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GOVERNOR OF HAWAII

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CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

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AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
POST OFFICE BOX 621
HONOLULU, HAWAII 96809

October 28, 2014

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OFC. OF ENVIRONMENTAL QUALITY CONTROL

FILE COPY
NOV 08 2014

Ms. Jessica Wooley, Director
Office of Environmental Quality Control
235 S. Beretania Street, Room 702
Honolulu, Hawaii 96813

Dear Director Wooley:

This letter is to 1) provide notice to withdraw the Environmental Impact Statement Preparation Notice for the Proposed Na Pua Makani Wind Project (Project), Kahuku, HI; and 2) transmit a new Environmental Impact Statement Preparation Notice for the Project. The Department of Land and Natural Resources (DLNR), Land Division is providing notice to withdraw a previous Environmental Impact Statement Preparation Notice (EISPN) published on December 23, 2013 in *The Environmental Notice.* Since that time, the Project was modified to incorporate landowner input with the intent of reducing impacts to active agriculture. As such, the Project design requires the addition of new Tax Map Keys (TMKs) parcels to the Project Area. Therefore, DLNR Land Division is withdrawing the previous EISPN and submitting a new EISPN.

Under the provisions of Act 172, Session Laws of Hawaii 2012, the DLNR has determined at the outset that an environmental impact statement is required for the Project being proposed by Na Pua Makani Power Partners, a wholly owned subsidiary of Champlin Hawaii Wind Holdings, LLC, situated in the Koolauloa District in the City and County of Honolulu, on the island of Oahu. Please see the enclosed EISPN, completed Publication Form and a summary of the proposed action, with a copy of the same sent via electronic mail, to oeqc@doh.hawaii.gov.

Pursuant to the requirements of the Section 11-200-3, Hawaii Administrative Rules (HAR), and Section 11-200-15, HAR, we request that you publish a public notice of this EISPN in the next available Environmental Notice for the public to submit comments to Champlin Hawaii Wind Holdings, LLC during a 30-day public comment period.

If there are any questions, please contact Ms. Brita Woeck at (425) 482-7645.

Sincerely,

William J. Aila Jr.
Chairperson

cc: Champlin Hawaii Wind Holdings, LLC

Enclosures: OEQC Publication Form
Summary of the proposed action in electronic format

APPLICANT ACTIONS
SECTION 343-5(C), HRS
PUBLICATION FORM (JANURARY 2013 REVISION)

Project Name: Na Pua Makani Wind Project

Island: Oahu

District: Koolauloa

TMK: TMK (1)5-6-008:006 (portion); (1)5-6-006:018, 32, 33, 34, 35, 47, 48, 49, 50, 51, 52, 54, 55, 56 (portions); and (1)5-6-005:018 (portion)

Permits: Possible permits include:

1. National Environmental Policy Act EIS from the U.S. Fish and Wildlife Service
2. Incidental Take Permit from the U.S. Fish and Wildlife Service
3. National Historic Preservation Act Section 106, as necessary
4. U.S. Army Corps of Engineers Clean Water Act 401, 402, 404, as necessary
5. Federal Aviation Administration Clearance
6. Incidental Take License from the State Department of Land and Natural Resources /Division of Forestry and Wildlife
7. Clean Water Act Compliance Section 401, 402, 404 from the State Department of Health, as necessary
8. Stream channel Alternation Permit from the State Department of Health, as necessary
9. National Pollution Discharge Elimination System Construction Permit from State Department of Health
10. Community Noise Permit for Construction Activities from State Department of Health
11. Air Quality Permit from State Department of Health, as necessary
12. Purchase Power Agreement by the Public Utilities Commission
13. Lease for or easement right from State Department of Land and Natural Resources for use of state land
14. Use and Occupany Agreement from the State Department of Transportation, as necessary
15. Conditional Use Permit – Minor from City and County of Honolulu
16. Joint Development Permit from the City and County of Honolulu
17. Permit to Move Oversized/Overweight Load from State Department of Transportation and City and County of Honolulu
18. Construction and Building permits from City and County of Honolulu

Approving Agency: Board of Land and Natural Resources
Contact: William J. Aila, Jr., Chairperson, Department of Land and Natural Resources
Kalanimoku Building,1151 Punchbowl Street, Honolulu, Hawaii 96813
(808) 587-0400

Applicant: Champlin Hawaii Wind Holdings, LLC
Contact: Mike Cutbirth; 2020 Alameda Padre Serra, Suite 105
Santa Barbara, CA 93103
(805) 568-0300

Consultant: Tetra Tech, Inc
Contact: Brita Woeck, Tetra Tech, Inc., 737 Bishop St., Suite 2340
Mauka Tower

Honolulu, HI 96813
(808) 441-6600

Status (check one only):

__DEA-AFNSI — Submit the approving agency notice of determination/transmittal on agency letterhead, a hard copy of DEA, a completed OEQC publication form, along with an electronic word processing summary and a PDF copy (you may send both summary and PDF to oeqchawaii@doh.hawaii.gov; a 30-day comment period ensues upon publication in the periodic bulletin.

__FEA-FONSI — Submit the approving agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and a PDF copy (send both summary and PDF to oeqchawaii@doh.hawaii.gov; no comment period ensues upon publication in the periodic bulletin.

__FEA-EISPN — Submit the approving agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and PDF copy (you may send both summary and PDF to oeqchawaii@doh.hawaii.gov; a 30-day consultation period ensues upon publication in the periodic bulletin.

X Act 172-12 EISPN — Submit the approving agency notice of determination on agency letterhead, an OEQC publication form, and an electronic word processing summary (you may send the summary to oeqchawaii@doh.hawaii.gov. NO environmental assessment is required and a 30-day consultation period upon publication in the periodic bulletin.

__DEIS — The applicant simultaneously transmits to both the OEQC and the approving agency, a hard copy of the DEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the DEIS (you may send both the summary and PDF to oeqc@doh.hawaii.gov); a 45-day comment period ensues upon publication in the periodic bulletin.

__FEIS — The applicant simultaneously transmits to both the OEQC and the approving agency, a hard copy of the FEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the FEIS (you may send both the summary and PDF to oeqc@doh.hawaii.gov); no comment period ensues upon publication in the periodic bulletin.

__ Section 11-200-23 Determination — The approving agency simultaneous transmits its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS to both OEQC and the applicant. No comment period ensues upon publication in the periodic bulletin.

__Statutory hammer Acceptance — The approving agency simultaneously transmits its notice to both the applicant and the OEQC that it failed to timely make a determination on the acceptance or nonacceptance of the applicant's FEIS under Section 343-5(c), HRS, and that the applicant's FEIS is deemed accepted as a matter of law.

__Section 11-200-27 Determination — The approving agency simultaneously transmits its notice to both the applicant and the OEQC that it has reviewed (pursuant to Section 11-200-27, HAR) the previously accepted FEIS and determines that a supplemental EIS is not required. No EA is required and no comment period ensues upon publication in the periodic bulletin.

__Withdrawal (explain)

Summary (Provide proposed action and purpose/need in less than 200 words. Please keep the summary brief and on this one page)**:**

Na Pua Makani Power Partners, LLC (NPMPP), a wholly owned subsidiary of Champlin Hawaii Wind Holdings, LLC, proposes to construct and operate the Na Pua Makani Wind Project (Project) near the town of Kahuku on the island of Oahu, Hawaii. The Project would consist of up to 10 wind turbine generators, with a nameplate generating capacity of up to approximately 25 megawatts (MW). The turbine array could include a combination of models from a single manufacturer ranging in generating capacity and dimensions, based on site-specific conditions and setback requirements. Supporting infrastructure for the proposed Project would include access roads, wind turbine assembly lay down areas, overhead and underground transmission and collector lines, an on-site substation and an operations and maintenance building and associated storage yard and parking area.

A previous EISPN was published on December 23, 2013 in *The Environmental Notice* but was withdrawn due to the requirement to include the addition of new Tax Map Keys (TMKs) parcels to the Project Area that were not included in the original EISPN as well as modifications in the Project design. Project design changes were made to incorporate landowner input, with the intent of reducing impacts to active agriculture.

