



Hawaiian Electric Company, Inc.

July 2007

Aloha and welcome to Hawai'i. Thanks for your interest in sustainable ocean energy development on the island of O'ahu. We co-sponsored this community forum to introduce stakeholders to the current knowledge of ocean energy technologies and to develop guidelines for ocean energy developers, many of whom would not be familiar with Hawai'i, to engage with our communities.

Our different perspectives but mutual shared experiences have taught us that the most prudent way to approach developing ocean energy for O'ahu is to engage ocean resource stakeholders in a proactive dialogue. Many good development projects have failed, or experienced costly and timely challenges in Hawai'i, because developers have failed to engage with our community early and productively. We cannot afford to allow the development of good sustainable alternative energy projects to fail.

The final guidelines were agreed to by a spectrum of ocean user stakeholders --- not a complete representation, but a diverse and knowledgeable group. The participants worked hard and passionately to represent their values, beliefs, and love for this special place they call home. Their conclusions, in which we agree, are that to be successful, any ocean energy developer must be patient, listen carefully, and be committed to developing a world-class operation that fully embraces the environmental and cultural values of Hawai'i.

Please consider this report as a modest starting point to work with our communities. We hope you find it useful.

Mahalo,

Dr. Mike Hamnett
Hawai'i Energy Policy Forum

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OCEAN ENERGY DEVELOPMENT GUIDELINES

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TABLE OF CONTENTS

Welcome	4
Ocean Energy Development Guidelines	5
What You Need to Do	6
Specific Issues That You Should Consider.....	7
The Basics	7
Environmental Issues	8
Cultural Issues	9
Fishing, Surfing, and other Ocean User Issues.....	10
Final Words.....	10
Resource Listing	11
Community Representatives & Organizations.....	11
City Government Agencies.....	13
List of Participants Who Have Approved of the Ocean Energy Development Guidelines.....	14
Attachment: Office of Environmental Quality Control’s Guidelines	15
for Assessing Cultural Impact	

E Komo Kai

(Welcome),

Mahalo for considering Hawai`i as a site for your ocean energy project.

As island people we are acutely aware of climate change and its impacts, as well as our responsibility to be good global citizens by reducing our carbon emissions and footprint. Our people realize that to do this we must aggressively increase our use of local resources, such as our surrounding ocean, to produce energy. Our legislature just passed, and the Governor signed Act 234 – Hawai`i's first bill regulating greenhouse gases.

There are several things about Hawai`i that differentiate us from any other place on the planet.

- Our values of *āloha`āina* (love of the land), *mālama`āina* (to care for and nurture the land), and *mālama ke kai* (to care for the ocean) are based in Hawaiian culture
- Native Hawaiian rights are protected under the Hawai`i State Constitution
- Our natural resources are protected under the Hawai`i State Constitution
- All beaches in Hawai`i are public – meaning everyone has equal access
- All submerged lands are held in trust for the people of Hawai`i
- Native Hawaiians are the indigenous people of these islands
- Our two official languages are Hawaiian and English
- We are the most isolated archipelago on the planet
- We are the most oil dependent state in the nation

A broad cross-section of our O`ahu community was convened to create a tool to help you better understand our communities, our relationship with the ocean, and the kinds of issues that are of interest to our people relating to ocean energy.

We hope that you find our efforts helpful!

***O`ahu Ocean Energy Dialogue Participants
July 2007***

OCEAN ENERGY DEVELOPMENT GUIDELINES

Please read the Welcome section first, as the distinctions described that make Hawai`i unique are important to an understanding of building a strong, sustainable business in Hawai`i. These short and simple guidelines are intended to advise and assist potential ocean energy developers in *what you need to do* and *what specific issues you should consider* when introducing a new ocean energy technology to Hawai`i and specifically on the island of O`ahu. It is a proactive approach to deal with anticipated community concerns and not intended to be a substitute for any of the federal, state, or county regulatory requirements. The guidelines have been compiled and agreed to by a broad spectrum of O`ahu ocean user stakeholders — not a complete representation, but a diverse and knowledgeable group (*See attached list*). Complete meeting notes can be obtained from Hawaiian Electric Company for those who want to review the full body of comments from all the stakeholders.

