Aloha:
Below are my comments on the EISPN and questions that should be addressed in the FPEIS for the HIREP underwater cable project.

Please note that I have been investigating the marks in the sediment mentioned on page 3-21 for over a year and have presented my findings at a professional conservation conference. My scientific paper describing the marks is in preparation for publication. I hypothesize that several species of marine mammal, including protected cetaceans such as beaked whales and endangered Hawaiian monk seals, produce the marks as a result of foraging behavior. Additionally, the two known sites of the marks are not currently within the boundaries of the Hawaiian Islands Humpback Whales National Marine Sanctuary (HIHWNMS), although I understand that the area is under consideration for inclusion. The marks are located immediately adjacent to the HIHWNMS off the northeast side of Penguin Bank at approximately 300 to 500 meters depth. I would be happy to share my research into the marks with you as part of the FPEIS process. Dr. Robin Baird might also be contacted regarding the marks and their possible importance to the survival of marine mammals resident in the area of the proposed cable route.

What follows are some questions/issues that should be addressed in the FPEIS. The overarching general questions are followed by questions specific to sections of the EISPN.

General
1. What will be the short term, long term, and cumulative impacts of the underwater noise from cable construction and maintenance on protected and endangered marine mammal species individuals, populations, habitat, and behavior?

2. What will be the short term, long term, and cumulative impacts of the electromagnetic field generated by the underwater cable on protected and endangered marine mammal species individuals, populations, habitat, and behavior?

3. Why are the only alternatives addressed the "preferred" (wind farms and underwater cable) and "no alternative"?

4. How would the financial risk of this extremely expensive and essentially untried project be allocated, i.e., how much to HECO and how much to electricity ratepayers?

5. What is the life of the FPEIS and how long will the findings be considered usable for future EIS for new energy projects?

6. What is role of the PUC in the process and how much authority will it retain over HECO?
Specific
1. Included in the EISPN is a table of the "Threatened and Endangered Terrestrial Plants and Wildlife." Why is a comparable table for threatened, endangered, and protected marine species not included?

2. What is role of the PUC in the process and how much authority will it retain over HECO?

3. How much business/financial risk is involved in this application of technology is to be allocated to HECO and how much is to be borne by electricity ratepayers?

4. Why is solar not offered as a strong alternative? Where are the figures demonstrating that wind energy is more affordable than solar? What is the comparison of profit margins for HECO between this wind project and an alternative project to put solar panels on every roof?

5. How will the energy conservation measures be implemented?

6. What does Castle & Cooke stand to gain as a result of the use of their land in Maui County for a wind farm and how does this compare with their current return on the land?

7. How long are the FPEIS findings available for use by a project-specific EIS? That is, at what point has there been too much change – such as unforeseen cumulative impact -- to risk basing future decisions on it?

8. Why will the FPEIS focus on just the wind projects instead of all alternative energy sources as a total package? This fragmentation simply does not make sense.

9. Why does Section 1.6 begin with the assumption that the wind project will go forward? Is it not an essential part of the NEPA process to wait until the data is complete before making this decision?

10. What are the specific impacts of underwater noise from construction and maintenance on protected marine mammals and other marine species?

11. Is an "incidental take permit" required under the Marine Mammal Protection Act? And if so, how would the number of animals to be allowed under the permit be determined?

12. How deep and how wide will the trench be to bury the cable in the sea floor?

13. What scientific studies have addressed electromagnetic field impact to marine animals resident near to undersea cables?

14. What scientific studies have addressed noise impact to marine animals resident near to undersea cables?

15. What is the proposed general impact to marine fauna in the area of the undersea cable?

16. On page 2-7, the costs of wind power in relation to other alternative energy sources is discussed, with wind determined to be the most cost effective. However, were all externalized costs included in the analysis? That is, were the costs to biological species and cultural sites included or left out? Their inclusion could strongly influence the conclusions.

17. On page 2-10, what criteria would used to determine "environmentally sensitive areas"? Why is the Hawaiian Islands Humpback Whale National Marine Sanctuary (HIHWNMS) not considered to be an "environmentally sensitive area", as the cable route runs through it?
18. On page 3-18: Why is the impact to marine fauna only considered within the corridor when noise can travel underwater much further resulting in significant adverse impact? What scientific literature, if any, supports only considering the areas within the cable corridor?

19. On page 3-19: Why is the HISWNMS mentioned but the potential impacts to the animals living there – especially humpback whale mothers and calves – are not addressed?

20. On page 3-23: What scientific literature or study supports this contention: "Coastal harbor improvement activities are localized and limited in area and not likely to affect whales or marine mammals in the region. Marine mammals that frequent harbor areas are acclimated to the types of human activities associated with the required improvements."

21. On page 3-24: What scientific literature or study supports this contention: "Placement of power cables on the ocean floor temporarily leads to impacts such as increased turbidity, noise, disturbance, habitat loss, habitat damage, and in certain cases long-term habitat change due to introduction of artificial substrate. However, environmental impacts are generally limited to the near proximity of cable routes (e.g., cable corridor widths of approximately 10 meters) and only in the case of alteration of habitat are they typically long term."

22. On page 3-28: Why is there no mention or reference (typically dB re 1 μPa) of underwater noise, which has very different characteristics than noise in air?

23. Various sound frequencies are known to adversely impact marine mammal species differently. What are the noise frequencies (Hz) of the sounds made by the machinery that will be used to place and maintain the cable?

24. How will the increased vessel traffic in the area for placing and maintaining the cable impact the marine mammals there?

Submitted on Mon, Feb 28, 2011 / 12:04PM HST by LORA

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