

State of Hawai'i
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Forestry and Wildlife (DOFAW)
Honolulu, Hawaii 96813

December 17, 2015

Endangered Species Recovery Committee
State of Hawai'i
Honolulu, Hawai'i

Committee Members:

SUBJECT: MASTER'S REPORT ON PUBLIC HEARING AND REQUEST FOR RECOMMENDATION OF APPROVAL ON THE NA PUA MAKANI WIND ENERGY PROJECT DRAFT HABITAT CONSERVATION PLAN

BACKGROUND:

In 2009, a pre-application for the Na Pua Makani Wind Power project (Project) was submitted by West Wind Works, LLC (West Wind) for a 25 MW facility to be located in Kahuku Agricultural Park. In 2011, West Wind submitted a draft Habitat Conservation Plan (HCP) to the State of Hawai'i Department of Land and Natural Resources Division of Forestry and Wildlife (DLNR – DOFAW) for an updated project proposal designed as a 20.7 MW, nine turbine facility. In 2012, A. Champlin Hawaii Wind Holdings, LLC (a subsidiary of Champlin / GEI Wind Holdings, LLC) acquired the Project from West Wind, and formed Na Pua Makani Power Partners, LLC (Na Pua Makani). Following acquisition of the Project, Na Pua Makani expanded the project's footprint and proposed increasing the facility capacity to 25 megawatts (MW).

Na Pua Makani proposes to construct and operate the Project of nine turbines with a nameplate generating capacity of up to approximately 25 MW on O'ahu, Hawai'i. The proposed Project would be located on state zoned agricultural land use district and urban land use district leased from DLNR and from the Malaekahana Hui West, LLC. The Project is proposed to begin construction in the second quarter of 2016 and begin commercial operation in 2017.

The anticipated life of the Project is 21 years. Prior to the expiration of the 21-year period, Na Pua Makani will evaluate whether to continue operation of the Project or to decommission it. Should the period of Project operation be extended, the facility may also be upgraded and repowered with appropriate lease, permit, and approval extensions obtained.

DOFAW released the draft HCP for a 60-day public comment period in the March 8, 2015, Office of Environmental Quality Control Environmental Notice. The draft HCP

was reviewed by the Endangered Species Recovery Committee (ESRC) at the March 31, 2015 meeting. On June 4, 2015, DOFAW conducted a public hearing on O‘ahu to receive public comments. During the public comment period, DOFAW received fifteen formal comments from members of the public and have included the Master’s report on the public hearing and table of comments in this submittal.

Since the draft HCP was published in the Environmental Notice, changes to the Project description include an increase in the height of the turbine with the maximum blade tip height proposed increasing up to 200 meters (656 feet) from 156 meters (512 feet). In addition, the take request for the Hawaiian goose or nēnē was decreased from eleven to six based on the change in current population on the island of O‘ahu.

Na Pua Makani is pursuing an Incidental Take License through the development of an HCP – in consultation with U.S. Fish and Wildlife Service and DOFAW staff – for incidental take associated with proposed wind farm operations.

INCIDENTAL TAKE PROPOSED:

The Project has the potential to result in incidental take of species listed under the federal Endangered Species Act and state endangered species statutes. The following listed species (Table 1) have the potential to be killed or injured by colliding with Project wind turbine generators or other components, or during Project activities: the ‘a‘o or Newell’s shearwater (*Puffinus auricularis newelli*), the ae‘o or Hawaiian black-necked stilt (*Himantopus mexicanus knudseni*), the ‘alae ke‘oke‘o or Hawaiian coot (*Fulica alai*), the ‘alae ‘ula or Hawaiian common moorhen (*Gallinula chloropus sandvicensis*), the koloa maoli or Hawaiian duck (*Anas wyvilliana*), the nēnē or Hawaiian goose (*Branta sandvicensis*), the pueo or Hawaiian short-eared owl (*Asio flammeus sandwichensis*), and the ‘ōpe‘ape‘a or Hawaiian hoary bat (*Lasiurus cinereus semotus*). Indirect take of some of these species could also occur, as it is possible that the death of a listed adult during the breeding season could result in loss of eggs or dependent young.

Table 1. Proposed incidental take request for the Na Pua Makani Wind Energy Project.