The proposed Project as described during the previous scoping period included one access point into the Project from Kamehameha Highway via the existing Malaekahana Road. The proposed Project would now be accessed at two points from Kamehameha Highway. The additional access is to the north via existing unnamed State-owned roads that leads to the Kahuku Agricultural Park which results in the addition of new TMK parcels to the Project Area. Additionally, Project components have been further refined to reduce impacts to active agricultural lands by relocating the operations and maintenance building, substation and construction laydown areas to fallow agricultural lands and adjusting turbine and internal access road locations within the Malaekahana Hui West lands.

The purpose of this EISPN is to inform interested parties of modifications to the Proposed Action since the publication of the previous EISPN and to seek agency and public input related to these changes. Comments provided during the previous public scoping period (December 23, 2013-January 22, 2014) will still be addressed and included in the Draft Environmental Impact Statement (EIS); therefore, there is no need to resubmit comments provided during the initial public scoping period. Publication of this EISPN will reinitiate the EIS scoping period in compliance with HRS Chapter 343 and provide an additional opportunity for reviewing agencies and the public to provide new and/or additional input on issues and resources of concern in light of the modified Project design. Comments received on this EISPN will be considered in developing the EIS.

ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE

Na Pua Makani Wind Project

Prepared for

Na Pua Makani Power Partners, LLC

Prepared by

Tetra Tech Inc.

November 2014

Project Summary

Na Pua Makani Power Partners, LLC (NPMPP), a wholly owned subsidiary of Champlin Hawaii Wind Holdings, LLC (Applicant), has prepared this Environmental Impact Statement Preparation Notice (EISPN) in accordance with Hawaii Revised Statutes (HRS) Chapter 343, Hawaii Administrative Rules (HAR) Title 11 Chapter 200, and Act 172-12. The Na Pua Makani Wind Project (Project) is located partially on state lands, triggering compliance with HRS Chapter 343 Hawaii environmental laws. A previous EISPN was published on December 23, 2013 in *The Environmental Notice* but was withdrawn due to the requirement to include new Tax Map Keys (TMKs) parcels to the Project Area that were not included in the original EISPN as well as modifications in the Project design. Project design changes were made to incorporate landowner input, with the intent of reducing impacts to active agriculture.

The purpose of this EISPN is to inform interested parties of modifications to the Proposed Action since the publication of the previous EISPN and to seek agency and public input related to these changes. Comments provided during the previous public scoping period (December 23, 2013-January 22, 2014) will still be addressed and included in the Draft Environmental Impact Statement (EIS); therefore, there is no need to resubmit comments provided during the initial public scoping period. Publication of this EISPN will reinitiate the EIS scoping period in compliance with HRS Chapter 343 and provide an additional opportunity for reviewing agencies and the public to provide new and/or additional input on issues and resources of concern in light of the modified Project design. Comments received on this EISPN will be considered in developing the EIS.

Project Name:	Na Pua Makani Wind Project
Applicant and Project Owner:	Na Pua Makani Power Partners, LLC Mike Cutbirth 2020 Alameda Padre Serra, Suite 105 Santa Barbara, CA 93103
Summary of Proposed Activity:	Na Pua Makani Power Partners LLC is proposing to construct a wind farm with a generating capacity of approximately up to approximately 25 megawatts (MW), consisting of up to 10 wind turbines. The proposed Project would also include an onsite substation, operations and maintenance facility and electrical collection system, a 34.5-kilovolt (kV) HECO-owned transmission line, and a construction access route along existing public roadways.
Project Location:	Kahuku, Koolauloa District, Oahu, Hawaii
Land Ownership:	Private (Malaekahana Hui West, LLC) and State of Hawaii

Tax Map Keys:	(1)5-6-008:006 (portion) (1)5-6-006:018, 32, 33, 34, 35, 47, 48, 49, 50, 51, 52, 54, 55, 56 (portions) (1)5-6-005:018 (portion)
State Land Use Classification:	Urban
City and County of Honolulu Zoning District:	AG-1 Restricted Agricultural AG-2 General Agricultural
Special Management Area (SMA):	Not within the SMA
Project Size:	Project Area – approximately 476 acres (193 hectares); Figure 1 Project Footprint – approximately 53 acres (21 hectares); Figure 2
HRS Chapter 343 Trigger:	Use of State Lands
NEPA Trigger:	Issuance of an Incidental Take Permit by the U.S. Fish and Wildlife Service
Approving Agency:	Hawaii Department of Land and Natural Resources Land Division 1151 Punchbowl Street Honolulu, HI 96813 Contact: Russell Tsuji, Administrator 808-587-0419
Project Consultants:	Tetra Tech Inc. 737 Bishop Street, Suite 2340 Honolulu, HI 96813 Contact: Brita Woeck (808) 441-6600

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1.0 INTRODUCTION

1.1 Introduction

Na Pua Makani Power Partners, LLC (NPMPP), a wholly owned subsidiary of Champlin Hawaii Wind Holdings, LLC, proposes to construct and operate the Na Pua Makani Wind Project (Project) near the town of Kahuku on the island of Oahu, Hawaii (Figure 1). The Project would consist of up to 10 wind turbine generators, with a nameplate generating capacity of up to approximately 25 megawatts (MW). The turbine array could include a combination of models from a single manufacturer ranging in generating capacity and dimensions, based on site-specific conditions and setback requirements. Supporting infrastructure for the proposed Project would include access roads, wind turbine assembly lay down areas, overhead and underground transmission and collector lines, an on-site substation and an operations and maintenance building and associated storage yard and parking area.

The proposed Project as described during the previous scoping period included one access point into the Project from Kamehameha Highway via the existing Malaekahana Road. The proposed Project would now be accessed at two points from Kamehameha Highway. The additional access is to the north via existing unnamed State-owned roads that leads to the Kahuku Agricultural Park which results in the addition of new TMK parcels to the Project Area. Additionally, Project components have been further refined to reduce impacts to active agricultural lands by relocating the operations and maintenance building, substation and construction laydown areas to fallow agricultural lands and adjusting turbine and internal access road locations within the Malaekahana Hui West lands (Figure 2). Project components are described in detail in Section 2.

The Project will require the use of State of Hawaii lands which triggers environmental review under the HRS Chapter 343. Due to the Project's need to obtain a commercial lease from the DLNR Land Division authorizing commercial operation of a wind project on State of Hawaii lands and use of State-owned lands, the DLNR Land Division will be the approving agency for the EIS. It was anticipated that the Project could have a significant impact to the human and natural environment; therefore, an EIS was planned from the Project's inception to fully disclose any potential impacts on the environment and to identify best management practices (BMPs), Project-specific design features, and mitigation measures to reduce potential impacts. As such, the State will evaluate the potential impacts associated with the construction and operation of the Project.

Due to the potential for the Project to impact species listed under the federal Endangered Species Act (ESA), NPMPP is voluntarily preparing a joint federal and state Habitat Conservation Plan (HCP) to accompany its application for an Incidental Take Permit (ITP) from the United States Fish and Wildlife Service (USFWS) under ESA Section 10(a)(1)(B). NPMPP is also applying for an Incidental Take License (ITL) from the Hawaii Department of Land and Natural Resources (DLNR) Division of Forestry and Wildlife (DOFAW) under Hawaii Revised Statute (HRS) Section 195D. Approval of the ITP, and the accompanying HCP, is a federal action that triggers review under the National Environmental Policy Act (NEPA); the USFWS is the lead federal agency for this process.

1.2 Purpose and Need

In an attempt to alleviate its dependence on imported fuels, Hawaii established an RPS that requires HECO and its affiliates, Hawaii Electric Light Company and Maui Electric Company, to generate renewable energy equivalent to 15 percent by 2015, 25 percent by 2020, and 40 percent by 2030. Hawaii's Clean Energy Initiative sets goals for the state to achieve 70 percent clean energy by 2030, with 40 percent coming from locally generated renewable sources (HCEI 2014). These laws, regulations, and initiatives reflect Hawaii's commitment to move away from petroleum-based energy generation and to increase its portfolio of renewable energy projects. Collectively, they demonstrate the overwhelming need for the development and implementation of renewable energy projects throughout the state.

