

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Forestry and Wildlife
Honolulu, HI 96813

March 27, 2009

Chairperson and Members
Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Land Board Members:

SUBJECT: REQUEST REVIEW FOR APPROVAL TO RELEASE FOR PUBLIC REVIEW THE KAHEAWA WIND POWER II WIND ENERGY GENERATION FACILITY HABITAT CONSERVATION PLAN, ISLAND OF MAUI, HAWAII

SUMMARY:

Submitted for your approval to release for public review is the draft "Kaheawa Wind Power II Wind Energy Generation Facility Habitat Conservation Plan, TMK Nos 4-8-001:001 and 3-6-001:014, Ukumehame, Maui, Hawaii" (Attachment I). The purpose of this draft Habitat Conservation Plan (HCP) is to mitigate for potential injury and death to endangered 'ua'u (Hawaiian petrel, *Pterodroma sandwichensis*), 'a'o (Newell's shearwater, *Puffinus auricularis newelli*), nēnē (Hawaiian goose, *Branta sandvicensis*), and 'ōpe'ape'a (Hawaiian hoary bat, *Lasiurus cinereus semotus*) caused by construction and operation at the KWPII facilities. The draft HCP outlines provisions for net benefit to the species and environment, and contributes to the recovery of each of these species.

BACKGROUND:

Kaheawa Wind Power II (KWPII) is proposing to develop a 21 megawatt (MW) wind farm on approximately 333 acres of State Conservation District lands, immediately adjacent to and west of the existing 30 MW Kaheawa Wind Power project (KWPI), which is operated by a sister entity under First Wind LLC. A draft Environmental Impact Statement (DEIS) was recently released for this project, and is available from the Office of Environmental Quality Control (OEQC). Per the DEIS, this project requires a Conservation District Use Permit, Construction Permit, PUC Approval, FAA Clearance, ESA Section 10 Incidental Take Permit, State Incidental Take License, and land lease & easements.

The proposed project includes construction and operation of:

- New and existing internal service roads that connect the facility to the existing KWP I access road.
- 14 new General Electric (GE) 1.5 MW wind turbine generators (WTGs).
- A new electrical substation and interconnection facilities to connect the facility to the existing MECO power transmission system.
- New underground electrical power lines connecting all of the turbines with the new substation.
- A new Battery Energy Storage System (BESS) adjacent to the electrical substation.
- New operations and maintenance building to house operations personnel, equipment and facility spare parts.
- Two new permanent meteorological towers to collect data during operations, and for a limited time, continued use of four existing meteorological towers.

Four state and federally listed endangered or threatened animal species have been documented on Maui within the vicinity of the wind resource area (WRA) where the met towers and WTGs are located. The incidental take of listed species has the potential to occur as a result of construction and operation of the KWPII facilities, for example through collision with turbines or guyed meteorological towers, vehicles, light attraction, or other activities, for endangered 'ua'u (Hawaiian petrel, *Pterodroma sandwichensis*), 'a'o (Newell's shearwater, *Puffinus auricularis newelli*), nēnē (Hawaiian goose, *Branta sandvicensis*), and 'ōpe'ape'a (Hawaiian hoary bat, *Lasiurus cinereus semotus*).

No known habitat loss for listed wildlife species is expected to occur. Additionally, no other listed, proposed or candidate wildlife species have been found or are known to be present in the project area. Botanical and invertebrate surveys conducted in 2008 determined that no federally or state-listed plant or invertebrate species occur within any of the met tower footprints. Therefore, no impacts are anticipated to directly affect sensitive plant or invertebrate species as a result of this project.

Complete avoidance of risk to the four listed wildlife species is not possible for the project; therefore, KWPII has proposed a number of measures minimize the risk of collisions and light attraction. For example, they have proposed to place the turbines in single rows, rather than staggered, to minimize collision risk; use of monopole steel tubular towers with lower rotational speeds; placement of all new power collection lines underground to eliminate risk of collision with these lines; minimizing use of lights at night, including both construction activities, buildings, and in FAA required lighting for

the turbines and met towers; using bird diverters on all guy wires; and through monitoring of nesting activities to minimize adverse risk to nēnē and their nests. Undergrounding lines will be particularly effective in eliminating collision risks.

Pre-construction monitoring has been conducted for seabirds, nēnē, and 'ōpe'ape'a, and a monitoring and adaptive management program has been proposed to address post-construction monitoring of take, and to determine and address adaptive management needs, to improve existing methods and address dynamic conditions. Post-construction monitoring will identify whether threatened or endangered bird and bat species are injured or killed from collision with one or more of the towers and will document impacts to other non-listed species. First Wind has an ongoing Wildlife Education and Observation Program for all staff members that will be on the property on a regular basis, and will expand this to include KWPII.

Mitigation proposed for each of the four listed species is designed to not only compensate for take that may occur as a result of collision with met towers, but also provide a net conservation benefit for the species addressed and to contribute to their recovery. The HCP includes a tiered take approach in which mitigation is commensurate with level of take. For example, proposed seabird mitigation includes predator proof fencing and predator control to protect part of the Makamaka'ole seabird colony in West Maui; if higher than baseline take occurred, a social attraction program at the site and invasive species control, or protection of a second site, would be required. For baseline levels of take, nēnē mitigation would focus on protection and management of the Hana'ula colony, including providing predator control and assisting in DOFAW nēnē management activities for baseline take; additional habitat improvement at Hana'ula or reintroduction at another site would be required for higher take levels. Baseline 'ōpe'ape'a mitigation includes funding of appropriate research, participation in the statewide census, and conducting on- and near-site research in conjunction with USGS researchers; higher levels of take would require greater levels of effort in these areas, and possible curtailment of turbines at low wind speeds (associated with higher bat mortality).

