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ZONING BOARD OF APPEALS

CITY AND COUNTY OF HONOLULU

THE STATE OF HAWAII

In the Matter of the Petitions of KEEP THE NORTH SHORE COUNTRY, a nonprofit corporation, and THE KAHUKU COMMUNITY ASSOCIATION, a nonprofit corporation, concerning the Na Pua Makani Wind Project – Subprojects A & B, 56-668 Kamehameha Highway, Kahuku, O'ahu, Tax Map Key (1) 5-6-008:006 & 5-6-006:018 From the Actions of the Director of Planning and Permitting, dated October 24, 2016 (2016/CUP-49); January 20, 2017 (2016/CUP-69 & 2016/W-63), & June 7, 2019 (2019/MOD-34, -35 & -36)	Case No. 2019/ZBA-7 (Consolidated) NA PUA MAKANI POWER PARTNERS, LLC AND DIRECTOR OF DEPARTMENT OF PLANNING AND PERMITTING, CITY AND COUNTY OF HONOLULU'S MOTION TO DISMISS KEEP THE NORTH SHORE COUNTRY'S PETITION TO APPEAL; MEMORANDUM IN SUPPORT; DECLARATION OF KATHY SOKUGAWA; EXHIBITS 1 - 10; AND CERTIFICATE OF SERVICE

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NA PUA MAKANI POWER PARTNERS, LLC AND DIRECTOR OF DEPARTMENT OF PLANNING AND PERMITTING, CITY AND COUNTY OF HONOLULU'S MOTION TO DISMISS KEEP THE NORTH SHORE COUNTRY'S PETITION TO APPEAL DIRECTOR'S APPROVALS OF CONDITIONAL USE PERMITS, WAIVER, AND MODIFICATIONS FILED DECEMBER 23, 2019

Na Pua Makani Power Partners, LLC ("NPM") and the Director of the Department of Planning and Permitting, City and County of Honolulu, Kathy Sokugawa ("Director"), through their respective counsel, jointly request that the Zoning Board of Appeals ("ZBA") dismiss Keep the North Shore Country's ("KNSC") Petition to Appeal Director's Approvals of Conditional Use Permits, Waiver, and Modifications ("Appeal Petition") as untimely under the Rules of the Zoning Board of Appeals ("ZBA Rules") § 22-2.

Section 22-2 of the ZBA Rules requires that a written petition appealing an action of the Director must be received within 30 days of the mailing or personal service of the Director's decision. In this instance, KNSC's Appeal Petition was not received within the mandated deadlines. Accordingly, NPM and the Director respectfully request that the ZBA dismiss the Appeal Petition.

This motion is based upon the attached memorandum, the declaration of the Director, Kathy Sokugawa, Exhibits 1 through 10, and other arguments of counsel as may be presented.

DATED: Honolulu, Hawaii, March 27, 2020.

BRAD T. SAITO

DEPUTY CORPORATION COUNSEL

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NA PUA MAKANI POWER PARTNERS, LLC AND DIRECTOR OF DEPARTMENT OF PLANNING AND PERMITTING, CITY AND COUNTY OF HONOLULU'S MEMORANDUM IN SUPPORT OF MOTION TO DISMISS KEEP THE NORTH SHORE COUNTRY'S PETITION TO APPEAL DIRECTOR'S APPROVALS OF CONDITIONAL USE PERMITS, WAIVER, AND MODIFICATIONS FILED DECEMBER 23, 2019

NPM and the Director respectfully request that the ZBA dismiss KNSC's Appeal Petition as untimely under ZBA Rules § 22-2.[1] KNSC's Appeal Petition, with respect to each of the challenged actions of the Director, is untimely and has been filed well outside of the mandatory thirty-day appeal deadline for each challenged action, which is necessary to invoke the jurisdiction of the ZBA pursuant to ZBA Rules § 22-2. Therefore, the ZBA does not have jurisdiction to entertain KNSC's appeal and should dismiss the Appeal Petition. Further, insofar as KNSC's Appeal Petition raises a due process argument to excuse its failure to appeal within the mandatory appeal filing deadlines, the argument fails as the extremely narrow due process exception that KNSC appears to invoke in its Appeal Petition is in no way applicable to the circumstances in this case. KNSC's assertion that it should be permitted to disregard the ZBA's mandatory appeal filing deadlines in this case would harm the citizens of this state by creating perpetual uncertainty regarding the appealability and status of lawfully-obtained permits, creating a chilling effect on all development in Hawaii. In support of their Motion to Dismiss, NPM and the Director state the following:

