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P.O. Box 2359
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Re: Comment on the scope of the Hawaii Wind EIS

Dear Mr. Kam:

Please accept this letter as the written comments of the administration of the County of Maui, Hawaii relating to the scope of the EIS proposed for the Hawai'i Wind project. We understand that DBEDT and DOE are only seeking comment on the scope of the proposed EIS at this point and we will limit our current comments to that topic.

As a general comment, our goal is to avoid a situation where the administrative record will be open to challenge. We are making these comments in the hope DEBDT and DOE will revise the scope of this EIS and republish in the Federal Register. We understand that you would be taking one step backwards before you could move forward, but we see it as more important to build from a solid foundation that avoids premature and arbitrary decisions.

Defining the Range of Reasonable Alternatives

Our first comment is that in defining the range of reasonable alternatives for the proposed action, it is arbitrary to limit the consideration to renewable

energy technologies placed on the islands of Maui County. The purpose of the proposed action, to the extent anyone can determine from the record at this point, is to provide electricity to Oahu. Environmental harm from laying the cable can be minimized if there is no need to bring the cable all the way to another island.

In our opinion, the possibility of generating additional renewable energy from both onshore and near shore resources in the vicinity of Oahu has been arbitrarily excluded from the scope of the EIS. We do not pretend to be familiar with all of the sea-based generating technologies, but even a cursory review of the literature shows several technologies that cannot be dismissed out of hand (as DBEDT and DOE appear to have done):

- Offshore Wind Generation. See, e.g. U.S. Dept. of Energy A National Offshore Wind Strategy: Creating an Offshore Wind Industry in the United States (Feb. 2011). According to this DOE report, Hawaii has 2.3 GigaWatts of shallow water offshore wind potential.

- OTEC. Ocean Thermal Energy Conversion appears to be technically feasible, and should be more fully explored as a reasonable alternative

- Airborne wind turbines. Makani Power is working on airborne wind turbines in the MW scale that could be used off shore. www.makanipower.com

We also believe it is arbitrary to exclude the alternative of energy production based on Oahu.

- New technologies allow potential use of geothermal energy from lower heat sources than previously thought suitable for geothermal. For example, www.powertubeinc.com . Oahu is known to have several different Potential Geothermal Resource Areas.

We also believe Oahu has in no way exhausted its ability to construct or install new solar systems providing an amount of electricity equal to a 400 MW windfarm.

Scoping for a Programmatic EIS

Many of our residents reported that the experience of attending the scoping meetings was frustrating. They had concerns regarding environmental and

cultural impacts that are not County level, or even island level concerns. What ahupua'a are affected by this proposal? To not be able to answer that question shows that DOE and DBEDT cannot be seeking serious cultural input at this point in time.

Our research indicates that this problem is well understood: "Combining different levels of site-specific and programmatic analyses leads to confusion about the purpose, scope, and adequacy of the analysis in the programmatic NEPA document". See NEPA Task Force on Modernizing NEPA Implementation, Sept. 2003, at 38.
http://ceq.hss.doe.gov/ntf/report/htmltoc.html

We believe that map locations of the affected areas must be included to allow meaningful input. It appears that a Programmatic EIS with Geographic Information System (GIS) information would give the necessary level of detail to allow meaningful input. We suggest that the EIS cannot be scoped until GIS information is provided showing the footprint of the wind farms and the cable.

Preliminary identification of Environmental Issues.

The islands of Maui County are full of distinct microclimates. To prepare even a preliminary identification of the environmental issues associated with the proposed action is not possible without defining the geographic area affected.

Many agencies have found that by overlaying location information on top of a programmatic approach the final product is more useful and the public participation more genuine. The County of Maui believes it would be arbitrary to continue with a non-GIS programmatic EIS, but addition of GIS data would allow meaningful public participation.

DOE and DBEDT cannot get around the fact that they issued maps to the public showing the possible cable routes, so it must be possible to define the affected areas geographically.

We also believe that any site specific evaluation of turbine locations must include a 3D model that will allow the public to evaluate the proposal. Sample language for modeling might require visual simulations prepared by taking photographs with a digital camera with a lens setting equivalent to

50mm. All photos and simulations will be taken and prepared with existing vegetation. Position data (e.g. GPS data) should be collected at the vantage point for each simulation so that wind turbines are accurately place simulated in the photos and models.

We understand that DBEDT and DOE see potential benefits associated with the programmatic approach. It can address threshold and broad policy issues that may be overlooked in a subsequent site-specific EIS. Broad issues in the *Big Wind* programmatic EIS could include state/regional-based and island-based social, cultural, environmental, and economic issues.

By way of example, a broad evaluation of the island-based energy resource alternatives for each affected island and how those alternatives compare with interisland generation and cable alternatives may be better suited in the context of a Programmatic EIS ("PEIS"), than in a site-specific EIS. Accordingly, we suggest that a comprehensive assessment of energy resource alternatives be conducted in the PEIS.

General Comments

The County of Maui supports renewable energy and the goals of the Hawaii Clean Energy Initiative (HCEI). However, the residents of Lanai and Molokai have raised many legitimate issues about the potential impacts of these windfarms and neither DOE nor DBEDT can answer basic questions such as which hunting and fishing areas would be affected, which cultural sites disturbed, which ahupua'a would be the location for the turbines.

This process should not move forward until GIS information can be provided regarding the location of the wind farms and the cable. Anything else violates the trust of our citizens who volunteer their time to give input on these proposals, only to find there is no way to give meaningful input.

1. The EIS Preparation Notice has been improperly defined and therefore, the EISPN should be re-issued with a scope of work that is relevant to the issues that need to be considered.

2. The PEIS should include, at a minimum, the use of a 3-D modeling tool and GIS locations. The 3-D modeling tool would incorporate preliminary siting information for the planned wind farms and interisland

cable systems and for possible future wind farms and/or other energy resource exporting alternatives for the islands of Lanai and Molokai.

3. The PEIS should include a 3-D modeling tool for the island of Maui, using reasonably forecasted energy resource developments that would justify the cost of interconnecting the island of Maui with Lanai, Molokai, and/or Oahu. If reasonable energy resource developments cannot be reasonably forecasted and modeled, then the re-issued EISPN and its subsequent PEIS should exclude the island of Maui from its consideration because such consideration would appear to be premature and more appropriately considered in the context of a site-specific EIS for Maui.

Very Truly Yours,

Douglas P. McLeod
Energy Commissioner

cc: Mayor Arakawa
Herman Andaya
Keith Regan
Rob Parsons
Zeke Kalua
Bill Medeiros
Kal Kobayashi