WHAT YOU NEED TO DO

■ **Communicate with the community that you plan to build in early in the process.**

Some development projects have failed or experienced costly and timely challenges in Hawai`i because developers and other relevant entities have failed to engage with our communities early and productively.

- Communities recognize their boundaries and are respectful of others' boundaries—communities tend to speak for themselves when impacts are proposed and other communities generally respect that.
- There will be important communities of interest as well the communities of place. Use of O`ahu's nearshore waters is not dictated by one's residential location.
- Certain communities (e.g., Wai`anae) already shoulder an unequal share of O`ahu's infrastructure burdens.

■ **Lead with a concept of giving back.**

- Developers will be expected to have a sense of stewardship for ocean resources.
- Planning should be done with a strong consideration of impacts to future generations. What will we leave behind for them (whether in the form of benefits, burdens or both)?

■ **Be committed to developing ocean energy systems that use reliable technology and will be models for embracing environmental and cultural values.**

- Hawai`i has a knowledgeable and active community that recognizes its need for renewable energy and will support responsible ocean energy development.

SPECIFIC ISSUES THAT YOU SHOULD CONSIDER

The Basics:

There are many regulatory agencies (federal, state and municipal) that do have jurisdiction over or review requirements attached to any ocean energy development project. Engaging the community early, however, will allow the developer to educate the community, gain public insight about potential impacts, and possibly garner public support for the project. Come to the community early with basic information such as:

■ **Physical dimensions, location, total area affected:**

- Where will the project be located? (Including the location of all different parts.)
- What are the dimensions of the project in its entirety? (Including the required safety zones.)
- How far from the shoreline will it be?
- Will it affect a surf zone?

■ **Technology:**

- Does the project produce heat or any other type of waste?
- What are the noise levels produced by the technology—both above and below the ocean's surface?
- What is the energy potential of proposed project?
- What is the project's minimum footprint? Is the build out scalable?

■ **Have risks from natural disasters been assessed (e.g., hurricanes, tsunami, earthquakes)?**

■ **How will the knowledge to run the technology be transferred to others to maintain and run the facility after the developer leaves?**

■ **What are impacts to navigation and access to harbors?**

■ **Are there homeland security issues?**

■ **What are the life cycle greenhouse gas impacts (e.g., emissions per kilowatt-hour over the life cycle of the development)?**

Environmental Issues:

When considering environmental issues, in addition to an assessment of potential immediate or direct impacts, baseline monitoring of the impacts and on-going monitoring of the project to address potential long-term and cumulative impacts will be needed. The following is a short list of the types of environmental impacts you will need to consider:

- **How will the physical structure of the systems impact the environment and ecosystems as a whole, and how, specifically, will it impact:**
 - Reefs
 - Marine life (e.g., entanglement / entrapment, migration corridors)
 - Food resources (e.g., fish stocks, *limu* (seaweeds))
 - Present and future mariculture systems and breeding/spawning areas
 - Water quality parameters (temperature, chemistry, turbidity, seasonal variability)
 - Tides, currents, shoreline processes (e.g. erosion, deposition)
- **What is the possibility of toxic leaks or oil spills? What is the response plan and how is it funded and maintained?**
- **What will be the under- and above-water noise impacts?**
- **What will be the visual impact?**
- **What are the implications for global warming and sea level rise?**

Cultural Issues:

Native Hawaiians, the indigenous people of the state, continue to practice their culture in Hawai`i today. *Kanaloa* is the Native Hawaiian God of the ocean, and the ocean and its resources are believed to be a *kinolau*, or body form, of *Kanaloa*. Ocean energy developers must understand the deep connection between Native Hawaiian people and the ocean not only as a source of food, fun, relaxation, and beauty, but also as a source of spirituality. From a Native Hawaiian point of view, there must be a reciprocal relationship between ocean users and the ocean. We will be taking something from *Kanaloa* (in the form of ocean space and energy), and ocean energy developers need to plan, in conjunction with the Native Hawaiian community, how we are going to reciprocate—give back to *Kanaloa* in some form. Some areas are still considered *wahi kapu* (sacred places) and important cultural artifacts, like *ko`a* (fishing shrines) still remain on some shores. Early consultation will reveal these special areas.

