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March 23, 2026

Endangered Species Recovery Committee
Honolulu, Hawai'i

SUBJECT: Division of Forestry and Wildlife Evaluation of the Kahuku Wind Project Habitat Conservation Plan Implementation During Fiscal Year 2025 and Quarters 1 and 2 of Fiscal Year 2026, and Request for ESRC Review of Licensee's Annual Report

Committee Members,

The Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW), requests the Endangered Species Recovery Committee (ESRC) to review the Kahuku Wind Energy Project annual report in accordance with the requirements outlined in Section 195D-25, Hawaii Revised Statutes. The annual report was prepared by Tetra Tech on behalf of Kahuku Wind Farm (licensee) as part of the obligations under the Kahuku Wind Energy Habitat Conservation Plan (HCP; SWCA 2010) and State Incidental Take License (ITL; ITL-10).

This submittal provides a summary of the FY 2025 annual report, along with the Q1 and Q2 FY 2026 reports, and includes comments from DOFAW.

BACKGROUND

ITL Licensee: Kahuku Wind Power, LLC
(Note that Terraform Power owns Kahuku, LLC)

Project: Twelve WTGs with a total 30-MW energy-generating capacity

ITL Duration: June 7, 2010 – June 7, 2030 (as of December 2025, 15.5 years (77.5%) through the license term)

Status of ITL: Two Hawaiian hoary bat fatalities were reported during the FY 2025 reporting period. In Q1, one additional Hawaiian hoary bat fatality was reported, increasing the total adult take estimate to 30 (26 direct, 4 indirect) as of December

2025. No fatalities at the wind farm site have been reported for other HCP-covered species to date. The licensed take limit is 23 bats.

Table 1. Total direct and indirect take and estimated total adjusted take since ITL issuance under the Kahuku Wind Power ITL as of December 31, 2025.

| Common Name | Total Direct Take (unobserved and observed)¹ | Indirect Take using HCP multipliers² | Total Estimated Take | Total Licensed Take |
|--------------------|--|--|-----------------------------|----------------------------|
| Hawaiian Hoary Bat | 26 | 4 | 30 | 23 |

¹ Based on the 80% credible maximum using the following model: Dalthorp, D., M. M. P. Huso, and D. Dail. 2017. Evidence of absence (v 2.0) software user guide: U.S. Geological Survey Data Series 1055.

² DNA results have identified the sex of nine of the ten bat fatalities detected at the project, confirming that six of the fatalities were female. Sex identification of one carcass was not confirmed, and the last two carcasses were genotyped as male. There is one pending carcass. These results were provided directly by Bishop Museum as of February 2025.

Total Projected Take at the End of the License Term:

Cumulative bat take through FY 2025 has surpassed the permitted level. Kahuku has begun working with agencies on an HCP amendment to address the take exceedance.

Avoidance and Minimization Measures Implemented:

Kahuku has been acoustically monitoring for bats at the site since operations began in 2011. Annual detection rates across all monitoring years have consistently remained low, below nine percent. The observed detection rates in the past three monitoring years (FY 2023 – FY 2025) were significantly higher than those recorded before FY 2022, excluding FY 2019. While the increases in detection rates from FY 2023 through FY 2025 are likely due to updated microphone sensitivity, the overall detection rates across all years appear stable, with no significant upward or downward trends, regardless of variations in sampling effort or microphone models.

Furthermore, adaptive management measures have been implemented at the wind farm and include additional trapping efforts using Havahart Live traps. Since the start of FY 2026, these efforts have removed four cats, including one cat in Quarter 2. The measures also involve adjustments in vegetation management and scavenger control efforts, along with ongoing project-wide Low Wind Speed Curtailment of all turbines from April through November.

Finally, Kahuku installed bat deterrents on the turbines in FY 2025. Thermal cameras are being used alongside the deterrents to assess bat behavior in response to them. This data will be available by the end of FY 2026. Kahuku has been working with the USGS on the idea of a Smart Curtailment program for adaptive wind turbine curtailment and plans to use their thermal and acoustic data for this analysis.

