



The Senate

STATE CAPITOL
HONOLULU, HAWAII 96813

June 6, 2019

Field Supervisor, U.S. Fish and Wildlife Service
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122
Honolulu, Hawaii 96850

Submitted by Email:
HlwindPEIS@fws.gov

RE: Wind Energy HCPs and PEIS
FWS-R1-ES-2019-N032

Dear Field Supervisor:

I have read these documents and offer the following comments and questions.

Alternative 3, Increased Curtailment, would prohibit all nighttime operations between April 15 and September 15, "when Hawaiian hoary bats are observed to be rearing young and are most active. The cessation of operations during this timeframe would result in minimization of the take of adult Hawaiian hoary bats and eliminate indirect take of juvenile bats."

Appendix G, Timber Harvesting, says "The Service recommends to not cutting trees above 15 ft between June 1 and September 15 to avoid impact to dependent (non-volant) bat pups."

1. Why does the Service contemplate two different beginning dates to limit activities that impact bat pupping and rearing? Should the timber harvesting restriction date be moved to April 15?

The Auwahi Wind PCMP includes systematic searches at all turbines inside the 328-ft radius surrounding the tower base. Kawailoa searches all 30 turbines within a 115-ft radius. Auwahi turbines are 428 ft tall, while Kawailoa turbines are 493 ft tall.

2. Why do these two projects have such different search radii? Why is this difference allowed, particularly in light of the Kawailoa's bat take? A 5 oz. baseball can travel over 400 feet after leaving a baseball bat at 100 mph. How far can a Hawaiian hoary bat travel when struck by a wind turbine blade spinning much faster? Is a 115-ft, or even a 328-ft, search radius considered prudent?

KWP II and Pakini Nui PCMP both include searches at all 14 turbines every seven days, the former within a radius of 229.7-ft radius, and the latter within a radius of 197-ft to 295-ft.

Auwahi and Kawaiiloa search approximately twice a week. KWP II and Pakini Nui towers are 328-ft tall.

3. Why is it appropriate for KWP II and Pakini Nui to search half as often as the other two projects? What is the likelihood a bat found at three days would also be found at seven days? Why do KWP II and Pakini Nui have wider search areas than Kawaiiloa and narrower search areas than Auwahi? How does KWP II search the cliffs?

Auwahi proposes 6.9 m/s LWSC from August through October, and 5.0 m/s otherwise. Kawaiiloa proposes to continue with 5.0 m/s year-round, with a 5.2 m/s renewal cut-in speed. KWP II proposes 5.5 m/s cut-in from February 15 through December 15. Pakini Nui proposes a 5.5 m/s cut-in and 5.0 m/s cut-out.

4. How do these different LWSC plans affect the estimated take for each of the projects? It would be helpful to review a table comparing the estimated reduced take for each project at each of the various wind speeds. If the purpose of LWSC is to minimize bat take to the maximum extent practical, why is each project allowed a different cut-in speed? If the reason for diverse LWSC is financial, please provide the financial impact for each project at each wind speed.

The mitigation actions listed for the proposed final tiers use terms like “based on the best available science and agency guidance...” and include general guidelines for land acquisition and protection. The minimum expectations appear vague and susceptible to financial haggling.

5. Is there a minimum commitment of land to be acquired or money to be invested if/when the final tiers are reached? What happens if the best available science indicates a certain amount of land acquisition and the project claims it cannot afford to acquire that much land? Negotiations should not be subject to claims of poverty, such that the project continues to operate without adequately meeting its obligation to species protection.

6. Why is any project allowed to operate after exceeding its allowable take? Is that not operating outside the law and subject to penalty for the non-permitted take? Why are they not bound to immediate nighttime curtailment whenever they fail to meet a tier commitment or exceed the take permit for bats? Why not make that clear in the amended permits and in future plans?

In Section 3.8, Hawaiian Hoary Bat, the median core use area for a male bat is calculated as 20.3 acres. The report then makes various assumptions and posits an estimate of 14,500 bats throughout the state, and 11,400 bats on Oahu, Maui and Hawaii islands.

7. It is mentioned elsewhere that the population is unknown. Is the Service establishing the existing bat population in Hawaii based on these assumptions? At a January 2019 meeting of the Endangered Species Recovery Committee, a much larger area per bat was discussed. How would the much larger area per bat affect these calculations? How many bats exist on each island?

Section 4.6.5, page 101, second paragraph, states "The habitat improvement would be expected to provide foraging sufficient to support a minimum of 85 bats if we assume bats use an average 20.3 acres for their core use area."

8. Can you point to a specific 1700 acre parcel, or similar, anywhere in Hawaii that has a documented population of 85 bats? A "minimum of 85 bats" indicates a conservative calculation and some certainty. How many bats are present in that area today? Assuming the numbers would increase to a minimum of 85, how many additional bats would relocate from other areas, and how many will be born in this area as a result of the improved foraging?

Alternative 2, Proposed Action, claims for each project that "It is certain that the entire population of bats on (island) would not be directly extirpated by the operation of (project)." Another recurring comment is "Acoustic detections have not shown a decline (in population)." The section on cumulative impacts does not include all potential take and threats.

9. Although a section called cumulative impacts is included in this report, there is no discussion on the cumulative take of bats per island, or the state, by all wind projects and other hazards. How many bats exist on each island, how much is the annual take, what is the annual rate of reproduction? If these numbers cannot be calculated, how can there be certainty?

10. Until the wind projects were proposed, there was limited detection of bats in many parts of the state. More monitoring is being done today than ever before. Under these circumstances, does "detections have not shown a decline" prove a stable or increasing population? How do we know that the population is not nearing a decline, or already in decline?

I am concerned that these wind projects will not adequately minimize and mitigate their take of the endangered 'ōpe'ape'a, the Hawaiian hoary bat, to the maximum extent practical. I am skeptical that the amended HCPs do anything more than condone more take at existing levels.

Why are any projects ever allowed to operate after exceeding their permitted take? Where is the evidence that bats will be replaced by any of the proposed mitigation measures? Adaptive management should include full nighttime curtailment or seasonal nighttime curtailment.

Thank you for allowing me this opportunity to share my thoughts.

Respectfully submitted,



Gil Riviere
Senator, District 23
Oahu's North and Windward Shores