It is also important to understand that in Hawai`i, Native Hawaiian traditional and customary rights, including gathering practices (e.g., gathering limu, fish, and other ocean resources), are protected by the Hawai`i State Constitution. Under the State Constitution, state agencies cannot allow gathering rights to be abridged by new development. Therefore, it is important to engage in early consultation with the Native Hawaiian community to determine what traditional and customary rights are being practiced and what the cultural impacts might be (*See attached Office of Environmental Quality Control's Guidelines for Assessing Cultural Impacts*). Some potential organizations to approach are:

- Office of Hawaiian Affairs
- `Aha Moku Councils
- Department of Hawaiian Homelands
- Hawaiian Homestead Associations
- Hawaiian Civic Clubs
- Canoe Clubs
- The State Historic Preservation Division (a division of the State Department of Land and Natural Resources)
- Cultural practitioner groups

Fishing, Surfing, and other Ocean User Issues:

- Access for fishing is very important. Fishing is not just a sport and hobby, but a very important cultural practice and a way for many families to put food on their tables.
- All beaches in Hawai`i are freely open to the public, and the loss of public beach access should be avoided.
- How will the proposed technology affect waves? (i.e., will it make areas “unsurfable,” will it affect the surf break(s) overall?) Because surfing is also a cultural practice, effects on surf sites need to be considered from a cultural perspective.

FINAL WORDS

We appreciate your interest in ocean energy development. In our humble opinions, keys to success are patience, ability to listen carefully, and a commitment to use reasonable technologies that embrace the environmental and cultural values of Hawai`i. Communities have a deep, sincere desire to see appropriate ocean energy technologies developed and implemented here—and an equally sincere desire to assist developers in helping to make ocean energy successful.

RESOURCE LISTING

Community Representatives & Organizations

These individuals, listed alphabetically, offered to be listed as resource contacts:

Awakuni, Catherine: Catherine Awakuni is the Executive Director of the State Division of Consumer Advocacy (aka the State Consumer Advocate). The DCA protects and advances the interests of Hawai'i's consumers of regulated public utilities and transportation services. For more information see the DCA website at www.hawaii.gov/dcca/areas/dca/ or contact DCA by email at consumeradvocate@dcca.hawaii.gov

Coleman, Stuart: Stuart H. Coleman is an Education Specialist at the East-West Center and Vice-Chair of the Surf Rider Foundation's O'ahu Chapter. He is also an author and has written about surfing, the environment and Hawaiian culture. He can be reached at scoleman34@aol.com.

Curtis, Henry: Henry Curtis is the Executive Director for Life of the Land. He may be reached at henry.lifeoftheland@gmail.com

DaMate, Leimana: Leimana DaMate, Representative, `Aha Moku Council, e-mail: LEIMANA@FASTNETHI.CO

Haley, Jim: retired 25 yrs. Sears ex. Logistics, small store manager; retired 26 yrs. CG Commander, CO Reserve Marine Safety Unit; retired 10 yrs. Science teacher DOE; `Iliahi Foundation, operating officer, 6years; Flotilla 14 USCG Auxiliary OPS, COM and MS officer 15 years. He may be reached at haleyj001@hawaii.rr.com

Hamnett, Michael: Michael Hamnett is Executive Director of the Research Corporation of the University of Hawai'i and Principal Investigator for the Hawai'i Coral Reef Initiative Research Program. He has worked on ocean and coastal resource management, energy development and climate change issues in Hawai'i for over 20 years. He can be reached at Hamnett@hawaii.edu.

Hawai'i Ocean Safety Team (HOST): HOST is a non-profit organization whose purpose is to promote stewardship of Hawai'i's waters and enhance ocean safety. It is comprised of representatives from maritime industries, government and the community who are committed to identifying maritime concerns and developing solutions before they become major issues. For more information see the HOST website at www.hosthawaii.org

Kahn, Leimomi: Leimomi Khan, President, Association of Hawaiian Civic Clubs, P. O. Box 1135, Honolulu, Hawai'i 96807, e-mail: khanm@hi808.net

Mālama Hawai'i: Mālama Hawai'i is a *hui*, group, of over seventy organizations and hundreds of individuals committed to the vision that Hawai'i, our special island home, be a place where the land and sea are cared for, and communities are healthy and safe for all people. Mālama Hawai'i uses effective communications and social marketing techniques in support of this vision. For more information see the website at <http://www.malahawaii.org>. Contact Pauline Sato, Acting Coordinator at psato@tnc.org.