Mitigation Status:

Hawaiian hoary bat: Tier 1 mitigation is complete. Kahuku is currently implementing the Tier 2 Hawaiian Hoary Bat Mitigation Plan, focusing on improving edge and foraging habitat for bats in the Helemano Section of the 'Ewa Forest Reserve. Plan implementation began in December 2024 with the clearing of vegetation within the bat foraging corridors. As of December 2025, Kahuku has completed baseline monitoring and vegetation clearing within the bat foraging corridors. Currently, Kahuku is conducting vegetation monitoring and maintenance as needed, as well as Year 1 monitoring (acoustics and arthropod sampling). Kahuku is still awaiting a response regarding their request for review of Hawaiian historical sites at Helemano from the Hawai'i State Historic Preservation Division, concerning any potential impacts to historic sites from water tank installation, piping, and barbed wire fence removal.

Waterbirds, short-eared owl, and seabirds: Tier 1 mitigation was completed; no further mitigation is needed at this time.

FY 2024 Annual Review:

The ESRC made the following recommendations at the FY 2024 annual review meeting that *Kahuku incorporated* into the FY 2025 actions:

- Present mitigation and adaptive management measures to reduce take at the wind farm and demonstrate how they will address the excess take before the amendment.
- Include deterrent specifications in the annual report.
- Request an update on the ongoing license amendment to increase bat take.
- Consider using trail cameras to monitor predators at the mitigation site and then adjust predator control actions based on what you find, following adaptive management practices.

In FY 2025, Kahuku collaborated with NRG Systems to install 12 tower-mounted ultrasonic acoustic deterrent systems, with one system (each comprising four deterrent units) at each turbine. Kahuku also installed corresponding thermal cameras at each turbine. Data from post-construction mortality monitoring and thermal camera imaging will be used to evaluate the effectiveness of the deterrents. Lastly, Kahuku is reviewing data and determining the implementation of an alternative Smart Curtailment program.

Deterrent specifications are detailed in section 10.0 of the annual report.

Kahuku plans to submit a revised HCP concept to DOFAW in March 2026, with a site visit and HCP meeting scheduled for May 4, 2026. They are collaborating with DOFAW to develop a schedule for HCP development, review, and ITL amendments.

Efforts in FY 2025 at the Helemano mitigation site focused on vegetation clearing. Kahuku is evaluating the feasibility of deploying a thermal camera at the site to record both bat activity and the presence of potential predators.

Issues & Concerns:

KAH has exceeded its permitted bat take under its current license and is now seeking an amendment to the Incidental Take License (ITL) to cover additional bat take. KAH submitted a Letter of Intent for developing a new habitat conservation plan/amendment for the 'ōpe'ape'a to agencies on April 5, 2024. Kahuku presented the amendment concept to the ESRC in September 2024.

- Amendment to the HCP needed
 - At 30 estimated cumulative bats taken, the licensee has exceeded their ITL allotted take (ITL limit of 23 bats).
 - The high rate of bat take exceeded the expected average rate of take.

AGENCY RECOMMENDATIONS:

The licensee has been meeting with DOFAW regarding this amendment since 2024. DOFAW has provided oral communication, reviewed documents, and offered two rounds of written comments on an HCP amendment concept. Additionally, the ESRC gave feedback on the Kahuku concept document in September 2024. DOFAW recommends that the licensee incorporate agency comments and ESRC feedback and submit a draft amendment to request higher bat take as soon as possible, so DOFAW can review it and present it to the ESRC as part of the approval process.

If you have any questions, please reach out to our Habitat Conservation Planning Program Associate, Kinsley McEachern, at laurinda.k.mceachern.researcher@hawaii.gov.

Respectfully submitted,



DAVID G. SMITH
Administrator