I. BACKGROUND.

NPM has substantially constructed and is continuing to construct a renewable wind energy project in Kahuku, Oahu ("Project"), which is comprised of eight turbines, all of which have already been erected on site. Once operational, the Project will offset approximately 70,000 tons of CO2 emissions and generate enough electricity to power approximately 16,000 homes annually. The Project is located on two separate parcels of

[1] This Motion to Dismiss is timely filed. At its hearing on February 20, 2020, the ZBA established that motions were due on March 26, 2020. March 26, 2020 is a state holiday. See HRS § 8-1. Pursuant to ZBA Rules § 21-8(b), where a deadline falls on a state holiday, the deadline becomes the next business day, which in this case is March 27, 2020. Therefore, this Motion to Dismiss is timely filed.

land leased by NPM and are referred to as Subproject A[2] and Subproject B.[3] Of the eight turbines, Turbine Nos. 1 through 4 are located on Subproject A, and Turbine Nos. 6 through 9 are located on Subproject B.

A. Subproject A – CUP No. 2016/CUP-69 and Zoning Waiver No. 2016/W-63 and Modifications.

On or about **November 29, 2016**, NPM submitted a Conditional Use Permit ("CUP") Minor and Waiver Permit Application for a proposed Renewable Wind Energy Project, located in Kahuku, Oahu, Hawaii: Subproject A at Tax Map Key ("TMK") No. (1) 5-6-008:006 ("Subproject A CUP Application").[4]

Land Use Ordinance ("LUO") § 21-4.60(c)(7) provides that the maximum permitted wind machine height is based on a setback from all property lines of one foot for every foot of the wind machine height. LUO § 21-5.700 provides that all wind machines must be set back from all property lines a minimum distance equal to the height of the system. Turbine Nos. 3 and 4, as proposed, complied with the minimum setback requirement. Turbine Nos. 1 and 2, as proposed, did not comply with the setback requirement. Thus, a zoning waiver was sought for Turbine Nos. 1 and 2.

On **January 20, 2017**, the Director issued Findings of Fact, Conclusions of Law, and Decision and Order approving NPM's Subproject A CUP Application for a "Conditional Use Permit (Minor) (CUPm) and Zoning Waiver (W) from LUO Section 21-4.60(7) and LUO Section 21.5700(a)" to allow wind machine setbacks "in the AG-1 Restricted Agricultural District and AG-2 General Agricultural District", subject to various conditions.[5] NPM was issued CUP No. 2016/CUP-69 ("Subproject A CUP") and Zoning Waiver No. 2016/W-63 ("Subproject A Zoning Waiver"). Pursuant to the Department of Planning and Permitting ("DPP") Rules of Practice and Procedure ("DPP Rules") § 6-2,

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[2] Subproject A is located at TMK No. (1) 5-6-008:006.
[3] Subproject B is located on portions of TMK No. (1) 5-6-006:018.
[4] See Subproject A CUP Application, dated November 29, 2016, without Figures, Appendices, and Attachment, attached hereto as **Exhibit 1.**
[5] See Subproject A CUP and Waiver Findings of Fact, Conclusions of Law, and Decision and Order, dated January 20, 2017, without Attachments, attached hereto as **Exhibit** 2, at 15.

the Director mailed notice of her decision on **January 20, 2017**.[6] No appeal was filed with the ZBA regarding the Subproject A CUP or Subproject A Zoning Waiver before the mandatory appeal deadline, established under ZBA Rules § 22-2, of **February 21, 2017**.[7]

On **May 8, 2019**, NPM submitted a written request for minor modification of the Subproject A CUP and Zoning Waiver ("Subproject A CUP Minor Modifications Request")[8] to modify the location and height of the four previously-approved wind turbines. The proposed heights of all four turbines were reduced from 591 feet to 567.6 feet. The setback encroachment for Turbine No. 1 was reduced 8.9 feet from the original setback encroachment of 284 feet to 275.1 feet. Similarly, the setback encroachment for Turbine No. 2 was reduced 17.8 feet from the original setback encroachment of 372.3 feet to 354.5 feet. The proposed setback for Turbine Nos. 3 and 4 remained compliant with the minimum setback requirements provided for under LUO § 21-4.60(c)(7).

On **June 7, 2019**, the Director approved NPM's Subproject A CUP Minor Modifications Request, which were issued as Minor Modification Nos. 2019/MOD-34 and 2019/MOD-35 (collectively, "Minor Modifications to Subproject A CUP").[9] Pursuant to DPP Rules § 6-2, the Director mailed notice of her decision on **June 7, 2019**.[10] No appeal was filed with the ZBA regarding the Minor Modifications to Subproject A CUP before the mandatory appeal deadline, established under ZBA Rules § 22-2, of **July 8, 2019**.[11]

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[6] See Letter from Director approving the Subproject A CUP and Waiver, dated January 20, 2017, without Enclosure, attached hereto as **Exhibit 3**.