Common Name	Scientific Name	Level of Take	Requested Authorization
Hawaiian Hoary Bat ‘Ōpe‘ape‘a	<i>Lasiurus cinereus semotus</i>	Tier 1	34 bats
		Tier 2	51 bats
Newell’s Shearwater ‘A‘o	<i>Puffinus auricularis newelli</i>	NA	4 Adults/fledglings 2 Chicks/eggs
Hawaiian Goose Nēnē	<i>Branta sandvicensis</i>	NA	6 birds
Hawaiian Duck Koloa	<i>Anas wyvilliana</i>	NA	4 birds

Common Name	Scientific Name	Level of Take	Requested Authorization
Hawaiian Stilt 'Ae'o	<i>Himantopus mexicanus knudseni</i>	NA	4 birds
Hawaiian Coot 'Alae Ke'oke'o	<i>Fulica alae</i>	NA	8 birds
Hawaiian Moorhen 'Alae'ula	<i>Gallinula chloropus sandvicensis</i>	NA	8 birds
Hawaiian Short-eared Owl Pueo	<i>Asio flammeus sandwhichensis</i>	NA	4 Adults/fledglings 4 Chicks/eggs

To address the potential of incidental take of the covered species, the following mitigation measures are proposed:

Proposed Mitigation for the Covered Species		
Covered Species	Tier 1 or One-Time	Tier 2
Hawaiian hoary bat	Provide funding for and report results from a bat research study contributing to the knowledge of Hawaiian hoary bats on Oahu and implement bat habitat restoration measures and associated monitoring at the Poamoho Ridge mitigation area.	Provide funding for and report results from a bat research study contributing to the knowledge of Hawaiian hoary bats and implement bat habitat restoration measures and associated monitoring at the Poamoho Ridge mitigation area.
Newell's shearwater	Provide funding to National Fish and Wildlife Foundation research fund to support research and management of Newell's shearwaters.	NA
Hawaiian goose	Construct hogwire fence at JCNWR and purchase predator traps and predator monitoring supplies for JCNWR.	NA
Hawaiian duck	Design and install fence and public information signs to reduce fatalities of waterbirds at Hamakua Marsh. Support public education and monitoring through the funding of a part-time biologist.	NA
Hawaiian stilt	Same as Hawaiian duck.	NA
Hawaiian coot	Same as Hawaiian duck.	NA
Hawaiian moorhen	Same as Hawaiian duck.	NA
Hawaiian short-eared owl	Provide funding to DOFAW's Endangered Species Trust Fund to support research and management of Hawaiian short-eared owls.	NA

MASTER'S REPORT ON PUBLIC HEARING

In accordance with the Notice of Public Hearing published in the *Honolulu Star Advertiser* on May 10, 2015 and the press release May 28, 2015, and as authorized by the Board of Land and Natural Resources, DLNR has conducted a public hearing relative to the proposed Na Pua Makani wind energy facility in Kahuku, O'ahu County, with a nameplate generating capacity of up to approximately 25 megawatts (MW). The proposed Project would be located on land leased from the State of Hawai'i's Department

of Land and Natural Resources (DLNR) and from the Malaekahana Hui West, LLC. The hearing was held on June 4, 2015 at 6:00 pm at the Kahuku Community Center 56-576 Kamehameha Highway Kahuku, Hawai'i 96731. DLNR Division of Forestry and Wildlife (DOFAW) staff in attendance were Jim Cogswell, Afsheen Siddiqi, Angela Amlin, John Vetter, and Kate Cullison.

J. Cogswell, Wildlife Program Manager, called the hearing to order and provided some general information on the proceedings. A presentation on the proposed Project was provided by A. Amlin, Protected Species Habitat Conservation Planning Associate. The meeting procedure was then described by J. Cogswell, and the floor was opened to public testimony, first to those who signed in on the sign-up sheet, then to others who had not initially signed in.