The Office of Hawaiian Affairs (OHA): OHA's mission is to *mālama* (protect) Hawai'i's people and environmental resources and OHA's assets, toward ensuring the perpetuation of the culture, the enhancement of lifestyle and the protection of entitlements of Native Hawaiians, while enabling the building of a strong and healthy Hawaiian people and nation, recognized nationally and internationally. Contact Heidi Guth at (808) 594-1962 or heidig@oha.org.

RESOURCE LISTING - CONTINUED

Sierra Club, Hawai`i Chapter: The Sierra Club, Hawai`i Chapter is Hawai`i's largest grassroots environmental advocacy organization. For four decades the Hawai`i Chapter has been working to promote renewable energy use, solid waste solutions, biodiversity preservation, and protection of wild areas. Contact Hawai`i Chapter Director Jeff Mikulina at hawaii.chapter@sierraclub.org

Thielen, Cynthia: Cynthia Thielen is the Assistant Minority Floor Leader in the Hawai`i House of Representatives and represents the 50th District (Kailua/Kāne`ohe Bay). She is a wave energy proponent and co-sponsor of Hawai`i's Global Warming Solutions Act. She may be reached at repthielen@capitol.hawaii.gov

Thompson, Myron: Myron Thompson is a member and representative of the Polynesian Voyaging Society and can be reached at myront@lava.net

Werny, Scott: Scott Werny is a Co-Chairman of the Surfrider Foundation, O`ahu Chapter. He may be reached at clearwater@hawaii.rr.com

RESOURCE LISTING - CONTINUED

City Government Agencies

City & County of Honolulu

The following Department of Planning and Permitting and related websites may be relevant in the permitting of ocean energy projects. **This is not meant to be an all-inclusive listing.** These are offered for your consideration in the development of the O`ahu Ocean Energy Community Dialogue Report.

- Department of Planning and Permitting: www.honoluluodpp.org
- O`ahu General Plan: <http://honoluluodpp.org/planning/OahuGenPlan.asp>
- Development Plans and Sustainable Communities Plans: www.honoluluodpp.org/planning/dpmap.pdf
- Zone Change Application and Instructions: www.honoluluodpp.org/Planning/ZoneChanges.asp
- Public Infrastructure Map: www.honoluluodpp.org/Planning/PublicInfrastructureMap.asp
- Special Management Area, Shoreline Setback, Conditional Use Permit (to download application and forms for Planning, Zoning, and Land Use, and other permits):
www.honoluluodpp.org/download/permits/
- Honolulu Land Information System (HOLIS) for maps showing zoning, Special Management area, and other parcel information:
 - o Parcel and Zoning Information: <http://gis.hicentral.com/website/parcelzoning/viewer.htm>
 - o GIS Interactive Map Tutorial: www.honoluluodpp.org/researchstats/gisguide.htm
- Revised Ordinances of Honolulu: www.co.honolulu.hi.us/refs/roh/index.htm#vol2
 - o Public Infrastructure Map Chapter 4, Article 8
 - o Land Use Ordinance (zoning) including CUP Chapter 21
 - o Shoreline Setback Chapter 23
 - o Special Management Area Chapter 25
- DPP Contact Information: www.honoluluodpp.org/aboutdpp/contact/info.asp
- Permit Register (listing of development permits, \$7) which is available at the library, Records Management, and Bookstore: www.honolulu.gov/csd/lrmb/pricelist.htm or email at bookstore@honolulu.gov.