[7] Thirty days following the date of mailing of the January 20, 2017 notice is February 19, 2017, which fell on a Sunday. Pursuant to ZBA Rules § 21-8, when the due date falls on a weekend or public holiday, the due date is the following business day. The next weekday, February 20, 2017, was President's Day, a federal holiday and a Hawaii state holiday under HRS § 8-1. Accordingly, the deadline to appeal the Subproject A CUP and the Subproject A Zoning Waiver was Tuesday, February 21, 2017. See Declaration of Kathy Sokugawa ("Sokugawa Declaration") at ¶4.

[8] See Subproject A CUP Minor Modifications Request, dated May 1, 2019, without Attachments, attached hereto as **Exhibit 4.**

[9] See Letter from the Director approving the Subproject A CUP Minor Modifications Request, dated June 7, 2019, without Enclosure, attached hereto as **Exhibit 5.**

[10] See id.

[11] Thirty days following the date of mailing the notice, June 7, 2019, is July 7, 2019, which fell on a Sunday. Pursuant to ZBA Rules § 21-8, when the due date falls on a weekend or public holiday, the due date is the following business day. Accordingly, the deadline to appeal the Minor Modifications to Subproject A CUP was Monday, July 8, 2019. See Sokugawa Declaration at ¶5.

B. Subproject B – CUP No. 2016/CUP-49 and Modification.

On or about **August 26, 2016**, NPM submitted a Conditional Use Permit (Minor) Application for a proposed Renewable Wind Energy Project, located in Kahuku, Oahu, Hawaii: Subproject B at TMK No. (1) 5-6-006:018 ("Subproject B CUP Application").[12] Turbine Nos. 6 through 9 are all compliant with the setback requirements provided for under LUO § 214.60(c)(7). Accordingly, no setback waiver was required or requested.

On **October 27, 2016**, the Director issued Findings of Fact, Conclusions of Law, and Decision and Order approving NPM's Subproject B CUP Application for a "Conditional Use Permit, Minor (CUPm) to allow wind machines in the AG-1 Restricted Agricultural District", subject to various conditions.[13] NPM was issued CUP No. 2016/CUP-49 ("Subproject B CUP"). Pursuant to DPP Rules § 6-2, the Director mailed notice of her decision on **October 27, 2016**.[14] No appeal was filed with the ZBA regarding the Subproject B CUP before the mandatory appeal deadline, established under ZBA Rules § 22-2, of **November 28, 2016**.[15]

On **May 8, 2019**, NPM submitted a written request for minor modification of the Subproject B CUP ("Subproject B CUP Minor Modification Request"),[16] to modify the height of the four previously-approved wind turbines by reducing the height of the wind turbines from 590.5 feet for Turbine No. 6 and 656.2 feet for Turbine Nos. 7, 8, and 9, to 567.6 feet for all four turbines (22.9 and 88.6-foot reductions, respectively). Turbine Nos. 6 through 9 continued to meet all setback requirements. On **June 7, 2019**, the Director

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[12] See Subproject B CUP Application, dated August 26, 2016, without Figures, Appendices, and Attachment, attached hereto as **Exhibit 6.**

[13] See Subproject B CUP Findings of Fact, Conclusions of Law, and Decision and Order, dated October 27, 2016, without Attachments, attached hereto as **Exhibit 7**, at 15-17.

[14] See Letter from the Director approving the Subproject B CUP Application, dated October 27, 2016, without Enclosure, attached hereto as **Exhibit 8**.

[15] Thirty days following the date of mailing the notice, October 27, 2016, was November 26, 2016, which fell on a Saturday. Pursuant to ZBA Rules § 21-8, when the due date falls on a weekend or public holiday, the due date is the following business day. Accordingly, the deadline to appeal the Subproject B CUP was Monday, November 28, 2016. See Sokugawa Declaration at ¶6.

[16] See Subproject B CUP Minor Modification Request, dated May 8, 2019, without Enclosures, attached hereto as **Exhibit 9.**

approved NPM's Subproject B CUP Minor Modification Request, which was designated as Minor Modification No. 2019/MOD-36 ("Minor Modification to Subproject B CUP"). Pursuant to DPP Rules § 6-2, the Director mailed notice of her decision on **June 7, 2019**.[17] No appeal was filed with the ZBA regarding the Minor Modification to Subproject B CUP before the mandatory appeal deadline, established under ZBA Rules § 22-2, of **July 8, 2019**.[18]

C. KNSC's Appeal to the ZBA.

On **December 23, 2019**, KNSC filed its Appeal Petition. The Appeal Petition challenges the actions of the Director approving: (1) the Subproject A CUP, the Subproject A Zoning Waiver, and the Minor Modifications to Subproject A CUP, and (2) the Subproject B CUP and Minor Modification to Subproject B CUP (collectively, the "DPP Approvals").