The purpose of the Project is to provide clean, renewable wind energy for the island of Oahu and to assist HECO in meeting Hawaii's Renewable Portfolio Standard (RPS) requirements and the State's goal to reduce electricity costs. The cost of electricity from renewable energy is currently about one-half the cost of electricity from burning oil. The power generated by the Project would be sold to HECO pursuant to the RPS under a long-term, fixed-price contract with fixed annual escalation providing long-term price stability for consumers.

NPMPP anticipates that operation of the Project would contribute to the State's diversified portfolio of renewable energy projects; provide environmental and economic benefits to the state and local communities; diversify Oahu's power supply; and contribute to the State's energy independence and security and reduce the $6 billion of foreign oil imported annually. Production of wind-generated energy would replace a portion of the State's electricity that is currently generated by burning fossil fuels, thus reducing greenhouse gas emissions and other forms of pollution that are detrimental to the environment and human health.

1.3 Consultation Process

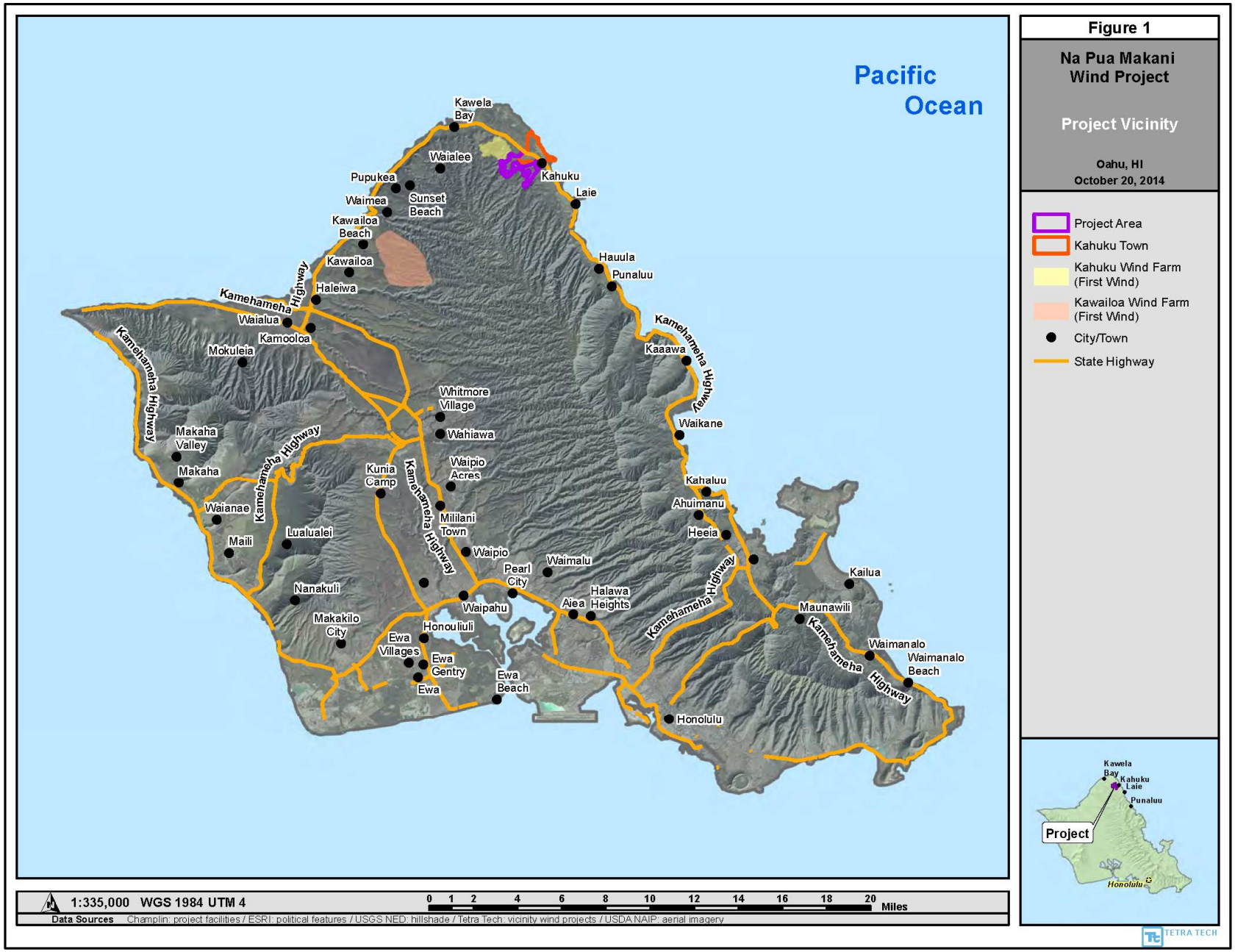
Consultation is a requirement of HRS Chapter 343. A previous EISPN for the Project was published on December 23, 2013 in *The Environmental Bulletin*, initiating a 30-day public comment period (December 23, 2013-January 22, 2014). The original EISPN was withdrawn.

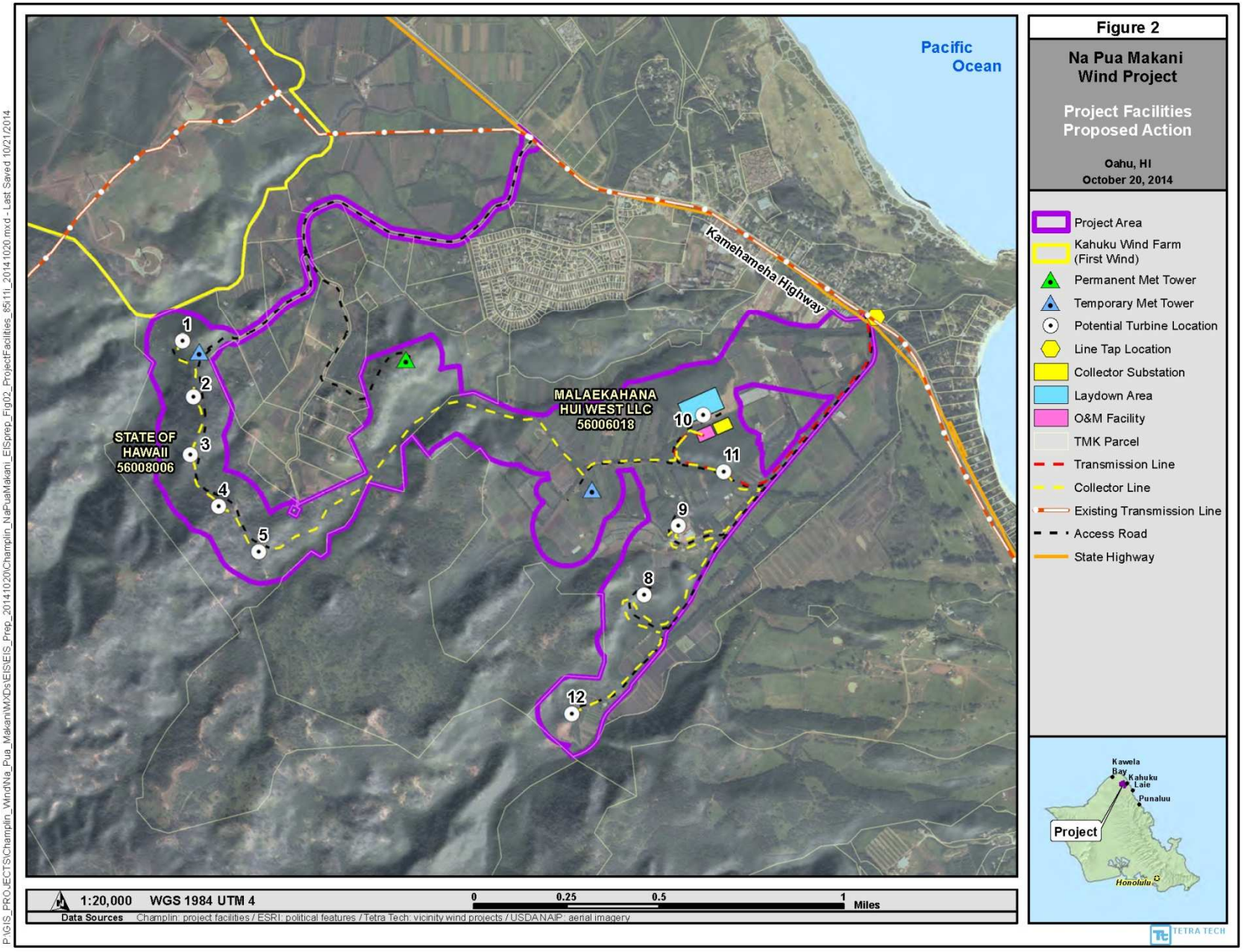
Initial public comments were received at two previous scoping meetings held at the Kahuku Community Center on November 13, 2013 and January 10, 2014, and electronic mail, and hardcopy mail submittals. Information on these meetings was announced through invitation letters with an enclosed Project fact sheet; flyers (posted at shopping centers and senior housing complex); and legal notice in the Star Advertiser. Table 1 identifies the parties that have been consulted for the Project.