LIST OF PARTICIPANTS WHO HAVE APPROVED OF THE OCEAN ENERGY DEVELOPMENT GUIDELINES

(Revised 9/1/07)

William Ailā.....	Mohala I Ka Wai
Catherine Awakuni	Division of Consumer Advocacy, State Department of Commerce & Consumer Affairs
Kat Brady.....	Life of the Land
Stuart Coleman	Surfrider Foundation, O`ahu
Tony Costa.....	Hawai`i Nearshore Fisherman
Henry Curtis.....	Life of the Land
Eric Enos	Ka`ala Learning Center
Frank Farm	Ali`i Holokai
Gail Grabowsky	Environmental Studies Program Director, Chaminade University, and an avid paddler
Heidi Guth.....	Office of Hawaiian Affairs
Jim Haley.....	Coast Guard Auxiliary, Kāne`ohe
Paula Helfrich	Economic Development Alliance of Hawai`i
Shad Kane.....	Kapolei Hawaiian Civic Club Representative
Koalani Kaulukukui	Earthjustice Honolulu Regional Office
Sterling Kaya	Hana Pa`a Hawaii
Leimomi Khan, President, and Leimana DaMate, Chair, Ocean Resources Committee	Association of Hawaiian Civic Clubs
Jayne LeFors	NOAA Fisheries Service
Sam Lemmo	Office of Conservation & Coastal Land, State Department of Land & Natural Resources
Jeff Mikulina	Sierra Club, Hawai`i Chapter
Alyssa Miller.....	Mālama Maunaloa
CDR Kathy Moore.....	Chief, Prevention, U.S. Coast Guard Sector Honolulu
Koa Shultz.....	The Nature Conservancy of Hawai`i
Keoki Stender.....	Diver, Underwater Photographer
Representative Cynthia Thielen.....	House of Representatives, Hawai`i State Legislature
Myron Thompson	Polynesian Voyaging Society
Scott Werny.....	Surfrider Foundation, O`ahu

Guidelines for Assessing Cultural Impacts

**Adopted by the Environmental Council, State of Hawaii
November 19, 1997**

1. INTRODUCTION

It is the policy of the State of Hawaii under Chapter 343, HRS, to alert decision makers, through the environmental assessment process, about significant environmental effects which may result from the implementation of certain actions. An environmental assessment of cultural impacts gathers information about cultural practices and cultural features that may be affected by actions subject to Chapter 343, and promotes responsible decision making.

Articles IX and XII of the State Constitution, other state laws, and the courts of the state require government agencies to promote and preserve cultural beliefs, practices, and resources of native Hawaiians and other ethnic groups. Chapter 343 also requires environmental assessment of cultural resources, in determining the significance of a proposed project.

The Environmental Council encourages preparers of environmental assessments and environmental impact statements to analyze the impact of a proposed action on cultural practices and features associated with the project area. The Council provides the following methodology and content protocol as guidance for any assessment of a project that may significantly affect cultural resources.

2. CULTURAL IMPACT ASSESSMENT METHODOLOGY

Cultural impacts differ from other types of impacts assessed in environmental assessments or environmental impact statements. A cultural impact assessment includes information relating to the practices and beliefs of a particular cultural or ethnic group or groups.

Such information may be obtained through scoping, community meetings, ethnographic interviews and oral histories. Information provided by knowledgeable informants, including traditional cultural practitioners, can be applied to the analysis of cultural impacts in conjunction with information concerning cultural practices and features obtained through consultation and from documentary research.

In scoping the cultural portion of an environmental assessment, the geographical extent of the inquiry should, in most instances, be greater than the area over which the proposed action will take place. This is to ensure that cultural practices which may not occur within the boundaries of the project area, but which may nonetheless be affected, are included in the assessment. Thus, for example, a proposed action that may not physically alter gathering practices, but may affect access to gathering areas would be included in the assessment. An ahupua'a is usually the appropriate geographical unit to begin an assessment of cultural impacts of a proposed action, particularly if it includes all of the types of cultural practices associated with the project area. In some cases, cultural practices are likely to extend beyond the ahupua'a and the geographical extent of the study area should take into account those cultural practices.

The historical period studied in a cultural impact assessment should commence with the initial presence in the area of the particular group whose cultural practices and features are being assessed. The types of cultural practices and beliefs subject to assessment may include subsistence, commercial, residential, agricultural, access-related, recreational, and religious and spiritual customs.