PUBLIC TESTIMONY

Kent Fonoimoana: My name is Kent Fonoimoana I apologize for my back facing to the crowd, but I have to address this gentleman here. First off, I would like to state that I am the president of Kahuku Community Association and our Association has opposed this project 8 to 1. I am also representing Kahuku on the Kahuku Neighborhood Board. And the Kahuku Neighborhood Board is opposed to this project unanimously. Now, getting beyond the fact that the community has opposed this, and this is for the folks that are going to be listening to testimony: we do not want this project in Kahuku. We have learned from the other project, First Wind. And in that light, it's my understanding in regards to the incidental take, that the wind turbine facilities are supposed to operate on a net-neutral basis. That means if you kill one bird that's protected species you're supposed to produce another one somehow. So now that the studies have been done with First Wind's project, we have data now, I would like to know how many of those critters, or birds that are endangered and protected, that have been killed both on Maui and on Oahu, how many have been reproduced or produced since then to make up for the ones that are lost due to bird strikes. I know I can't be prosecutorial, and I'm disappointed with that, but I would like to know that if your entity, the DOFAW, you guys have the numbers, and if they're not producing what's been subtracted, then what sense does it make to put more here on our island? We need to look at the cumulative impacts on all species. This project, the current project, the Kawailoa project, the Maui project, and now we want to have them offshore too. I think that, I'm not opposed to renewable energy, I'm opposed to those renewable energy that do impact our species. We give voice to the voiceless. Our critters don't have voices, they depend on us. They depend on you. We depend on you, you guys, to serve the critters. And if we're not doing our job, well then maybe they need to get another one.

I do have some questions specifically, I know I'm not supposed to ask questions, but part of my testimony will be this. I would like to know how heavily weighted TetraTech's study is with you guys because I read it, and in my reading of their, of that document sitting on the desk over there, it states that there's no nesting areas for 'u'au kani, or the petrel, or the shearwater in this area. Which is a crock of snot. I can take anybody in this room right now and walk about a mile and a half or less than that that way and introduce

you folks to what a nesting area looks like. And it's active. Mokuieia Island has protected and endangered species that their study says that most of these nesting areas are on the Leeward Coast and there's none here. And there's two radar studies that they did. In both of the studies they only identified one shearwater that flew over their project, the proposed project. Now I don't know how that's possible because in the evenings when I walk in La'ie and I walk in Kahuku I can hear them flying over, I know what they sound like. I'm a born and raised local person, we know what they are. Now for them to say that only one out of two of their studies, it makes me question the whole study from that, just those two instances might take the whole thing and throw it in the trash. First off, a company from Oregon? Come on. I mean, I'm not slamming TetraTech, I know they did their job, and speaking of folks that do their job, I thank you guys for coming all the way out to the country to come visit with us. But again, I'd like to say that I'm not against renewable energy, I am against adding more turbines to a community that is in solid opposition against this except for those community members who have gotten some financial incentives to either remain silent or to become active participants in the industrialization of the country. That's part of my testimony, you'll have more later on. I thank you all very much.

Tēvita Ka'ili: *[read written statement, below]*

Aloha Nui Mai Kākou,

Mahalo for organizing this Public Hearing. My name is Tēvita Ka'ili. I am a resident of this Ahupua'a of Kahuku and a cultural anthropologist with specialty in Pacific cultures. I am also the

Cultural Advisor for the Kahuku Community Association. I want to first acknowledge Ahamanu, the wind of Kahuku. Ahamanu (or 'Ahamanu) means the gathering of manu, birds. Note that Ahamanu, the name of the wind of Kahuku, is probably a reference to the role of the makani/wind in gathering ('aha) birds (manu) to Kahuku. As a Polynesian anthropologist, I am a strong advocate for clean, green, and renewable energy for this 'āina. However, I am deeply troubled by the injuring and killing of manu (birds and bats) by industrial wind turbines. These birds and bats are vital to our ecology and they are also highly significant to Polynesian cultures. Many of these beautiful winged creatures are acknowledged in the Hawaiian Creation Chant Kumulipo and other Polynesian creation stories as indigenous, as ancestors, as protectors, as creators, and as our elders. Some are 'aumākua (ancestral guardians), makua (parental birds), keiki (children of parent birds), kia'i (guardian/caretaker birds), and others are kinolau (body forms) of principal ancestors in Oceania. Tonight, we are discussing manu, winged creatures, which are all highly significant to Hawaiian and other Polynesian cultures:

'Aumākau – Ancestral Guardians:

1. 'Alae 'ula or Hawaiian moorhen (*Gallinula chloropus sandvicensis*) - 'Aumakua. Makua/parent bird of the Apapane bird (Kumulipo line #303). 'Alae 'ula taught Maui the secret of firemaking.

2. Pueo or Hawaiian short-eared owl (*Asio flammeus sandwichensis*) - 'Aumakua. Kia'i/guardian bird of the Noio bird (Kumulipo line #361).