With the re-publication of the EISPN, a new 30-day comment period will commence and a public scoping meeting will be held during that period. Agency and public comments received through the consultation process will be incorporated into the EIS.

Table 1. Agency/Organization Consulted for the Na Pua Makani Wind Project

Agency/Organization
U.S. Fish and Wildlife Service
Maui and Oahu National Wildlife Refuge Complex
U.S. Army Corps of Engineers
U.S. Department of Agriculture
Marine Corps Base Hawaii
U.S. Army Garrison, Hawaii Department of Army, Kahuku Training Area
Federal Aviation Administration
Senator Brian E. Schatz
Senator Mazie K. Hirono
Representative Tulsi Gabbard
Representative Colleen Hanabusa
State of Hawaii Department of Land and Natural Resources (DLNR)
State of Hawaii, DLNR, Land Division
State of Hawaii, DLNR, Division of Forestry and Wildlife (DOFAW)
State of Hawaii, DLNR, Historic Preservation Division
State of Hawaii, Department of Business, Economic Development and Tourism (DBEDT)
State of Hawaii, Department of Agriculture
State of Hawaii, Office of the Governor
State Senator Clayton Hee
State Senator Mike Gabbard
State Representative Chris Lee
State Representative Richard Fale
City and County of Honolulu, Office of the Mayor
City and County of Honolulu, Department of Planning and Permitting
City and County of Honolulu Councilmember Ernie Martin
Landowner – Malaekahana Hui West, LLC
Laie Community Association
Hauula Community Association
Koolauloa Neighborhood Board
North Shore Neighborhood Board
Koolauloa Community Health and Wellness Center
Turtle Bay Resort
Kahuku Medical Center
Keep North Shore Country
Laie Hawaii Temple
Kahuku Elderly EAH Housing
North Shore Community Land Trust
Sunset Beach Community
Defend Oahu Coalition
Kahuku Community Association
Kahuku High and Intermediate School
Kahuku Elementary School
Laie Elementary School
Kamehameha Preschool Kahuku
Numerous Individuals


Pacific Ocean
Kawela Bay
Waialee
Kahuku
Laie
Pupukea
Waimea
Sunset Beach
Kawailoa Beach
Kawailoa
Haleiwa
Hauula
Punaluu
Kamehameha Highway
Waialua
Kamooloa
Mokuleia
Kaaawa
Whitmore Village
Wahiawa
Waikane
Makaha Valley
Makaha
Kunia Camp
Waipio Acres
Waianae
Mililani Town
Kahaluu
Ahuimanu
Heeia
Lualualei
Maili
Waipio
Waimalu
Pearl City
Kailua
Nanakuli
Halawa Heights
Aiea
Waipahu
Maunawili
Makakilo City
Honouliuli
Ewa Villages
Ewa Gentry
Ewa
Ewa Beach
Waimanalo
Waimanalo Beach
Honolulu
Figure 1
Na Pua Makani Wind Project
Project Vicinity
Oahu, HI
October 20, 2014
Project Area
Kahuku Town
Kahuku Wind Farm (First Wind)
Kawailoa Wind Farm (First Wind)
City/Town
State Highway
Project
Honolulu
1:335,000 WGS 1984 UTM 4
0 1 2 4 6 8 10 12 14 16 18 20 Miles
Data Sources Champlin: project facilities / ESRI: political features / USGS NED: hillshade / Tetra Tech: vicinity wind projects / USDA NAIP: aerial imagery
TETRA TECH


Pacific Ocean
Kamehameha Highway
STATE OF HAWAII 56008006
MALAEKAHANA HUI WEST LLC 56006018
1
2
3
4
5
8
9
10
11
12
Figure 2
Na Pua Makani Wind Project
Project Facilities Proposed Action
Oahu, HI
October 20, 2014
Project Area
Kahuku Wind Farm (First Wind)
Permanent Met Tower
Temporary Met Tower
Potential Turbine Location
Line Tap Location
Collector Substation
Laydown Area
O&M Facility
TMK Parcel
Transmission Line
Collector Line
Existing Transmission Line
Access Road
State Highway
Kawela Bay
Kahuku Lae
Punaluu
Project
Honolulu
1:20,000 WGS 1984 UTM 4
0 0.25 0.5 1 Miles
Data Sources Champlin: project facilities / ESRI: political features / Tetra Tech: vicinity wind projects / USDA NAIP: aerial imagery
TETRA TECH
P:\GIS_PROJECTS\Champlin_Wind\Na_Pua_Makani\MXDs\EIS\EIS_Prep_20141020\Champlin_NaPuaMakani_EISprep_Fig02_ProjectFacilities_85x11i_20141020.mxd - Last Saved 10/21/2014

2.0 PROJECT DESCRIPTION

2.1 Project Location

The Project Area includes portions of two parcels which would be leased and additional parcels that would be used to access the Project (TMK 5-6-008:006; 5-6-006:018, 32, 33, 34, 35, 47, 48, 49, 50, 51, 52, 54, 55, 56; and 5-6-005:018) located in the Kahuku, Oahu, Hawaii. One parcel for the Project will be leased from the DLNR (approximately 234 acres [95 hectares]) and one parcel from the Malaekahana Hui West, LLC (approximately 452 acres [183 hectares]). Temporary entry permits or licenses or easements shall be utilized for the parcels providing access to the Project. The Project Area, within which all activities are proposed, includes approximately 476 acres (193 hectares). It is accessible via local roads off of Kamehameha Highway, and is located east of the existing Kahuku Wind Farm (Figure 2).

2.2 Project Components

The Proposed Action would include up to 10 turbines (8 to 10 depending on the turbine models selected) and associated foundations and transformers; an underground electrical collection system; up to three met towers; access roads; construction staging areas; an operations and maintenance building and associated storage yard; a transmission line; and an onsite substation (Figure 2). Civil and electrical infrastructure necessary to support the Project includes the underground components of the Project, such as turbine and met tower foundations, the transmission line, and the electrical collection system. The EIS will describe the construction and operation activities associated with each Project component in detail.

2.2.1 Turbines

NPMPP is currently considering turbine models from leading turbine manufacturers including Siemens, Vestas, and GE. The turbine array could include a combination of models from a single manufacturer ranging in generating capacity and dimensions. Turbine models being considered range in hub height from approximately 262 feet (80 meters) to 302 feet (92 meters) with rotor diameters ranging from 328 feet (100 meters) to 384 feet (117 meters), resulting in a maximum height at the top of the blade of up to 512 feet (156 meters) above ground level. The combination of turbine models and specific number of turbines under each alternative will be selected to ensure consistency with HECO grid requirements, onsite wind resources, and other Project-specific factors.

2.2.2 Electrical System (Electrical Collection System, Substation, Transmission Line, and Point of Interconnect)

Power from the turbines would be stepped up to 34.5 kV at pad-mounted transformers and then collected through an electrical collection system. The electrical collection system would run from turbine to turbine. The electrical collection system would consist of up to two separate 34.5-kV feeder circuits, one circuit for the turbines 1 to 5, and one circuit for the turbines 6 to 10. To the

extent practicable the collection system would be installed underground, but it could be necessary to install portions of the collection system above ground to respond to construction challenges or to avoid impacts to streams and other resources in the Project Area. This system would feed into an onsite electrical substation, which would step up the voltage and transmit the power to the point of interconnect with the Oahu's general transmission system via a new approximately 1 mile (0.6 kilometer) HECO-owned and operated transmission line.

