost effective are being directly discouraged. Further, this type of “negative incentive” is diametrically opposed to the spirit and goals of the Emerging Renewables Program. Increased efficiency and reduced costs are to be encouraged. By limiting the rebate to 50% of job cost, only companies like Bergey Windpower and Southwest Windpower, who have a price structure and system cost in the range of \$6 to \$7 per watt will benefit. If more systems emerge that ultimately cost less to install, and produce the same or more electricity, everyone wins and the goals of the Emerging Renewables Program are met.

We recommend a Feed-in-tariff for payment of incentives. Feed-in-tariffs are based on actual delivery and are the best solution and alternative to the rating, certification and rebate issues facing the CEC in its Emerging Renewables Program.

#### 2) 90%/10% rebate payment- This will have no practical impact and stands to create an ineffective bureaucracy. We request that either, #1 - The CEC Institute a Feed-in-tariff structure, #2 The CEC eliminate the 90/10 proposal and keep the existing program as is, or #3 The CEC institute a 50%/50% rebate program like the SGIP where the second half of the rebate is paid at the end of the 1<sup>st</sup> year, based on verified performance.

#### 3) A Feed-in-tariff or 50/50 rebate structure would eliminate the need for additional testing and certification of equipment. Due

to a conflict of interest the SWCC should be disqualified as a certification agency because they are directly affiliated with the Emerging Renewable Program's largest stakeholder.

- 4) The “Betts Limit Theory” is just that, a theory, and should not be used as a tool to disqualify turbines or equipment. We request this section be removed. Again, a performance-based incentive solves the problem here. Piling on is not required. It is performance, not theory, that should determine what equipment qualifies for listing by the CEC.
- 5) More specific criteria for removing equipment must be included in the Draft Guidebook language or the proposed disqualification language removed.

Proposed Changes to ERP Guidebook Text:

Page 2 Item I - “or tested to be reliable” should remain. We request you do not strike this language because emerging technologies should be tested, certified and reliable.

Page 5 Item D -

Strike and Remove “small turbines that are identified as off grid...” This is nebulous and discriminatory because available technologies are commonly adapted to either on-grid or off-grid applications or both.

Page 8 Item K Number 3

Strike and remove the addition of “manufacturer” in this section. This is nebulous and discriminatory because a manufacturer typically produces more than one product and a “manufacturer” should not be disqualified based entirely on only one product that they make. This change appears to be directed at one particular “manufacturer”. A nonperforming product will be eliminated either by a performance based incentive, by the audit powers in place, or by new audit powers in the proposed Draft Guidebook.

Page 10 Item A

Remove from 4<sup>th</sup> paragraph, last sentence “only COMPLETE” applications. The CEC and Staff need to help Ratepayers to get Clean Energy, and to receive their rebate funding. The CEC should NOT hinder or limit Ratepayer access to the ERP program. The spirit of this language is not helpful and targets applications submitted to the CEC under duress due to the sudden March 4<sup>th</sup> deadline. Applications submitted on or before March 4<sup>th</sup>, may or may not be “COMPLETE”, however applicants should be allowed

time to make any needed changes and to complete their applications without being penalized or excluded in any way.

Page 11

Remove the 50% maximum cost to rebate ratio in the Draft Guidebook. This is obvious price fixing in support of older technology. This provision would stifle, not encourage innovation and cost effectiveness and should be stricken.

Page 12

Delete the proposed 90/10 rebate language or change it to a 50/50 rebate OR institute a "feed-in-tariff" structure to insure compliance via true performance.

Page 12 Item D

Strike and Remove the proposed funding limits and the new account structure that includes creating a separate trust fund account which bifurcates the program and moves monies away from wind technologies. We request that the Emerging Renewables Program retain its full access to the "Renewable Resource Trust Fund", and that funds are not sequestered or transferred to another account, including the one named "Emerging Renewable Resource Account" (ERRA). Limiting access to program funds or splitting funds between Fuel Cell technologies and Wind technologies should not occur. We request that, #1 funds are not diverted to another account, and remain where they are, #2 funds are not split between wind and fuel cells, and #3 funds are available to qualified CEC Emerging Renewable Program technologies on a first come first served basis.

Page 13 Item E

Footnote - Remove completely the proposed "20 Application limit" language. In fairness to all, applications should be processed as received on a first come first served basis until funds are exhausted. The idea to limit a company to only 20 rebate applications is obstructionist and probably unconstitutional and/or illegal. It benefits only the largest stakeholders, and likely violates anti-trust law and RICO statutes. The language of this section proposes to limit and delay development of wind energy in California and is arbitrary, discriminatory and anti-business.

Page 14

Reinstate existing language and omit all "30Kw" restrictions language. Every California Ratepayer with an electric bill and meter should be able to qualify for the ERP funds and wind

power, especially in the case of Apartments, Manufactured Homes, Condominiums, and other multiple meter, multi-use properties. We request that this section be restored to the original language, so that ERP funds can be spent as they were intended.

Footnote II – Strike the proposed language and reinstate to original.

The CEC should assist Ratepayers in completing their applications and their projects , and should NOT create loopholes or additional restrictive policies or language to deny access.

Page 15 Item A

Electronic mail is legal and should be allowed and included.  
Electronic mail is considered legal in a court of law as per the Digital Millennium Copyright Act. It is greener too!

Page 19

Strike proposed language and restore previous language. The CEC proposal to not accept applications considered “incomplete” is discriminatory, unhelpful, and just bad policy. It appears the intention is to disqualify a large number of rebate applications submitted before the March 4th deadline. The CEC **should** be helping ratepayers to get clean energy and assist them, and NOT denying them access or delaying their applications.