3. Nēnē or Hawaiian goose (*Branta sandvicensis*) 'Aumakua. Kia'i/guardian bird of the Hehe bird (Kumulipo line #349)

Mākua – Parental/Caretaker Birds:

1. 'A'o or Newell's shearwater (*Puffinus auricularis newelli*) - Makua/parent bird of the A'u bird (Kumulipo line #299)

2. 'Alae 'ula or Hawaiian moorhen (*Gallinula chloropus sandvicensis*) - 'Aumakua. Makua/parent bird of the Apapane bird (Kumulipo line #303). 'Alae 'ula taught Maui the secret of firemaking.

3. 'Alae ke'oke'o or Hawaiian coot (*Fulica alai*) - Makua/parent bird of the Apapane bird (Kumulipo line #303).

Kia'i – Guardian/Protector Birds:

1. Pueo or Hawaiian short-eared owl (*Asio flammeus sandwichensis*) - 'Aumakua. Kia'i/guardian bird of the Noio bird (Kumulipo line #361).

2. Nēnē or Hawaiian goose (*Branta sandvicensis*) 'Aumakua. Kia'i/guardian bird of the Hehe bird (Kumulipo line #349)

3. Koloa maoli or Hawaiian duck (*Anas wyvilliana*) - "Koloa birds protected a legendary blind giant, Ima-i-ka-lani, and quacked to warn him from which side he might expect an attack (FS 169). (PPN toloa.)" (Hawaiian Dictionary). Koloa ducks are guardians (kia'i) for Imaikalani.

Keiki – Child/Offspring of Mākua Birds:

1. Ae'o (Kukuluae'o) or Hawaiian stilt (*Himantopus mexicanus knudseni*) Keiki/child bird of the Kioea (Kumulipo line #316).

Kinolau – Body Form/Manifestation/Vessels of Ancestors/Gods

1. Ōpe'ape'a or Hawaiian hoary bat (*Lasiurus cinereus semotus*) - Kinolau (body form) of Kanaloa (Kumulipo lines #589 – 592).

My main concern is that the Draft Habitat Conservation Plan only addresses the ecological impacts but does not address the adverse cultural impacts by the injuring and killing of birds and bats that are guardians, protectors, parents, caretakers, and vessels in Hawaiian and Polynesian cultures. Mahalo!

Elizabeth Rago: Aloha. I'm Elizabeth Rago and I'm here to testify in opposition, in opposition of the turbines for this this new project. There is bladeless, flying, and other technology that are being developed that will harness the wind without take. Forbes recently noted that the new technologies will cut maintenance by 80 percent and 53 percent less than the average cost of current turbine technology. The lower maintenance and operating costs add up to an estimated lower cost per kilowatt. Most relevant to this committee would be two things. First, SunEdison and Harvard University are working to put this device on the market within a year. Second, there will be no mammals killed due to this technology. So basically the first option fulfilled is what I'm saying, they will avoid completely, and again this technology. Sorry, I'll just need to go to the script because I'm nervous. Are there issues with alternative forms of harnessing wind like this new tech, like all technology, of course. But as far as take, there will be none. At least in the maintenance of this new technology. So I'm hoping that this committee will consider putting forward the recommendation that this project, with this current technology, be terminated. And that we, as the state and community, be patient and ensure that all technologies be exhausted before a project is approved. Again, the alternative form of wind energy projected to be on the market within a year, this new bladeless technology that's coming. We can wait, we can wait to ensure the, I'm just asking that we wait to ensure the safety of Hawaii's species and animals.

The second thing I'd like to address is the cultural weight that the committee has, the weight that the committee has on the cultural. I'll just read. I attended the hearing on March 27 regarding the HCP. There were several things that I learned, and one of the most concerning and pressing issues was regarding decision-making among some board members and the lack of respect and weight in decision-making of how the kānaka maoli make meaning of our indigenous and endangered wildlife. I know that during the hearing you received testimony from one of the premier anthropologists of Pacific Studies, Dr. Tēvita Ka'ili on the subject. His testimony was thorough in explaining the spiritual significance of each endangered species that is referenced in the HCP. Unlike the other testimonies that were read aloud, his was not. The science of cultural significance was not discussed in any part of the committee's meeting, nor had any weight in making decisions that affect the 'āina. This beautiful land that we now enjoy is due to the care of our indigenous. My hope is that their voice and those they hold sacred are heard and respected, and that no project that would take the lives of species knowingly, including our state mammal the hoary bat, be approved by the Division of Forestry and Wildlife. Especially with this new technology just on the horizon.