2.2.3 Met Towers

The Project would include one permanent un-guyed lattice-frame met towers and two temporary guyed towers (Figure 2). These towers would support weather instruments that measure and record weather data to measure performance and guide Project operation. The met towers would be approximately 262 feet (80 meters) tall with base dimensions approximately 22 by 22 feet (7 by 7 meters) and reducing down to approximately 2 by 2 feet (1 by 1 meter). The temporary met towers would be removed during Project construction.

2.2.4 Internal Access Roads

Internal wind farm access roads would include portions of an existing road network plus the addition of new road segments (Figure 2). Existing roads within the Project Area would be widened to, and new access roads would be constructed to, approximately 16 feet (5 meters) to allow adequate passage for crawler cranes and transport trucks, as well as turn-around locations. All access roads would have a gravel surface, stormwater erosion and control features.

2.2.5 Construction Staging and Equipment Laydown Area, Operations and Maintenance Building and Associated Storage Yard

A construction staging and equipment laydown area would be established to serve a variety of storage and support functions over the life of the Project (Figure 2). During construction, the area would be used as temporary storage and laydown area, refueling location, and waste collection area. It would also serve to provide temporary parking, office space, and sanitary facilities. During operation, a portion of this area would be maintained and would encompass permanent facilities including the operations and maintenance building, storage yard, and parking area.

2.1.1 Construction Access Route

Construction related traffic for the Project would include the transporting of the major turbine components, hauling in materials for the turbine foundations, other miscellaneous deliveries, and employee related traffic. The major turbine components would be transported by sea and offloaded at Kalaeloa Harbor located on the west side of Oahu. A Traffic Assessment Report will be prepared for the EIS which will identify possible routes from Kalaeloa Harbor to the Project Area based on the number and dimensions of turbine components. The Malaekahana Hui West portion of the Project would be accessed via the existing Malaekahana Road off of Kamehameha Highway; the

DLNR portion of the Project would be accessed via existing State-owned roads off of Kamehameha Highway through the Kahuku Agricultural Park.

2.3 Project Schedule

Construction of the proposed Project is anticipated to commence in the third quarter of 2015 and begin commercial operation in the fourth quarter of 2015 or in 2016.

2.4 Required Permits and Approvals

Table 2 identifies the major federal, state, and local permits and approvals anticipated for the Project. A comprehensive list will be provided in the EIS.

Table 2. Applicable Federal, State, and Local Statutes, Regulations, Permits, and Authorizations Required for the Na Pua Makani Wind Project

Agency	Permit/Approval	Status
Federal		
USFWS	National Environmental Policy Act (NEPA) Compliance	Draft EIS anticipated to be published in 2015
USFWS	Incidental Take Permit and Habitat Conservation Plan(Endangered Species Act, Section 10(a)(1)(B))	Ongoing consultation (initiated in 2013); Joint federal/state draft HCP anticipated to be published in 2015
Federal Aviation Administration (FAA)	49 U.S.C. § 44718; 14 CFR Part 77; Objects Affecting Navigable Airspace; Determination of No Hazard and Notice of Proposed Construction or Alteration	Determination of No Hazard issued 03/04/2014 and 10/17/2014; Application for Notice of Proposed Construction or Alteration to be submitted
Hawaii State Historic Preservation Division	National Historic Preservation Act Section 106 Compliance	Ongoing; USFWS consultation with SHPD initiated July 2014
U.S. Army Corps of Engineers (USACE)	Clean Water Act Section 401, 402, 404 approval	To be complete as necessary
State		
State of Hawaii, DLNR	Chapter 343/Hawaii Environmental Policy Act (HEPA) Compliance	Joint federal/state draft EIS anticipated to be published in 2015
State of Hawaii, Department of Health, Clean Water	Clean Water Act Compliance (Sections 401 / 402 / 404)	To be completed as necessary
State of Hawaii, Commission on Water Resource Management	Stream Channel Alteration Permit (SCAP)	To be completed as necessary
State of Hawaii, DLNR DOFAW	Incidental Take License/Habitat Conservation Plan (HRS Chapter 195-D)	Ongoing consultation (initiated in 2013); Joint federal/state draft HCP anticipated to be published in 2015
State of Hawaii, Department of Transportation	Use and Occupancy Agreement	To be completed as necessary
State of Hawaii, Department of Transportation and City & County of	Oversized and Overweight Moving Permits	To be completed

Agency	Permit/Approval	Status
Honolulu, Department of Transportation Services		
State of Hawaii, Department of Health	Noise Permit	To be completed
State of Hawaii, Department of Health	Air Quality Permit	To be completed as necessary
Hawaii Public Utility Commission	Purchase Power Agreement	Anticipated to be approved 2014
City & County of Honolulu	Conditional Use Permit Minor and Joint Development Permit	To be completed
Various Agencies	Construction-related Permits	To be completed

3.0 ENVIRONMENTAL SETTING

This section describes the project setting. The EIS will provide a full description of the physical and natural environment and applicable land use plans and policies pertaining to the Project. The EIS will also provide descriptions of the HCP mitigation areas. Each of the major resource areas where anticipated potential impacts associated with construction and operation of the Project are described below along with studies that will be conducted as part of the environmental analysis. Additional topics that will be addressed in the EIS include hazardous and regulated materials and wastes; socioeconomic resources; recreation and tourism; land use; environmental justice; and public infrastructure and services.

The Project lies on a portion of 685 ac (277 ha) of leased land in Kahuku, Oahu, of which approximately 476 acres (193 hectares) comprise the Project Area. The operational Kahuku Wind Power facility abuts the Project area to the northwest (Figure 1). It is surrounded by agricultural farm lands to the north; residential housing, community infrastructure, and agricultural farm lands to the east; a mixture of agricultural farm lands and undeveloped forest lands to the south; and undeveloped forest lands to the west. James Campbell National Wildlife Refuge is approximately 0.75 miles (1.2 kilometers) to the north and Malaekahana State Recreation area is 0.1 miles (0.2 kilometers) to the east.

3.1 Geology and Soils

The Project area consists of steep, dissected ridges surrounding gently sloping valleys (Hobdy 2013). Elevations range from approximately 3 feet (1 meter) above mean sea level (amsl) on the northern edge to 614 feet (187 meters) amsl on the southern edge. The dominant soil types in the Project Area include Lahaina silty clay (3-15 percent slopes) soils and Paumalu-Badland complex soils (10-70 percent slopes), with coral outcrops at elevations below 100 feet (30 meters) amsl (Foote et al. 1972, NRCS 2013). Agricultural lands within the Malaekahana Hui West portion of the Project Area are classified as Prime Agricultural Lands under the ALISH system. The EIS will evaluate the potential for erosion and stormwater runoff, impacts to site drainage patterns, changes in soil character and loss of soil productivity, and effects to Prime Agricultural Lands. A Preliminary Drainage Study will be prepared for the EIS to address potential impacts on stormwater management.

3.2 Hydrology and Water Resources

The Project Area lies within the Oio and Malaekahana watersheds and has an average annual rainfall ranging from approximately 45 inches (114 centimeters) to 60 inches (152 centimeters; Giambelluca et al. 2013). There are no wetlands within the Project Area. There are three streams within the Project boundary including Ohia Stream on the northern border, Keaaulu Stream which runs through the middle of the Project, and Malaekahana Stream on the southern border. Field surveys conducted in 2013 identified Malaekahana Stream as a perennial stream (Hobdy 2013b). Ohia and Keaaulu streams are considered to be intermittent non-Relatively Permanent Waters as they only flow for 1 to 5 days, one to three times a year, following larger rains storms. Based on preliminary determination (Hobdy 2013b), all three streams may qualify as jurisdictional waters of the U.S and would be subject to jurisdiction under Section 404 of the CWA and Section 10 of the Rivers and Harbors Act (RHA) if impacts to these streams cannot be avoided.

The Project Area is located in the Koolauloa Aquifer system (aquifer code 30601) of the Windward Aquifer sector (aquifer code 306) (DLNR 2008). This aquifer system has sustainable yields of 36 to 41 million gallons per day (mgd) (136 to 155 million liters per day; CWRM 2008).

The EIS will evaluate the potential for impacts to wetlands and other water of the U.S.; alteration of drainage patterns; contamination of surface water from erosion, sedimentation, stormwater runoff and/or pollutants; alteration of surface water and groundwater quality; and groundwater depletion or interference with groundwater recharge. A Preliminary Drainage Study will be prepared for the EIS to address potential impacts on stormwater management.