The types of cultural resources subject to assessment may include traditional cultural properties or other types of historic sites, both man made and natural, including submerged cultural resources, which support such cultural practices and beliefs.

The Environmental Council recommends that preparers of assessments analyzing cultural impacts adopt the following protocol:

1. identify and consult with individuals and organizations with expertise concerning the types of cultural resources, practices and beliefs found within the broad geographical area, e.g., district or ahupua`a;
2. identify and consult with individuals and organizations with knowledge of the area potentially affected by the proposed action;
3. receive information from or conduct ethnographic interviews and oral histories with persons having knowledge of the potentially affected area;
4. conduct ethnographic, historical, anthropological, sociological, and other culturally related documentary research;
5. identify and describe the cultural resources, practices and beliefs located within the potentially affected area; and
6. assess the impact of the proposed action, alternatives to the proposed action, and mitigation measures, on the cultural resources, practices and beliefs identified.


Interviews and oral histories with knowledgeable individuals may be recorded, if consent is given, and field visits by preparers accompanied by informants are encouraged. Persons interviewed should be afforded an opportunity to review the record of the interview, and consent to publish the record should be obtained whenever possible. For example, the precise location of human burials are likely to be withheld from a cultural impact assessment, but it is important that the document identify the impact a project would have on the burials. At times an informant may provide information only on the condition that it remain in confidence. The wishes of the informant should be respected.

Primary source materials reviewed and analyzed may include, as appropriate: Mahele, land court, census and tax records, including testimonies; vital statistics records; family histories and genealogies; previously published or recorded ethnographic interviews and oral histories; community studies, old maps and photographs; and other archival documents, including correspondence, newspaper or almanac articles, and visitor journals. Secondary source materials such as historical, sociological, and anthropological texts, manuscripts, and similar materials, published and unpublished, should also be consulted. Other materials which should be examined include prior land use proposals, decisions, and rulings which pertain to the study area.

3. CULTURAL IMPACT ASSESSMENT CONTENTS

In addition to the content requirements for environmental assessments and environmental impact statements, which are set out in HAR §§ 11-200-10 and 16 through 18, the portion of the assessment concerning cultural impacts should address, but not necessarily be limited to, the following matters:

1. A discussion of the methods applied and results of consultation with individuals and organizations identified by the preparer as being familiar with cultural practices and features associated with the project area, including any constraints or limitations which might have affected the quality of the information obtained.
2. A description of methods adopted by the preparer to identify, locate, and select the persons interviewed, including a discussion of the level of effort undertaken.
3. Ethnographic and oral history interview procedures, including the circumstances under which the interviews were conducted, and any constraints or limitations which might have affected the quality of the information obtained.
4. Biographical information concerning the individuals and organizations consulted, their particular expertise, and their historical and genealogical relationship to the project area, as well as information concerning the persons submitting information or interviewed, their particular knowledge and cultural expertise, if any, and their historical and genealogical relationship to the project area.
5. A discussion concerning historical and cultural source materials consulted, the institutions and repositories searched, and the level of effort undertaken. This discussion should include, if appropriate, the particular perspective of the authors, any opposing views, and any other relevant constraints, limitations or biases.

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6. A discussion concerning the cultural resources, practices and beliefs identified, and, for resources and practices, their location within the broad geographical area in which the proposed action is located, as well as their direct or indirect significance or connection to the project site.
 7. A discussion concerning the nature of the cultural practices and beliefs, and the significance of the cultural resources within the project area, affected directly or indirectly by the proposed project.
 8. An explanation of confidential information that has been withheld from public disclosure in the assessment.
 9. A discussion concerning any conflicting information in regard to identified cultural resources, practices and beliefs.
 10. An analysis of the potential effect of any proposed physical alteration on cultural resources, practices or beliefs; the potential of the proposed action to isolate cultural resources, practices or beliefs from their setting; and the potential of the proposed action to introduce elements which may alter the setting in which cultural practices take place.
 11. A bibliography of references, and attached records of interviews which were allowed to be disclosed.

The inclusion of this information will help make environmental assessments and environmental impact statements complete and meet the requirements of Chapter 343, HRS. If you have any questions, please call 586-4185.