From: Sent: To: Subject: noreply@hirep-wind.com Monday, February 28, 2011 9:19 AM Johnston, Douglas; Merz, Jeff [HIREP Wind EIS] New Comment

A New Comment has been Submitted

IREP-Wind project Re: 3.6 NOISE

I write because of my deep appreciation for the Islands of Hawaii. They are deep in my psyche. I am deeply concerned that the islands I have visited will never be the same again with the landscape populated with wind turbines and the soundscape polluted by the unwanted sound of wind turbines. People do not travel to Maine or Hawaii and spend their vacation dollars to see or hear wind turbines. The tourist industry here in Maine is being threatened by the proliferation of wind turbines. The Maine Professional Guides Association and the Maine Sporting Camps Association have already expressed strong warnings about the effects on wildlife and potential loss of tourism in Maine due to proliferated wind turbine facilities. We have seen strong and adverse effects on real estate values near the wind turbine facilities. Property values are influenced by visual appeal. Most people agree that a wind turbine vista is not visually appealing, when it comes to buying property. Personally , and with great regret, I would probably not return to Hawaii again if I were to be greeted by wind turbines. It would not be an enjoyable visit.

I appreciate the commitment in the EIS Preparation Notice to predict potential noise impacts from the project. I take issue with the statement that there is no way to predict community reaction to noise. This is inaccurate.

The EPA 1974 Levels Document contains a useful ordinal reaction prediction method often referred to as the "Normalized Ldn" method developed by Eldred in the early 1970s. It has been said (FICON, 2006) that scientists prefer the continuous "annoyance" equation established later by Schultz. However Schultz had to abandon the change (increase) from the background sound level in order to develop his equations of annoyance. The Schultz annoyance values do not provide planners and regulators a clear understanding of the potential community reaction such as; no reaction, sporadic complaints, widespread complaints, appeals to stop the noise, or vigorous action.

The "Normalized Ldn" method has correlated well here in Maine and Massachusetts to actual community reactions from actual wind turbine noise level versus distance, including at Mars Hill, Freedom, and Vinalhaven, Maine. You may find an example public document describing and using the method at http://www.friendsofmainesmountains.com/uploads/Exhibit%203,%20Rand-Ambrose%20Saddleback%20Peer%20Review.pdf. With respect to wind turbine noise, it is important to account for the sound character using the method's correction for tonal or impulsive noise. This is because wind turbine noise is not steady and innocuous as a mountain stream or soothing like surf; it is highly noticeable, erratic, or impulsive, often described as "sneakers in a dryer" or "a jet that never lands".

Were I to suggest an alternative to wind power, it would be "no-action" on wind turbines. Instead, I would look at ocean thermal or tap the strong Navy expertise to design and construct redundant, compact and secure nuclear electric power plants that would provide dependable electric power to the Islands.

My requests:

I ask the project to include in the EIS an actual community reaction assessment, using an ordinal method such as The EPA Normalized Ldn method or the California CNEL to predict community reaction to the probable noise emissions from the proposed project.

I ask that the project take with extreme caution and skepticism any modeled wind turbine noise emissions based on ISO 9613-2. Such models have proven themselves utterly inaccurate here in New England. The 9613-2 standard itself disavows use for elevated noise sources, states an uncertainty of 3 dB to 1000 meters, and disclaims any accuracy beyond 1000 meters. It has been found that a 5-8 dB safety design margin is necessary and prudent to ensure compliance with standards (decibel noise limits) and as a basis for predicting and preventing adverse community reaction.

Respectfully Submitted, Rober Rand --Robert W. Rand, Member INCE Rand Acoustics 65 Mere Point Road Brunswick, Maine 04011 Tel: 207-632-1215 Fax: 206-339-3441 Web: <u>http://randacoustics.com</u>

Submitted on Mon, Feb 28, 2011 / 09:18AM HST by Robert W. Rand

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