3.3 Air Quality and Climate Change

Air quality in the state of Hawaii is some of the best in the nation, primarily because of consistent trade-winds and limited emission sources. Data collected from Hawaii Department of Health and U.S. Environmental Protection Agency air quality monitoring stations in the vicinity of the Project indicate that criteria pollutant levels consistently remain well below state and federal ambient air quality standards (HDOH 2012).The EIS will include an analysis of Project greenhouse gas emissions (estimated levels of air pollutants and fugitive dust); compliance with state and federal air quality standards; and effects on climate.

3.4 Noise

Existing sources of sound in the vicinity of the Project include passing vehicles on Kamehameha Highway and other nearby roads, agricultural activities (e.g., off-road vehicles), leaf or grass rustle during elevated wind conditions, and insect noise. Closer to the coastline, breaking waves also contribute to the existing soundscape. The EIS will present the results of baseline acoustic monitoring conducted in the vicinity of the Project. A Noise Impact Assessment will also be prepared for the EIS to evaluate potential audible noise and low frequency/infrasound impacts associated with Project construction and operation, and assess compliance with noise regulations.

3.5 Natural Hazards

The EIS will describe the potential effects of natural hazards on the Project. These include tsunamis, hurricanes, earthquakes and seismicity, flooding, and wildfire. A small portion of the northeastern edge of the Project Area, near Kamehameha Highway, is within the Civil Defense Tsunami Evacuation Zone (NOAA 2013). The entire island of Oahu has a UBC seismic risk zone ranking of 2A (USGS 2001), which indicates a low level of seismic risk. According to the Flood Insurance Rate Map prepared by the Federal Emergency Management Agency, the Project Area is located predominantly within Flood Zones D (an area of undetermined flood hazard) and X (an area determined to be outside the 0.2-percent-annual-chance (or 500-year) floodplain). A small portion of the Project lies within Flood Zones AE and AEF, which are designated as special flood hazard or high risk, areas (areas within the 1-percent-annual-chance (or 100-year) floodplain). Wildfire risk in the vicinity of the Project is low due to climatic conditions and available fuels; nonetheless, a Fire Management Plan will be prepared for the Project and will be included in the EIS.

3.6 Biological Resources

The vegetation within the Project area is dominated by a mixture of aggressive non-native weedy species that took over following the abandonment of sugar cane (*Saccharum officinarum*) cultivation. Several common native species occupy some of the ridge tops. The most abundant species in the Project area is the common ironwood (*Casuarina equisetifolia*). Native species are largely intermixed with non-native species with the exception of a few ridge tops where the native `ulei (*Osteomeles anthyllidifolia*), forms large monotypic patches. Other common native species include `uhaloa (*Waltheria indica*) and `akia (*Wikstroemia oahuensis*). A general biological survey of the Project area was completed in June 2013 (Hobdy 2013b). The Project Area provides habitat for a variety of birds, most of which are non-native, as well as for several non-native mammal species and numerous invertebrates. There are no wetlands or waterbodies within the Project Area and there are no areas where congregations of birds occur, although birds including species protected under the federal Migratory Bird Treaty Act have the potential to transit through the Project Area. The EIS will assess impacts related to the introduction and spread of noxious weeds, loss of native plant communities, fire; and effects to wildlife including direct mortality, habitat removal and alteration, and noise and disturbance.

3.7 Threatened and Endangered Species

Seven state and/or federally threatened and endangered species are known to occur, or have the potential to occur, in the vicinity of the Project Area including the Hawaiian hoary bat (*Lasiurus cinereus semotus*), Newell's shearwater (*Puffinus auricularis newelli*), Hawaiian goose (*Branta sandvicensis*), Hawaiian stilt (*Himantopus mexicanus knudseni*), Hawaiian coot (*Fulica alai*), Hawaiian moorhen (*Gallinula chloropus sandvicensis*), and Hawaiian short-eared owl (*Asio flammeus sandwichensis*). These species would be covered under the Project Habitat Conservation Plan (HCP). No federal or state threatened, endangered, or candidate plant species are known to occur within the Project Area. Additionally, no portion of the Project Area has been designated as critical habitat for any listed species.

In compliance with Section 10 of the ESA and HRS § 195D-4(g), the Applicant intends to prepare an HCP and apply for an ITP/ITL from the USFWS and DOFAW, respectively. The HCP will include measures to avoid, minimize, and mitigate for impacts to threatened and endangered species, which will benefit other wildlife including migratory birds. The EIS will evaluate the impacts of Project construction and operation on threatened and endangered species.

3.8 Historic, Archaeological, and Cultural Resources

The Project Area encompasses the ahupuaa of Kahuku, Keana, and Malaekahana within the moku, or district, of Koolauloa. Traditional accounts of the natural resources and conditions of the Kahuku ahupuaa indicated that during Hawaiian settlement prior to the arrival of Europeans, many parts of the landscape were used for traditional agriculture, habitation, and ceremony. Several themes are tied to Kahuku' s landscape during the pre-contact period including the abundance of the hala tree, or *Pandanus*, and its importance to ancient Kahuku's cultural identity; the presence of fresh water springs; and the presence of fish and fishing practices. The Kahuku area is also known for landmarks including Kahuku Point, or Kalaeokahipa, and the great cave of Pohukaina. Much less pre-contact information is known about the ahupuaa of Keana and Malaekahana. The former derives its name from a cave on the inland side of Kahuku Intermediate and High School. The latter is the name of the mother of the Hawaiian goddess La 'ieikawai. Agricultural terraces were associated with Kaukanalaau Stream in the Malaekahana area.

Two previous archaeological studies have been conducted in portions of the Project Area. These were conducted by Cultural Surveys Hawai'i (Stride et al. 2003) and International Archaeological Research Institute (Morrison 2009). Both studies indicated that the Project Area has been extensively modified by agricultural activities since the time of first European contact, including cattle and sheep ranching and sugar and pineapple cultivation. An Archaeological Inventory Survey and a Cultural Impact Assessment will be prepared for the EIS to build on these studies and address potential impacts to archeological sites and traditional cultural uses and practices.

3.9 Visual Resources

The visual setting surrounding the Project Area consists of steep, dissected ridges surrounding gently sloping valleys. Lands adjacent to the Project Area include agricultural lands to the north; residential, community infrastructure, and agricultural lands to the east; a mixture of agricultural lands and undeveloped forest lands to the south; and undeveloped forest lands to the west. Higher elevation portions of the Project Area are characterized by vegetated ridges not actively used for agriculture and appear more natural, while the lower elevations within the Project Area are characterized by cultivated lands supporting a wide array of crops and fallow agricultural land.

A number of primarily residential communities are located along the Kamehameha Highway, including Kahuku, Laie, Hauula, Punaluu, Kahana and Kaaawa from which the Project may be visible. The Kamehameha Highway is the only arterial roadway linking these areas. A Visual Resource Assessment will be prepared for the EIS and will include a Geographic Information

System-based viewshed analysis and computer generated visual simulations of the Project from specific viewpoints.

3.10 Transportation

State and county highways and roadways comprise the majority of the proposed construction route to the Project Area and will be described in detail within the EIS. In general, the proposed construction route will start from Kalaeloa Harbor using H-1 East to Kamehameha Highway to the Project. Kamehameha Highway is a regional two-lane State highway under the jurisdiction of the State of Hawaii, Department of Transportation (HDOT) that serves the Koolauloa area. Access into the Project will be provided by two existing roads off of Kamehameha Highway (Figure 2). The northern road is owned by the State Department of Agriculture and provides access to the DLNR portion of the Project Area through Kahuku Agricultural Park lands owned by the State. The southern road is the existing Malaekahana Road near the Kahuku Fire Station which provides access to the Malaekahana portion of the Project Area. A Transportation Impact Assessment will be prepared for the EIS to analyze transportation requirements for the Project and potential impacts to transportation.

3.11 Public Health and Safety

Health and safety issues will be addressed in the EIS and will focus on the operation or failure of the Project and its components. Health and safety topics will include the potential for turbine collapse and blade throw, shadow flicker, fire, noise and vibration, electromagnetic interference, and stray voltage.

