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California Air Resources Board
Comments for Climate Change Draft Scoping Plan
October 2, 2008

Dear Sir or Madam:

Thank you for the opportunity to participate in the development of a long term vision for California.

In recent years, the growth in global energy demand has been outpaced only by continually rising energy prices and increasing alarm about emissions. As oil prices repeatedly establish new record highs, it is clear that long term planning of any kind requires an explicit consideration of energy. Globally, nationally, and at the state level, renewable energy from sources such as wind, solar, biomass, and geothermal has been recognized as a reliable, economical, and clean way of securing a successful energy future. Wind power, in particular, has emerged at the forefront for utility-scale electrical power generation.

Renewable energy will be a critical component in reducing GHG emissions. The draft Scoping Plan addresses the benefits of renewable energy in recommended strategies such as the Renewables Portfolio Standard, the Million Solar Roofs Program, and as an adjunct to Green Buildings. We ask the ARB to consider yet another strategy to combat GHG emissions with renewable energy. Distributed, or small-scale, renewable energy can provide numerous benefits to individuals, communities, the State, and the environment. Distributed renewable systems are typically sized to provide power for a single home, school, farm, or small community; any of these can be either be on-grid or off-grid. Benefits from distributed systems can be significant; it can lower electricity loads and costs, reduce GHG emissions, create a visible "green" image, lessen dependence on utility companies, provide stability to fluctuating energy prices, and can stimulate a change of attitude (individual energy producers tend to be more aware of energy efficiency and conservation).

The State currently has several mechanisms in place that support the implementation of distributed renewable energy. Several incentive programs (e.g., the CEC Emerging Renewables Program and the CPUC Self-Generating Incentive Program) exist to offset upfront costs. A successful net-metering program allows local renewable power installations and grid-supplied power to work in concert. A new feed-in tariff program enables consumers to enter into long-term contracts with utilities.

Programs like these are essential for distributed renewable energy to succeed, however to maximize the use of renewable energy, specifically distributed wind power, we encourage the ARB to consider the following:

- Promote education and outreach about renewable energy so that the public is aware of current technology; its environmental and economic benefits; federal and state incentives; and financing options.
- Establish or support the development of a wind resource assessment program. Good wind measurements are essential to assessing the economic viability of a wind power system. While California already has wind maps and meteorological data from weather stations, good quality data collected on-site would significantly improve economic evaluations of prospective installations.
- Actively monitor legislation involving distributed renewable energy. Important areas include tax incentives, changes in net-metering and feed-in tariff programs, and permitting guidelines for small wind power systems.
- Encourage renewable power manufacturers and vendors to develop options specifically for new and existing homes, green buildings, government buildings, ship electrification at ports, and the agricultural community. These include hybrid renewable energy systems (e.g., combined wind and solar power systems), energy storage options (e.g., pumped hydro), on-site load pairing (e.g., wind power system coupled with a desalination unit), and wave energy. Financial alternatives such as leasing options and power purchase agreements are equally important.
- Support the development of model homes, schools, government buildings, farms, and communities that can be used as examples to display the potential benefits of using renewable energy sources to reduce electricity loads, costs, and GHG emissions.

Distributed renewable energy can not only have a considerable impact on CHG emission reduction, but it also offers other advantages such as privatized investments, quick installations, supporting California “green companies” and “green jobs”, and it requires minimal government involvement.

We are very encouraged by the renewable energy activities of the State and hope that the long term vision becomes a reality.

Best regards,

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