Another issue, my last, another issue of significance that I observed occurred actually at the hearing before the one concerning Champlin Wind. I share this to underscore what I just said about its impacts in decision-making on your committee. There was a committee member who wanted to make a decision based on very insufficient data because there was a promise of more money from the company. In essence, it was a bribe. This particular member of the board pushed hard for the plan the company was proposing and in doing so stated that they could use the money for funding research for the very bats that the company was killing. He even said, "If I were a bat, I would be happy about this." This statement, and more importantly this thinking, is not appropriate

or acceptable when on the committee which makes decisions that will impact the islands for generations. This kind of arrogance compromises the integrity and credibility of this committee. So cultural...I won't read that paragraph, that wasn't a nice paragraph. So, in closing again I'd to implore this committee to consider the three things I've outlined. First, please decline this current proposal knowing that safer technology will be on the market in the near future. Second, I ask that spiritual beliefs of the indigenous are given equal weight as all other factors in decision-making. And third, I ask that this committee rethink who is allowed to be appointed on it. Thank you.

Charlotte Kamauoha: Aloha, my name is Charlotte Kamauoha and I'm a long time resident of Kahuku community. I'm so grateful that Mr. Ka'ili has brought up the cultural significance of our animals that could be harmed by the industrial turbines, and I too echo that. I'm also worried and concerned, not just for our animals, but as a mother of children with special needs. Even though there is not enough empirical data, and maybe there is no room for qualitative or anecdotal data of the impact that certain sounds and frequencies have on children with special needs. I do have two children with sensory processing issues, and that is a concern for anybody who has children even on the autism spectrum or otherwise. So, in looking at that impact statement there may not be room for people who can be impacted by it but I'm hoping that it can be considered as well. Thank you.

Junior Primacio: My name is Junior Primacio, I'm a longtime resident of Kahuku. I've been involved in three, not one, three windmill that was put up in Kahuku area. The first one was Hawaiian Electric proposal, you do know about that. There was four windmills throughout the Hawaiian Electric. And one, not five, biggest in the state. Anyway, I'm for, I'm leaning towards for the windmills. Kahuku need to be sustainable. Kahuku is a deprived community. Not only school, but all, everything in here, even our hospital. We need business in Kahuku. And if the windmills can fit Kahuku's environment and meet our needs, I'll be for it. I'm still waiting to see the EIS in its complete form before I make a sensible decision. I'm not going speculate anything. I want facts. And I think, thus far, I hear only thing in favor of the windmills. I don't hear any facts that is contrary to what people are saying. And as a result of that, even the birds, I'm involved directly with First Wind and they're monitoring the birds that are struck by the windmills. So, information is there, I'm quite sure. And I think that I have one concern that I wanted to address in regards to the current windmill. Because it's partially in the agricultural land area, being used by agricultural farmers, I hope our consideration for the farmers are included in the process. And not only the birds, but the farmers, and how the farmers can also help address the birds in that area. And so, that's all I have to say. Thank you.

Maria Fonoimoana: My name is Maria Fonoimoana and I want to make it clear that I am opposed to any new wind turbines that are going to be constructed here in our area. As far as I'm concerned, this is not just a Kahuku issue. This is not only an issue of sustainability. I'm opposed for a number of reasons, and I can echo the comments made from my brother about the populations of birds in this area. We've grown up around Goat Island where there is a Reserve there. There is the University that has done studies right across the street from us, and so it's heavily populated by these birds. I am strongly

opposed for many, many reasons. The other thing is that we've read studies that other countries have done on populations of species that have diminished or basically evacuated areas that have been surrounded by wind turbines because of the frequencies and the low humming. And I can see where that would be a big concern, because it affects wildlife, it definitely affects us as well. I know this meeting is mostly concentrated on that, but I am opposed, and I would hope like what Liz Rago mentioned earlier, that you would wait, collect some more information. I feel like we are, if this goes through we're going to be the recipients of obsolete turbines. I feel like we are a dumping ground for these monstrosities, where we could hold off and I am not opposed to renewable energy, I am so supportive of that. But I am not in support of this, and I feel that we should we wait and proceed with caution.

