The Case for Raising the Small Wind Rebates

Workshop on the Proposed Changes to the ERP Guidebook

CEC Docket No. 02-REN-1038

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December 5, 2005



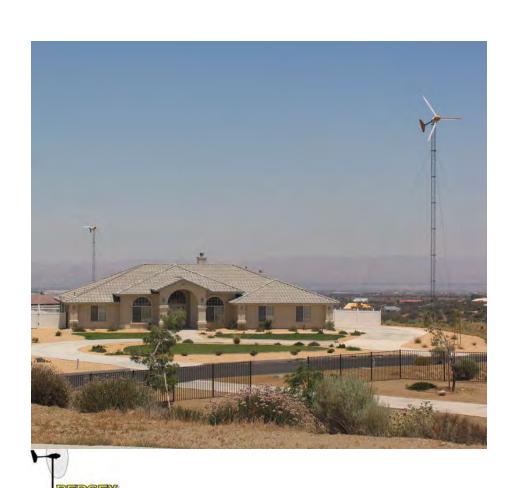


Two Comments:

- We support extending rebate reservations back to 9 months – helps with permitting delays
- We encourage the Commission to restore small wind rebate to par with solar, per the proposed \$2.60/W



Solar is Not a Silicon Bullet



It Can Be Much More Expensive

For 1,500 kWh/Month in San Bernardino Co., (before subsidies):

Wind: \$46,000

Solar: \$82,000

Small Wind's Stock is Rising

Wal-Mart "Experimental Supercenters" feature small wind





Californians Want Small Wind



Small Wind's Potential in California is Significant

- 24% of California has sufficient resources for small wind*
- 1.8 M acres are prime for small wind*
- Top 200 ZIP Codes have ~ 52,000 suitable properties* ... ~ 400 MW potential



Primary Small Wind Market Areas

Wind Speed at 30 m **CALIFORNIA ENERGY COMMISSION** CHAIRMAN - WILLIAM J. KEESE COMMISSIONER - JIM BOYD COMMISSIONER - ROBERT PERNELL COMMISSIONER ART ROSENFELD COMMISSIONER - JOHN GEESMAN EXECUTIVE DIRECTOR - STEVE LARSON SYSTEMS ASSESSMENT & FACILITIES SITING DIVISION **CARTOGRAPHY UNIT** DEPUTY DIRECTOR - TERRENCE O'BRIEN CARTO GRAPHER'S: JACQUE GILBREATH and TERRY ROSE Legend Wind Resource Mean Speed MPH 10.1 - 11.2 4.5 - 5.0 12.3 - 13.4 5.5 - 6.0 13.4 - 14.5 6.0 - 6.5 14.5 - 15.7 6.5 - 7.0 15.7 - 16.8 7.0 - 7.5 16.8 - 17.9 7.5 - 8.0 100 Miles 17.9 - 19.0 8.0 - 8.5

This map was created by TrueWind Solutions using the Mesomap system and historical weather data.

California Wind Resources

Note: Wind Resources Coincide With Residential

Peak Load Periods

Antelope Valley Hesperia Area

Solano County



The Policy Says



Emerging Renewables Program

Goal is to accelerate cost reduction and market acceptance through high volume production of emerging renewable technologies

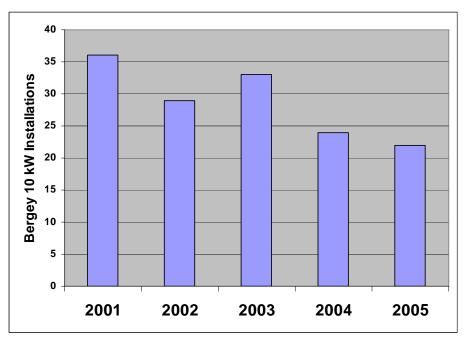
- Provides rebates for purchasing & installing distributed generation renewable energy systems
- Reduces the up-front costs for customers
- Eligible technologies: solar photovoltaic and thermal electric, small wind, fuel cells

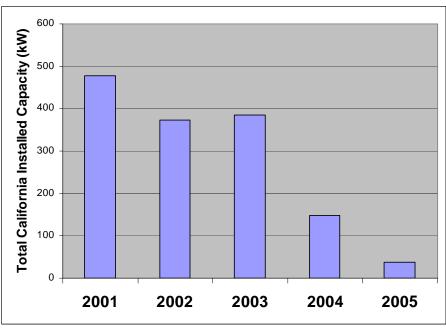


Small Wind Hasn't Felt the Love

- In 2003, the CEC cut small wind rebates more than it did for PV, even though small wind was not part of the over-subscription problem and small wind sales had not "exploded"
- Small wind rebates have further declined at double the rate of PV
- Current rebate is ~ 25% on a 10 kW system
- Performance-Based Incentive program only covers PV

Resulting in Declining Sales:





Bergey Sales Data

CEC Rebate Data



Our Proposed Turnaround

For the next two years, give small wind the same rebate as proposed for PV: \$2.60/W (up to 10 kW, \$1.60 above that)



Costs and Benefits

- Projected Costs: \$2.6 M in 2006,
 \$4.2 M in 2007 \$6.8M Total
- Projected Installation of 2.6 MW New in Two Years (vs. 1.4 MW in Last 6 Years)
- Projected Installed Cost Reduction of 16%



There's Precedent and Sufficient Funding

- In 2001, the CEC raised the PV rebate from \$3.00/W to \$4.50/W due to low PV sales
- From 1999 to 2003 PV and small wind had the same rebate level (subject to a 50% cap)
- As of Nov. 8th, the < 30 kW ERP fund contained \$51 million</p>
- Draft Investment Plan allocates ~\$55 M per year for the ERP (net of repayment)



Additional Considerations

- Active sales lead to streamlining of permitting
- Small wind is subject to property taxes, unlike solar, increasing payback
- Product availability problems with solar and large wind, not so with small wind
- Both Bergey and Southwest have new factories with substantial production growth capability



Summary

For ~ 6 % of projected ERP funding over the next two years the CEC could transform the small wind market, lower costs appreciably, drive local and state policy/regulatory advances, and give Californians' more energy choices ... without jeopardizing the California Solar Initiative