With respect to KNSC's alleged "previous involvement" with the DPP Approvals and justification for its intervention at this late date, KNSC states:

> 28. [KNSC] and its members participated in many of the meetings NPM represented to the Director as having been held in regard to the proposed wind turbine project.
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> 29. [KNSC] expressed opposition to the project through its President as well as its member and supporters, in a petition on file for the 2016/CUP-69, 2016/W-3, 2019/MOD-34 & 35, 2016/CUP-49, and 2019/MOD-36 permits.
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> 30. Where petitioners provided specific notice of their concerns with a particular project, and the Director approves the project applications, those petitions are entitled to appeal the approval, notwithstanding rules limiting appeals to those taken within thirty-days of the Director's decision.[19]

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[17] See Letter from the Director approving the Subproject B Minor Modification Request, dated June 7, 2019, without Enclosure, attached hereto as **Exhibit 10**.

[18] Thirty days following the date of mailing the notice, June 7, 2019, was July 7, 2019, which fell on a Sunday. Pursuant to ZBA Rules § 21-8, when the due date falls on a weekend or public holiday, the due date is the following business day. Accordingly, the deadline to appeal the Minor Modification to Subproject B CUP was Monday, July 8, 2016. See Sokugawa Declaration at ¶7.

[19] Appeal Petition at ¶¶ 28-30.

The DPP did not receive any direct communications from KNSC regarding any opposition to the NPM Project or objections to the DPP Approvals, and KNSC did not participate in any meetings with the Director or DPP regarding the DPP Approvals.[20] In other words, the Appeal Petition filed on December 23, 2019, was the first indication from KNSC to the Director or her department that KNSC was opposing the Project and/or the DPP Approvals. The only "petition on file for the 2016/CUP-69, 2016/W-3, 2019/MOD-34 & 35, 2016/CUP-49, and 2019/MOD-36 permits" of which the Director is aware is the Appeal Petition.[21] No legal authority is cited in support of the assertion in paragraph 30.

On January 15, 2020, NPM filed its Application to Intervene in the ZBA's proceedings regarding KNSC's Appeal Petition.[22] At its meeting on January 23, 2020, the ZBA granted NPM's Application to Intervene, and at its meeting on February 20, 2020 also determined that any motions were to be filed on or before March 26, 2020. Accordingly, this Motion to Dismiss is timely filed.[23]

II. JURISDICTION OF THE ZONING BOARD OF APPEALS.

The Revised Charter of the City and County of Honolulu ("RCCCH") § 6-1516 establishes the jurisdiction of the ZBA.[24] RCCCH § 6-1516 states, in relevant part:

> **Section 6-1516. Zoning Board of Appeals –**
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> **….**The zoning board of appeals shall hear and determine appeals from the actions of the director in the administration of the zoning ordinances, including variances therefrom, subdivision ordinances and any rules and regulations adopted pursuant to either.

See also LUO § 21-1.40 ("Appeals from the actions of the director in the administration of the provisions of the LUO shall be to the zoning board of appeals as provided by

[20] See Sokugawa Declaration at ¶8.
[21] See Sokugawa Declaration at ¶9.
[22] See ZBA Rules § 22-5(c)(1)-(2).
[23] See Footnote 1.
[24] See Hoku Lele, LLC v. City & Cty. of Honolulu, 129 Hawaii 164,166, 296 P.3d 1072, 1074 (2013).

Section 6–1516 of the charter. Appeals shall be filed within 30 days of the mailing or service of the director's decision.").