Kent Fonoimoana: First off thank you for allowing me a second bite of the apple. In reading I have to I forgot something while I was up here, nerves and whatnot. In the document, this thing here is a Habitat Conservation Plan. In the document, if you take the time to find your facts, and the facts are there, Junior, it says that you're going to be, that you're grading around each turbine. That there will be denuded, taking out all the trees and whatnot to make it easier to count the carcasses of the critters, of the flying animals that have been struck by these blades, to make them easier for folks to go and count. Such as at the turbine here, at First Wind's project. Took down all the trees, took down all the shrubs. As a Habitat Conservation Plan I think that it sounds kind of backwards because you're taking away the habitat for these animals. In their study it says that, in order to minimize impacts with these flying, our flying friends be it mammals or bird or whatever, avian, that you actually remove the habitat so that there won't be any strikes. Now that to me is going to have a large impact, larger impact on strikes than it is by taking away the thing. So now the 'ōpe'ape'a there is a long list of trees that the 'ōpe'ape'a habitate in. Ironwoods are amongst them. Koa trees, you name it. And I feel that the removal of habitat is not really a Habitat Conservation Plan by putting these turbines in. Now it's 4.5 acres per turbine. Now if you broaden that out to the what, to the others, there's multiple different ways that they're going to do their studies to count the birds. The other one is 10 acres per turbine of removal of trees, of plants, and whatnot. Now that not only has an impact on avians, birds, critters, it has an impact on human beings. Because now we're limited to what kind of crops we can grow around these turbines. So if you count them all, so far there's 30 over there, 12 up here – 42 plus another 10, that's 52 times 10 acres. That's quite a bit of acres that we're losing of our farmlands to grow food. And so as far as a Habitat Conservation Plan, the habitat is better, their habitat is better off, without the turbines. Someone mentioned the nēnē goose, our state bird. Which critter, which bird, has the most kills so far by wind turbines. Is it the nēnē goose? I think it's up there. I think it is. Now if there is anyone here that has some factual information that can tell me otherwise, then I think it's the nēnē goose. So that's my thing. And I do know that some people are motivated by money. I know that some people are motivated by the love of the land, and I'm of the land. Thank you.

Mike [Kobiyata]: Ok, my name is Mike Kobiyata Sr. Anybody born and raised in Kahuku, raise your hand. Born and raised in Kahuku, right in Kahuku. Your parents

work on the plantation? You know what this place used to be? This office right here? I used to come in the summertime to work for the plantation. This is where we signed up. This is where all plantation people were. This is the main office. Just small background on myself. But, I was wondering, on the conservation, I'm very, I'm just learning all of this right now. I've been on the mainland for a while, and I'm back here in Kahuku and I want to give back to my community. And back in the day on the plantation haul cane trucks went up in the mountains. Did you guys know what they do to the sugar cane before they harvest it? They burn the fields, yeah? So that the thing, all the leaves, everything, so that all they have is the stalk. So I was wondering listening to all the bird action stuff, the bats, you know I haven't done any research, just from listening to anthropologists and the rest of your testimonies. So, when the sugar cane burn, it's fields. It's acres of. So some of the bats never make it during that time, they burn. The birds, the smoke blowing, some of those birds died, back in the day. So, and I'm not familiar with all the names of the birds, but you guys know where Goat Island is? What kinds of birds are on Goat Island, Kent?

Kent Fonoimoana: Those birds are shearwaters.

Mike Kobiyata: Shearwaters. We used to eat those things. But you know, after the feathers, with or without the feathers, the thing is pretty small. But Goat Island now, you know, since I've been home for what, three years now, no more trees. There's, I went to, I walked to the island one time and there's nothing. I see the holes of the birds. What I'm trying to get at is, if the conservation with our birds, with the windmills, we got to look at it as what is it going to benefit. Is it going to benefit our community? Our children that go to Kahuku School, Wailua School, Hau'ula, La'ie? That's why I'm anxious that, that's why I'm at this meeting. I know Kent's cousins, and you're from Ala Moana too? But anyways my testimony was just to, I just wondering, all those facts that you seem to have, what are birds doing? What are birds, what are you guys going to do with the, the bats? Why you guys trying to preserve the bats? You guys eat them? You no more not bats for eat? I'm just, I'm just being kind of sarcastic in a sense, but like I said I born and raised in this community. Danilo, Mr. Primacio was my baseball coach when I was a little kid. You guys know where Adams Field, everybody know where Adams Field is? I played baseball over there. Mr. Primacio was my, my coach. But I'm just intrigued by the, you people, you know. I want to see. This place is, you guys look on Saturday and Sunday how many cars we have on the road? They all come to the country. They love this place. Kent, you know you seen where my son lives? That's my grandfather, my father, myself, my son, my kids, my grandchildren, that's five generations over here already. They walking on the same plantation road that I went work on. That I walked on. So I'm just a community-oriented person that's kind of in turmoil when I hear all this stuff going on. So, to me, the community we have to be together. Thank you.