Page 28 Item VII

Strike proposed language and Restore to previous eligibility requirements for system costs. This is PRICE FIXING which favors old technology, as stated above.

R1 form – Reinstate the “necessary documentation” checklist at the bottom of the page. Applicants need a clear and concise checklist to help them complete their applications properly. This helps them to provide the necessary information. The checklist is a helpful tool and we request that it is updated, corrected, and remains on the R1 application.

R2 form – Modify R2 form to match the adopted Guidebook for a 50/50 rebate or Feed-in-tariff or rebate payment structure as approved or modified.

Page 49

We request the Draft Guidebook language be modified to allow for improvements to the AWEA standard. Specifically, the AWEA standard does not take into account the entire spectrum of wind and tends to benefit technologies that are tuned to a metric and wind speed of 25 mph. If a performance metric is to be

established as the benchmark for funding, it should take into account the weighted grid-tie productivity of a technology over the entire spectrum of wind. It should NOT only address a specific wind speed that will benefit specific technologies tuned to that speed. A “feed-in-tariff” answers any questions as to the actual performance of a product and makes the need for a system of certification agencies unnecessary.

Page 48/49A

**Appendix 3** last paragraph, Rewrite or Remove the language of this section. We request that specific criteria for disqualification be included. The proposed language is nebulous and overly broad.

Disqualification should be limited to and based upon quantifiable criteria and results. It should NOT be based on opinions or just “any reason” at all.

Page 48/49

Whether or not the SWCC is chosen to be included in the new Guidebook, we request that RTCL “Renewables Testing & Certification Labs” is included in the list of acceptable testing bodies.

In the event certification is required by the CEC to the AWEA standard 9.1-2009, then we request that the testing deadline be rewritten from “18 months from Guidebook adoption” to **“18 months from filing an application** for testing and certification with the testing body”, And “If certification takes more than 18 months, through no fault of the Applicant, it shall not be grounds for disqualification, and an appropriate extension will be granted.”

We request that a 50/50 rebate structure or Feed-in-tariff be adopted in lieu of a lengthy and costly testing and certification process that uses a standard that is still incomplete and in the process of development.

Page 51 Item F


We request that this section be stricken completely. The Betz Limit Theory is an unproven theory. Real data and testing must be the standard for such a serious action as disqualification and CEC delisting of a manufacturer's product.

Page 51 Item G

We request that this timeline be changed to allow 30 days for a response. 10 days is inadequate as a required response time for this type of proposed action against a company.

I hereby request that all the above mentioned issues are brought before the public, the CEC staff and Commissioners at the August 3<sup>rd</sup>, 2011 workshop. I also request that the Draft Guidebook is revised appropriately to reflect changes, deletions and modifications as noted above, before its adoption.

I endorse the above requests and position and pledge my support.

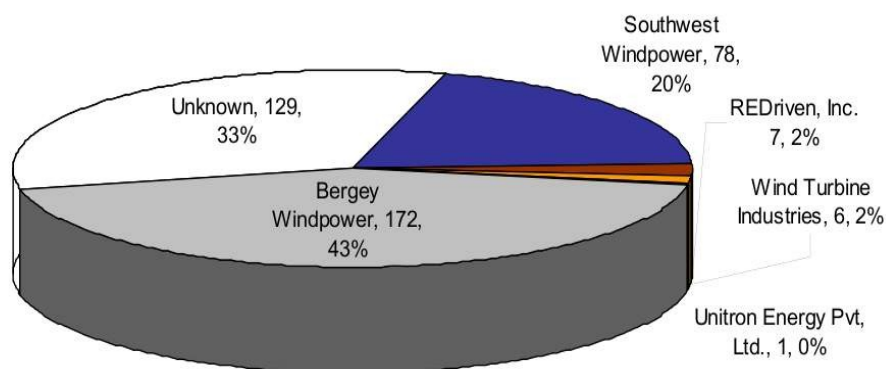
Signed:  \_\_\_\_\_

Title: Eugene Buchanan Vice President GRIDNOT\_\_\_\_\_



## ATTACHMENT A

Figure 4-5: Distribution of Wind Turbine Manufacturers



Source: ERP Database

The most common turbine is the Bergey Windpower BWC EXCEL 10 kW turbine (162 systems, about 41 percent of total systems). The next popular models are Southwest Windpower Skystream 3.7 (25 systems, 6 percent), AIR403 (22 systems, 6 percent), and Whisper 500 (21 systems, 5 percent).

Although only a fraction of manufacturers and models are active in the ERP, retailers and contractors do not see that as an impediment to their business. In the 2009 Energy Commission survey, when contractors and retailers were asked if access to wind turbines was a barrier, half responded that it was not and, on average, they reported that was only a minor barrier. Regardless of the number of choices in products, contractors tend to use the same manufacturer models over time. This may be because contractors are more comfortable with installing systems that are known to be reliable. As discussed in later chapters, the ERP only has a few dominant contractors, and these contractors' preferred models are naturally the majority of models rebated under the ERP.

COAST 1 CONST.

# Wind Turbine Info:

## ATTACHMENT B

	Total Cost	State Rebate Until 4/6/11	Need to do Project	Fed Tax Credit	Net Cost
Berger 10 KW on 80 ft GL Tower 1,000-1,500 KW/mo 1 to 49 acres RL Zoning	64,000	30,000	34,000	19,200	14,800
Berger 10 KW On 100 ft GL Tower 1,100-1,600 KW/mo 5 acres and up RL Zoning	66,000	30,000	36,000	19,800	16,200
Berger 10 KW On 120 ft GL Tower 1,200-1,700 KW/mo Agricultural Zoning	69,000	30,000	39,000	20,700	19,300