3.12 Military Interests

Military interests in the vicinity of the Project include the Army's Kahuku Training Area (KTA), the Kawailoa Training Area (KLOA), and the A-311 Tactical Flight Training Area (TFTA), see Figure 3. The Project Area abuts the eastern side of the KTA, the second largest maneuver training area on Oahu encompassing approximately 4,569 acres (1,849 hectares). The KTA is primarily utilized to conduct and support multiple infantry battalion-sized Army Training and Evaluation Program missions, which include mountain and jungle warfare, and air support training. There are 11 designated helicopter landing zones and three parachute drop zones in the KTA, the nearest of which is approximately 0.6 mile (1.0 kilometer) west /southwest of the Project Area. The northern end of the Army's Kawailoa Training Area (KLOA) is also located within 5 miles (8 kilometers) of the Project Area. KLOA is used primarily for helicopter aviation training, helicopter unit tactical training, long-range patrol, and command post displacement. A-311 TFTA overlays the KTA and KLOA and is defined as a Special Use Airspace and is used for helicopter training exercises. There are no formal flight routes but flights may occur anywhere within A-311 TFTA. The EIS will evaluate the potential for effects associated with loss of land available for military training, changes in training and practices with a resulting change in military readiness, degradation of functioning of military communications systems, and hazards to training flight operations in A-311 TFTA.

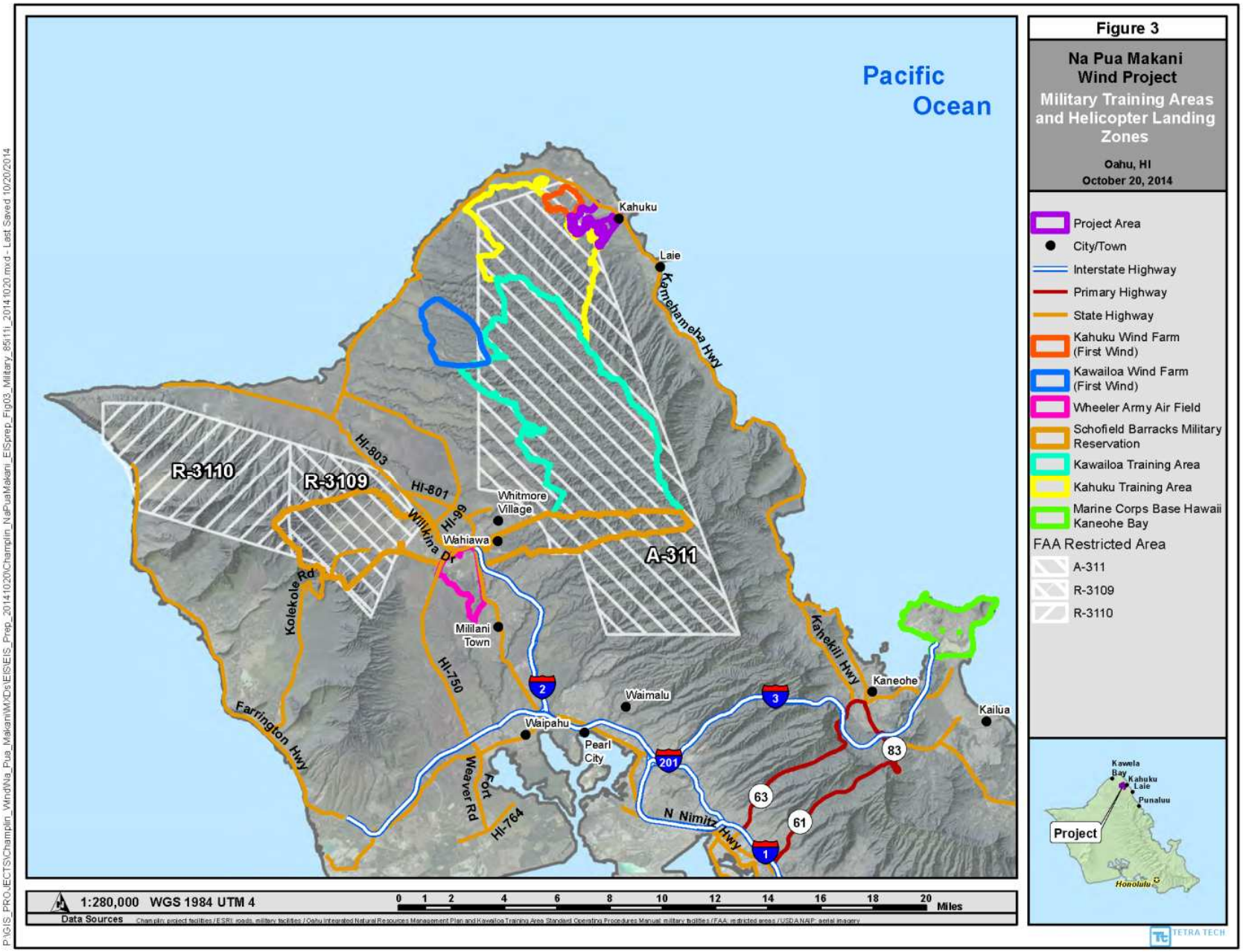


Figure 3
Na Pua Makani Wind Project
Military Training Areas and Helicopter Landing Zones
Oahu, HI
October 20, 2014
Pacific Ocean
Project Area
City/Town
Interstate Highway
Primary Highway
State Highway
Kahuku Wind Farm (First Wind)
Kawailoa Wind Farm (First Wind)
Wheeler Army Air Field
Schofield Barracks Military Reservation
Kawailoa Training Area
Kahuku Training Area
Marine Corps Base Hawaii Kaneohe Bay
FAA Restricted Area
A-311
R-3109
R-3110
R-3110
R-3109
A-311
Kahuku
Laie
Kamehameha Hwy
HI-803
HI-801
HI-99
Whitmore Village
Wahiawa
Wilikina Dr
Kolekole Rd
Mililani Town
HI-750
Farrington Hwy
Waipahu
Pearl City
Waimalu
Kaneohe
Kailua
Kanehili Hwy
Weaver Rd
Fort
HI-764
N Nimitz Hwy
2
3
201
1
63
61
83
Kawela Bay
Kahuku
Laie
Punaluu
Project
Honolulu
1:280,000 WGS 1984 UTM 4
0 1 2 4 6 8 10 12 14 16 18 20 Miles
Data Sources
TETRA TECH
P:\GIS_PROJECTS\Champlin_Wnd\Na_Pua_Makani\MXDs\EIS\EIS_Prep_20141020\Champlin_NaPuaMakani_EISprep_Fig03_Military_85i11i_20141020.mxd - Last Saved 10/20/2014

4.0 ANTICIPATED IMPACTS

4.1 Short-Term Impacts

Construction of the Project would result in short-term adverse impacts to soil, hydrology, and biological resources in the Project Area. The Project would result in ground disturbance, much of which would be temporary and subject to restoration activities at the end of Project construction. Construction would be completed in accordance with federal, state and county regulations and implementation of best management practices would minimize impacts to soil, hydrology and water resources, and vegetation. Avoidance and minimization measures included in the Project HCP would reduce the likelihood of potential construction related impacts to wildlife, including listed species (e.g., associated with attraction to nighttime construction lighting (seabirds) and removal of bat roosting habitat). The Project would result in a short-term beneficial impact to the local economy during construction due to job creation, although there would also be short-term adverse construction impacts such as noise, dust, and increased traffic.

4.2 Long-Term Impacts

There will be long-term impacts of the Project that would be beneficial. Operation of the Project would provide a source of electrical energy generated from an abundant, clean, local, and infinitely renewable energy source at approximately one-half the cost of burning imported oil. Generation and integration of wind energy into the electric grid further reduces fossil fuel consumption, thereby reducing GHG emissions, particulate-related health effects, and other forms of pollution associated with coal or diesel fuel electric generation. Over the long term, the Project would provide a stable, long-term source of tax revenue for the state and county. The Project would also provide a revenue stream for the State in terms of lease payments. In addition, the power generated by the Project would be sold to HECO under a long-term, set base price contract with fixed annual escalation, providing long-term price stability for HECO consumers. Potential long-term adverse impacts would occur in relation to noise, threatened and endangered species (authorized and mitigated for under the Project HCP), archaeological resources, and visual resources. These impacts will be discussed in detail in the EIS. Cumulative impacts of the Project with planned developments in the surrounding Koolauloa region will be identified in the EIS.