Eloise Reed: Ok, thank you. My name is Eloise Reed. I'm a resident of Kahuku. Been here since, well, been Hawaii since '81. But anyway, I am totally, totally against windmills. And I'll tell you why. We've got the first 10-plus, then we're going to get another 10-plus, then we're going to get another 20-plus. Next thing you know we won't

have no land for agricultural, no land for anything else, our kids will be sharing their parks with the windmills. I mean at first they were going to have it so close to the schools, to the residential areas. I mean I don't know much about the birds and the bees, and the, I don't know much about that. But I do know that for us human beings pretty soon we're going to be sharing, we'll have nothing to eat because all our agriculture land, I've gone through I've walked and I've jogged down through that side and I see the beautiful, you know, farms. Pretty soon I'm not going to see farms, I'm going to see windmills, like I have already. And then, I work at Turtle Bay, tourism is number one. Guess what? Tourism I thought in Hawai'i was supposed to be the number one industry, pretty soon all our guests, because we have too many guests they not come here because they see the ugly windmills. And they see the ugly windmills around Wahiawa, around there. So I just want to say please, no more windmills. I mean solar, use solar. Hawaii is more sunny than any other country. Use solar, something, but not windmills. I thank you for your time. Aloha. Sorry, I'm not finished. This is a P.S. that when I think about it too, the money that they're supposedly getting to progress, help us, only certain people get it. Not everybody gets it. I mean, you know, they could, well I'm not going to cut down the other companies, but who's going to get the money? The progress? How much? Small change. Small kine change. Thank you.

Jean Williams: I do know that on the current turbines where they are.

Jim Cogswell: Could you please state your name?

Jean Williams: My name is Jean, Jean Williams. I know the current turbines where they are, when they're on cause a constant hum in the homes. That the adult and children especially cannot get sleep when the turbines are on because they have that hum constantly. So, at the moment now, the few that we have are too close to some of the homes. I have one of my friends that have actually moved off the islands to another island because their child could not tolerate the humming all the time. So I do know that the hum is already affecting our keiki, our children. Thank you.

TABLE OF PUBLIC TESTIMONY

<i>Topic</i>	<i>Number of Comments</i>	<i>Response</i>
Opposition to killing the Hawaiian hoary bat	8	The HCP describes measures that Na Pua Makani Power Partners will implement to avoid and minimize impacts to bats. These include the use of low wind speed curtailment and not clearing vegetation during the bat pupping season. Mitigation for incidental take of bats is intended to provide a net benefit to the species, in accordance with State requirements.

Topic	Number of Comments	Response
Opposition to killing native Hawaiian birds	9	The HCP describes measures that Na Pua Makani Power Partners will implement to avoid and minimize impacts to birds. These include minimization of on-site lighting and using light that is shielded and/or directed downward, limiting turbine lighting except as required by FAA standards, placement of the power collection line below ground, and marking of above-ground powerlines.
Opposition to killing Blackburn's Sphinx Moths	1	The Blackburn's sphinx moth is not resident on O'ahu. Therefore, no Project-related impacts to this species will occur.
Concern due to proximity to James Campbell Wildlife Refuge	2	No waterbird species covered under the HCP were observed within the Project area during Project avian point count surveys conducted over a 1-year period. Waterbirds have shown high avoidance of obstacles, including turbines and other objects. Since 2014 two translocated adult geese and three goslings were documented at the refuge. Should incidental take occur mitigation proposed will provide a net benefit to the species by providing funding for management of the species on O'ahu.
Concern regarding whether animals killed are being replaced as claimed	2	Na Pua Makani Power Partners has worked in close consultation with USFWS and DOFAW to evaluate potential impacts (take) and to identify mitigation measures that will provide a net benefit to each listed species that could be impacted by the Project.
Concern that bird studies are not accurate in documenting current presence	1	General avian surveys were conducted over a 1 year period and three seasons of nocturnal radar surveys were conducted, both of which were consistent with wildlife agency guidance. Results were consistent with baseline surveys conducted at the neighboring Kahuku Wind Project. Although no listed avian species were detected, they are assumed to have the potential to occur in the project area and are therefore included in the Project HCP.
Destruction of trees and foliage not addressed by HCP	6	Most of the tree species occurring within the Project that may be cleared during construction are not native to Hawai'i. Furthermore, because the Hawaiian hoary bat may roost in trees, the HCP avoidance and minimization measures include a timing restriction on clearing of trees that could potentially support bat roosting as recommended by USFWS and DOFAW guidance.

