DOE/EA-1726

FINDING OF NO SIGNIFICANT IMPACT
DEPARTMENT OF ENERGY LOAN GUARANTEE TO KAHUKU WIND POWER, LLC FOR CONSTRUCTION OF THE KAHUKU WIND POWER FACILITY IN KAHUKU, O'AHU, HAWAII

AGENCY: U.S. Department of Energy, Loan Guarantee Program Office

ACTION: Finding of No Significant Impact

SUMMARY: The U.S. Department of Energy (DOE) conducted an environmental assessment (EA) that analyzed the potential environmental impacts associated with the proposed construction and operation of a 30 megawatt (MW) wind power facility on approximately 578 acres (234 hectares) in the Kahuku area on the northeastern portion of the Island of O'ahu, within the State of Hawaii. DOE, through its Loan Guarantee Program Office (LGPO), proposes to provide a Federal loan guarantee in the amount of $117 million pursuant to Title XVII of the Energy Policy Act of 2005 (EPAct 2005) to Kahuku Wind Power LLC to support the construction of the proposed wind power facility. The purpose and need for agency action is to comply with DOE's mandate under EPAct 2005 by selecting eligible projects that meet the goals of the Act. DOE is using the NEPA process to assist in determining whether to issue a loan guarantee to Kahuku Wind Power LLC to support the proposed project.

The proposed wind power facility would integrate installation of two new or significantly improved technologies compared to commercial technologies currently available in the U.S., the Xtreme Battery Energy Storage System (BESS) and the Clipper LibertyTM wind turbine generators (WTGs). The 30 MW of power potentially generated by the proposed facility would be able to eliminate the use of approximately 154,550 barrels of oil annually that would otherwise be used to produce conventional power in Hawaii. Eliminating the consumption of this amount of oil would in turn reduce emissions of the following air pollutants:

- carbon dioxide: 159 million lbs (72.4 million kg) annually and 3.2 billion lbs (1.4 billion kg) over the life of the project;
- sulfur dioxide: 330 thousand lbs (149.8 thousand kg) annually and 6.6 million lbs (2.7 million kg) over the life of the project;
- nitrogen oxides: 237 thousand lbs (107 thousand kg) annually and 4.7 million lbs (2.1 million kg) over the life of the project; and
- mercury: 1.5 lbs (0.7 kg) annually and 30 lbs (13.6 kg) over the life of the project.

All discussion and analysis related to the potential impacts of construction and operation of the proposed wind power facility are contained in the Final EA (DOE/EA-1726), which is incorporated by reference. DOE examined potential impacts on the following resources and found none to be significant: climate; topography; geology, soils, and geologic hazards; water resources; air quality; noise; scenic resources; public health and safety, including impacts related to intentionally destructive acts; land use; flora; wildlife; socioeconomics and environmental

justice; cultural resources; utilities and public services; and cumulative effects, including global climate change.

Under the State of Hawaii regulatory process, Kahuku Wind Power LLC is in the final stages of obtaining an Incidental Take License (ITL) for seven federally listed and one state listed threatened or endangered species in accordance with Chapter 195-D, Hawaii Revised Statutes, which is issued by the Hawaii Department of Land and Natural Resources (HDLNR). The U.S. Fish and Wildlife Service (USFWS) works in consultation with HDLNR during the ITL process. In order to qualify for an ITL, an applicant must implement a Habitat Conservation Plan (HCP). As required by Section 195D-30, all actions authorized under the HCP must be designed to result in an overall net benefit to both state and federally listed threatened and endangered species.

Kahuku Wind Power LLC began the formal HCP process in early November 2008. The draft HCP was released for public review in August 2009 with a public comment period through November 2009 and a public meeting on November 4, 2009. Two comment letters on the draft HCP were received, one from Office of Hawaiian Affairs (OHA) and one from the state Attorney General. The USFWS also provided comments on the draft HCP. In response to these comments, Kahuku Wind Power LLC revised the HCP. No comments were received during the public meeting. The HCP for the proposed wind power facility has been approved and outlines the conservation measures Kahuku Wind Power LLC will be required to implement under the ITL. These conservation measures are identified in the EA as an integral part of the proposed project and would reduce the impacts to listed threatened and endangered species.

As part of the NEPA process, DOE consulted with USFWS under Section 7 of the Endangered Species Act (ESA) to address the potential for construction and operation of the proposed facility to adversely affect seven federally listed threatened or endangered species. USFWS issued a biological opinion (BO) on May 13, 2010. In the BO, USFWS determined that the proposed wind project would not jeopardize the survival and recovery of any federally listed threatened or endangered species and adopted the conservation measures in the HCP as the reasonable and prudent measures required to minimize incidental take. The conservation measures in the HCP will be enforced by the State of Hawaii through the ITL and an HCP Implementing Agreement and by DOE through the Common Agreement for the loan guarantee.

In addition to the ESA consultation process, DOE provided USFWS with an opportunity to comment on the draft EA. USFWS responded with a request for additional information in the EA on measures to control invasive species from construction materials and on the benefits and potential impacts of conservation measures for covered species required in the HCP. DOE added text to Sections 3.11.2.1 and 3.12.4.1 of the EA to address USFWS comments.

DOE notified OHA and two local community leaders of its finding that no historic properties would be affected by the proposed action under Section 106 of the National Historic Preservation Act and provided an opportunity for comment. OHA concurred with DOE's no adverse effect determination and requested information on consultations conducted with individuals knowledgeable of a certain portion of the proposed project site. DOE conducted additional consultation and responded to OHA that none of the individuals contacted were aware of any culturally or historically significant resources at or surrounding the site. DOE also received

comments on the archeological survey from Mr. Ralph Makaiau, President of Kahuku Community Association. DOE's responses to OHA and Mr. Makaiau are included in Appendix L of the EA.

In accordance with applicable regulations and policies, DOE sent a notification letter regarding the Department's determination to prepare an EA to the Hawaii Office of Environmental Quality Control on November 13, 2009. The letter described the proposed action and stated that a draft EA would be sent to the state for review. On February 26, 2010, DOE sent the draft EA to the Hawaii Office of Environmental Quality Control and invited their comments on the draft. The draft EA was also posted on the Loan Guarantee Program Office website and a notice of availability was published in the Honolulu *Advertiser* and the Honolulu *Star Bulletin*. At the end of the 30 day public comment period, no additional comments were received.

DETERMINATION: On the basis of the Final EA, DOE has determined that providing a Federal loan guarantee to Kahuku Wind Power LLC to support construction of the proposed wind power facility in O'ahu, Hawaii will not have a significant affect on the human environment. The preparation of an environmental impact statement is therefore not required, and DOE is issuing this Finding of No Significant Impact.

Copies of the Final EA and BO are available at the DOE Loan Guarantee Program Office website at www.lgprogram.energy.gov or from

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Additional information on the DOE NEPA process is available from

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Issued in Washington, DC on the 27th day of May in the year 2010.

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