5.0 SIGNIFICANCE CRITERIA

The EIS will assess the overall impact on the environment based on criteria established in HRS Chapter 343, and HAR Chapter 200 (Environmental Impact Statement Rules). In determining whether an action may have a significant effect on the environment, the EIS will consider every phase of the Proposed Action and the expected consequences (primary, secondary and cumulative, as well as short-term and long-term). Thirteen categories of Significance Criteria are identified in

HAR Chapter 200. Each of these significance criteria are presented below, and are discussed in the context of the Project.

Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;
The site has been extensively modified as a result of prior land uses. Field studies of natural and cultural (including archaeological and historic) resources will be conducted for the Project Area. The outcome of these studies will inform appropriate mitigation measures. A Cultural Impact Assessment will be prepared for the EIS.

Curtails the range of beneficial uses of the environment;
The construction and operation of the Project will not curtail the beneficial uses of the environment. The Project is being designed to minimize impacts to active agriculture, although some agricultural impacts are anticipated.

Conflicts with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders;
The Project would contribute to the States RPS and would also help to meet goals embodied in the state's Global Warming Solutions Act of 2007 and the 2008 Hawaii Clean Energy Initiative. The Project would comply with and help meet the State and County land use policies and goals of development of renewable energy on Ag zoned land. The EIS will expand on the Project's conformance with land use plans, policies, and controls and consistency with key federal, state, and local regulations. A list of permits and approvals anticipated for the Project is provided in Table 2.

Substantially affects the economic or social welfare of the community or State;
The Project would provide both short-term and long-term economic benefits to the state and county. Short-term beneficial economic impacts would include direct wages to local workers and secondary spending by construction workers for housing, food and other goods and services that would further stimulate the local economy. Over the long term, the Project would provide a stable, long-term source of tax revenue for the state and county. The Project would also provide a revenue stream for the State in terms of lease payments. In addition, the power generated by the Project would be sold to HECO under a long-term, set base price contract with fixed annual escalation, providing long-term price stability for HECO consumers. An economic assessment will be provided in the EIS.

Substantially affects public health;
Public health and safety concerns commonly raised in association with wind energy development relate to the operation and/or failure of the Project or its components. Topics include the potential for turbine collapse and blade throw, shadow flicker (shadows cast by the moving blades), fire, noise and vibration, electromagnetic interference, and stray voltage. Although substantial public

health effects are not anticipated for the Project, public health and safety will be addressed in detail in the EIS.

Involves substantial secondary impacts, such as population changes or effects on public facilities;
The Project is not anticipated to result in any growth inducing effects or substantial impacts to public infrastructure. Secondary impacts will be addressed in the EIS.

Involves a substantial degradation of environmental quality;
The Project would impact soil, hydrology, vegetation, and wildlife resources in the Project Area in association with ground disturbance, much of which would be temporary and subject to restoration activities at the end of Project construction. Ground disturbance during construction increase the potential for soil erosion and runoff. Grading has the potential to alter drainage patterns within the Project Area and result in stormwater runoff in adjacent areas. The EIS will describe best management practices and mitigation measures that would be implemented to minimize degradation of environmental quality.

Is individually limited but cumulatively has a considerable effect upon the environment or involves a commitment for large actions;
The EIS will provide a detailed discussion of cumulative effects associated with each resource. A list of projects and actions considered in the analysis of cumulative effects will also be provided.

Substantially affects a rare, threatened, or endangered species, or its habitat;
The Project has the potential to result in adverse effects to threatened and endangered birds and bats that cannot be avoided, although the avoidance, minimization, and mitigation measures outlined in the Project HCP would reduce these impacts. The EIS will evaluate impacts to threatened, endangered and other special status species, and will evaluate impacts associated with Project construction and operation.

Detrimentally affects air or water quality or ambient noise levels;
Construction and operation of the Project have the potential to affect water quality (through erosion and sedimentation) and generate noise. The EIS will include a Preliminary Drainage Plan and assessment of the potential for drainage pattern alteration and flood risk. The EIS will also present the results of baseline acoustic monitoring and will include an analysis of audible noise and low frequency/infrasound impacts and compliance with noise regulations.

Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;
Small portions of the Project Area are located within the Civil Defense Tsunami Evacuation Zone (NOAA 2013b) and within Flood Zones AE and AEF, which are designated as special flood hazard or

high risk, areas. The EIS will analyze the potential for effects to the Project from natural hazards and will include a Preliminary Drainage Plan.

Substantially affects scenic vistas and view planes identified in county or state plans or studies;
The Project would be visible from the surrounding communities. A visual impact assessment will be prepared for the EIS which will include a Geographic Information System-based viewshed analysis and visual simulations of Project wind turbines from key viewpoints.

Requires substantial energy consumption.
Construction and operation of the Project would not require substantial energy consumption. Operation of the Project would provide a source of electrical energy generated from an abundant, clean, local, and infinitely renewable energy source. The use of a local renewable resource, as compared to imported foreign fuels, also provides greater security in maintaining an energy supply and reduces State expenditures on imported fossil fuels. The Project would provide electricity to HECO's grid, and is expected to do so continuously over its approximately 20-year lifespan.

6.0 RANGE OF ALTERNATIVES

The EIS will provide a discussion of the alternative development process and screening criteria. Alternative evaluated in the EIS will include a No Action alternative, the Proposed Action (Alternative 2; described above), and a larger generation wind project alternative. The EIS will describe alternatives that were considered but eliminated from further analysis.

6.1 Alternative 1 – No Action

Under the No Action alternative, the Project would not be constructed. The USFWS would not issue an ITP, and DLNR would not approve the Project. Alternative 1 would avoid the potential take of Covered Species, but would not provide a clean source of electricity, offset carbon emissions, or contribute to the achievement of the State's renewable energy goals and achievement of the State's RPS law.

6.2 Alternative 2 (Proposed Action) – Up to 10 Wind Turbines

Alternative 2 is the Proposed Action and fully described in Section 2. Alternative 2 would involve the construction and operation of a wind generation facility of up to approximately 25 MW, consisting of up to 10 turbines. It would include an onsite substation, operations and maintenance facility, electrical collections system, a 34.5-kV HECO-owned transmission line, and a construction access route along existing public roadways. Alternative 2 would also involve the issuance of an ITP/ITL to authorize incidental take of the Covered Species. Alternative 2 would meet the Project's purpose and need objectives by providing a clean source of renewable energy and contributing to HECO's RPS requirements.

6.3 Alternative 3 – Larger Generation Wind Project (up to 12 Wind Turbines)

Alternative 3 would involve the construction and operation of a larger generation facility of up to approximately 42 MW. Alternative 3 would consist of up to 12 turbines total (2 to 4 additional turbines compared to the Proposed Action) and associated infrastructure. HECO transmission line upgrades would be required for the additional turbines and associated generating capacity beyond those identified in Proposed Action, resulting in a lag of at least 3 years before the construction of the additional turbines. At this time, there is no specific engineering information from HECO indicating the extent or specific location of the transmission line upgrade that would be needed. Alternative 3 would also include the issuance of an ITP/ITL to authorize incidental take of the Covered Species (the same as under the Proposed Action). Alternative 3 would also meet the Project's purpose and need and objectives by providing a clean source of renewable energy and contributing to HECO's RPS requirements.

7.0 ANTICIPATED DETERMINATION

In 2012, Act 172 was signed into law. The Act allows a proposing agency to elect to prepare an Environmental Impact Statement without first preparing an Environmental Assessment. Based on the established significance criteria, the description of the Project provided above, and input received from the local community during preliminary outreach efforts it is anticipated that the Proposed Action may result in a significant impact to the human and/or natural environment. Therefore, under the provisions of Act 172 (12), the DLNR has determined from the outset that an EIS is warranted for the Project. This EIS Preparation Notice initiates the process, as provided by the rules. In fulfillment of Hawaii's Environmental Impact Statement process, public review and comments relevant to the Project will be addressed in the EIS. The DLNR Land Division will be the Accepting Authority for the Project.

8.0 REFERENCES

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