Semi-annual reports, including all data, would be submitted to DOFAW and USFWS, followed by semi-annual review meetings with the agencies to determine appropriate adaptive management actions, and to ensure timely implementation of HCP requirements. Annual reports would be reviewed by the Endangered Species Recovery Committee

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(ESRC). These reports would summarize the results of the post-construction monitoring surveys, document take, if any, and recommend any changes needed to the monitoring protocol. Any incidental take of one of these covered species is to be reported within 24 hours and the cumulative adjusted take reported within two weeks.

DISCUSSION:

The ESRC has reviewed the draft "Kaheawa Wind Power II Wind Energy Generation Facility Habitat Conservation Plan, TMK Nos 4-8-001:001 and 3-6-001:014, Ukumehame, Maui, Hawai'i" during its February 12-13, 2009 meeting on Maui, and visited the seabird mitigation site in order to provide more detailed recommendations. The ESRC has provided its recommendation for release for public review (Attachment II). The ESRC has no objections to the substance of the HCP and agree that the HCP will provide a net conservation benefit to the covered species. With Board approval, a notice of the availability of the draft HCP would be published in the OEQC Bulletin. The Department would solicit public input and hold a public hearing on the Island of Maui during the next 60 days.

Following the public review process, the applicant, DOFAW, US Fish and Wildlife Service, and ESRC would discuss and make any changes necessary before submission to the Endangered Species Recovery Committee for their final review. The Committee will provide a recommendation to the Board to accept, amend, or reject the proposal. The HCP will then be resubmitted to the Board for final consideration.

RECOMMENDATION:

That the Board approve for public release the draft "Kaheawa Wind Power II Wind Energy Generation Facility Habitat Conservation Plan, TMK Nos 4-8-001:001 and 3-6-001:014, Ukumehame, Maui, Hawai'i" by the required two-thirds vote of the authorized membership.

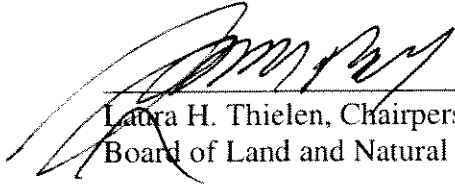
Respectfully submitted,



For Paul Conry
Administrator

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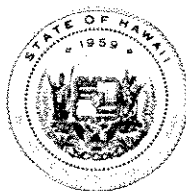
APPROVED FOR SUBMITTAL:



Laura H. Thielen, Chairperson
Board of Land and Natural Resources

Attachment I. Habitat Conservation Plan for the Construction and Operation of the
Lānaʻi Meteorological Towers, Lānaʻi, Hawaiʻi.
Attachment II. ESRC recommendation.

LINDA LINGLE
GOVERNOR OF HAWAII



LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
FIRST DEPUTY

KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

DIVISION OF FORESTRY AND WILDLIFE
1151 PUNCHBOWL STREET, ROOM 325
HONOLULU, HAWAII 96813
TEL (808) 587-0166 FAX (808) 587-0160

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
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LAND
STATE PARKS

March 4, 2009

TO: Honorable Chairperson and Members
Board of Land and Natural Resources

FROM: Endangered Species Recovery Committee (ESRC)

Loyal Meyerhoff, Director, USGS - Biological Resources Division, UH
Patrick Leonard, USFWS - Pacific Islands Ecoregion, Honolulu, HI
Laura H. Thielen, Chair, Dept. of Land and Natural Resources
James Moncur, Director, Environmental Center, University of Hawaii
Pat Hart, Appointed Member, UH, Honolulu, HI
Jim Jacobi, USGS - BRD, Hawaii Nat. Park, HI (BRD Representative)
Cliff Morden, University of Hawaii, Honolulu, HI (UHEC Representative)
Bill Standley, USFWS - Pacific Islands Ecoregion (FWS Representative)
Scott Fretz, Division of Forestry and Wildlife (DLNR Representative)
John Harrison, Appointed Member, Honolulu, HI

SUBJECT: ESRC recommendation for approval for release for public review the Kaheawa Wind Power II Wind Energy Generation Facility Habitat Conservation Plan, Island of Maui, Hawai'i.

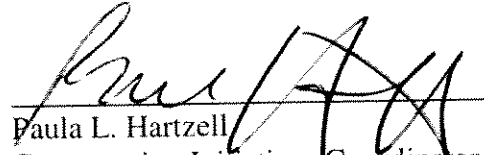
The ESRC has been requested to make recommendations regarding the Kaheawa Wind Power II Wind Energy Generation Facility Habitat Conservation Plan, Island of Maui, Hawai'i, for release for public review. The purpose of this draft Habitat Conservation Plan (HCP) is to mitigate for potential injury and death to endangered 'ua'u (*Pterodroma sandwichensis*), 'a'o (*Puffinus auricularis newelli*), nēnē (*Branta sandvicensis*), and 'ōpe'ape'a (*Lasiurus cinereus semotus*) caused by project construction and operation at the facilities. The draft HCP outlines provisions for net benefit to the species and environment, and contributes to the recovery of each of these species.

The ESRC agrees with the purpose and intent of the proposed HCP, and anticipates its progression through the public review process. The ESRC recommends that the Board approve

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for public release the Kaheawa Wind Power II Wind Energy Generation Facility Habitat Conservation Plan, Island of Maui, Hawai'i.

Prepared and Submitted by:


Paula L. Hartzell
Conservation Initiatives Coordinator
Division of Forestry and Wildlife