Topic	Number of Comments	Response
General observation that birds and bats were likely historically killed by burning cane fields	1	The context of this public comment was that the individual did not understand why other members of the public were so concerned over potential bat impacts from turbines when bats were historically killed by burning of cane fields. Na Pua Makani Power Partners acknowledges other historical and current anthropogenic impacts affect Hawai'i's wildlife.
Negative impact to cultural practices and considerations	7	The HCP acknowledges that the listed species that could be impacted by the Project are culturally important and references an expanded discussion of this topic in the Project EIS.
General support of project	2	No response required.
General support of wind energy or other renewable energy	3	No response required.
No reduction in electricity costs from past projects	3	Not applicable to HCP – see Project EIS.
Recommendation to use newer technology for wind power generation that is less harmful to wildlife and generally more safe and efficient	3	Turbines being considered for use at the Project are appropriate for site specific conditions, including the wind regime, safety factors, and other considerations. The technology referred to in this comment was proposed by a start-up company and is not in production nor commercially available within the time frames of the project. Additionally the start-up company acknowledged that the cost of energy is higher than current state of the art technology from top tier manufacturers. The technology has no track record, is not proven or commercially ready and would not be acceptable to HECO as a generation source.
Recommendation to base decision to build turbines on facts only	1	HCP uses the best available science and agency recommendations and guidance to develop the HCP.
Concern about the influence of money from fines being used as a decision factor	1	The HCP relies on the best scientific information available to determine potential impacts, identify avoidance and minimization strategies, and develop appropriate mitigation. Agencies evaluate the HCP and other documents based on federal and state regulations.
Project too close to communities with homes, schools, community centers	1	Not applicable to HCP - See Project EIS.

Topic	Number of Comments	Response
Project limits the expansion of existing communities	1	Not applicable to HCP – see Project EIS.
Unightly turbines	1	Not applicable to HCP - see Project EIS.
Potential loss of farmland from clearing for the turbines	2	Not applicable to HCP.
Potential loss of tourism from the project	1	Not applicable to HCP.
Suggestion that farmers be involved in helping with bird issues	1	Not applicable to HCP.
General safety concerns	1	Not applicable to HCP - see Project EIS.
Impacts to persons with medical complications	1	Not applicable to HCP.
Human and/or animal disturbance from noise frequencies and humming	2	There is no evidence that we are aware of, such as studies at other wind energy facilities, that noise disturbance to species covered in the HCP from operation of wind turbines would occur.
General health concerns	1	Not applicable to HCP.
General question about how the project will benefit the community	1	Not applicable to HCP.

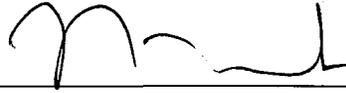
ANALYSIS & RECOMMENDATIONS:

DOFAW staff has worked closely with Na Pua Makani through several rounds of revisions of the draft HCP. The following are concerns that Staff have with the current version of the document:

- **Measures of Success.** As written, the measures of success are vague and do not include quantitative goals or a timeline for achieving benchmarks. These measures should be clearly laid out with specific, quantifiable goals within the HCP. DOFAW understands that for the Hawaiian hoary bat mitigation, Na Pua Makani would like to include those details in the finalized management plan to be completed within one year of commercial operation. DOFAW would like this plan to be finalized within one year of permit issuance to prevent any delay in mitigation actions.
- **Post Construction Monitoring Plan.** Na Pua Makani is proposing periods of interim monitoring over half of the life of the permit to include a reduced monitoring effort with no searcher efficiency or carcass retention trials. DOFAW is supportive of less intensive monitoring periods informed by standardized

searches, but prefers to have searcher efficiency and carcass retention trials conducted to inform take estimation throughout the life of the permit.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read 'S. Fretz', written above a horizontal line.

Scott Fretz, Acting Administrator
Division of Forestry and Wildlife