As explained by the Hawaii Intermediate Court of Appeals ("ICA") in the Hoku Lele case,

> [t]he ZBA Rules further address the scope of the ZBA's jurisdiction, stating as follows:
>
> > § 22–1 *Petition*. (a) Any person who is specially, personally, or adversely affected by an action of the director may appeal the director's action to the board by submitting a written petition to the board[.][25]

Critically, the mandatory requirements to invoke the ZBA's jurisdiction to appeal an action of the Director is further addressed in ZBA Rules § 22-2, which states:

> § 22-2 Mandatory appeal filing deadline. (a) A written petition appealing an action of the director **must be received** at the department of land utilization within 30 days of the date of mailing or personal service of the director's written decision; except that in the case of an appeal relating to the administration of the subdivision ordinance, the petition must be received within 15 days after receipt of the notice of the action.
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> (b) If the appeal is not timely filed, it **shall** be dismissed by the board upon the board's own motion or the motion of any party to the proceeding.[26]

While the waiver of most ZBA Rules by the ZBA is expressly permitted, the ZBA Rules specifically prohibit the ZBA from waiving the mandatory appeal filing deadline.[27]

III. KNSC'S APPEAL PETITION IS UNTIMELY AND MUST BE DISMISSED.

A. The Director Provided Proper Notice of her Decisions under DPP Rules § 6-2.

The Director provided a written decision and mailed proper notice with respect to

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[25] Id. 167, 296 P.3d at 1075 (citing ZBA Rules §§ 21–1, 22–1).
[26] ZBA Rules § 22-2 (emphasis added).
[27] ZBA Rules § 22-7 states:

> §22-7 Waiver or suspension of rules. The board may waive or suspend any procedure in chapter 22 for good cause, except that the mandatory appeal filing deadline and any other provisions mandated by law, shall not be waived.

each of the DPP Approvals. DPP Rules § 6-2 governs notices of the Director's decisions, and states:

> The director shall mail the written decision to the applicant and, upon request, shall give notice of the decision to other interested persons. The decision shall be available for review by the public at the department of planning and permitting.

As explained *supra*, the following notices of the Director's decisions were mailed by the Director on the following dates:

DPP Approval	**Notice of Decision Mailing Date**
Subproject B CUP	October 27, 2016
Subproject A CUP	January 20, 2017
Subproject A Zoning Waiver	January 20, 2017
Minor Modifications to Subproject A CUP	June 7, 2019
Minor Modification to Subproject B CUP	June 7, 2019

All of the DPP Approvals have been and continue to be available for review by the public at the DPP.[28]

B. KNSC's Appeal Petition is Untimely under ZBA Rules § 22-2 and LUO § 21-1.40.

KNSC's appeal of all of the DPP Approvals is grossly tardy. The following chart indicates the mandatory appeal filing deadline for each of the DPP Approvals, calculated based upon the 30-day deadline mandated by the ZBA Rules and LUO discussed above, and the number of days past the mandatory appeal filing deadline the KNSC Appeal Petition was filed:

[28] See Sokugawa Declaration at ¶10.

DPP Approval	Mandatory Appeal Filing Deadline	Days Past Mandatory Appeal Filing Deadline KNSC Appeal Petition was Filed
Subproject B CUP	November 28, 2016	1,120 Days
Subproject A CUP	February 21, 2017	1,035 Days
Subproject A Zoning Waiver	February 21, 2017	1,035 Days
Minor Modifications to Subproject A CUP	July 8, 2019	168 Days
Minor Modification to Subproject B CUP	July 8, 2019	168 Days

As explained by the ICA, ZBA Rules § 22-2 and 22-7 "establish a mandatory, exclusive, and short thirty-day period within which a director's action can be appealed to the ZBA; once the thirty-day period has passed, the director's action becomes final and binding."[29] As stated by the Hawaii Supreme Court, "[i]t is undisputed that an appeal of a CUP issuance must take place within thirty days of the mailing or service of the director's decision, pursuant to LUO § 21–1.40 and as provided for in ZBA Rules § 22–2."[30] Accordingly, KNSC's Appeal Petition must be dismissed by the ZBA, pursuant to ZBA Rules § 22-2 and LUO § 21–1.40, because the Appeal Petition was untimely filed with respect to each of the DPP Approvals.

IV. KNSC'S APPEAL PETITION DOES NOT RAISE A DUE PROCESS CONCERN.

Although not explicitly stated, it appears that KNSC's Appeal Petition attempts to invoke a due process argument to circumvent the ZBA's mandatory dismissal of its appeal. The Hawaii Supreme Court recently decided Unite Here! Local 5 v. Department of Planning and Permitting, 145 Haw. 453, 455, 454 P.3d 394, 396 (2019) ("PACREP"), in which the Court found that **under the unique circumstances present in that case** - specifically, where the record demonstrates that the interested party advocated for certain conditions in a permit, the permit was approved with those conditions, and the permitting

[29] Hoku Lele, LLC, 129 Haw. at 168, 296 P.3d at 1076.
[30] Citizens Against Reckless Dev. v. Zoning Bd. of Appeals of City & County of Honolulu, 114 Haw. 184, 196, 159 P.3d 143, 155 (2007).

authority knew the importance of the conditions to the interested party - the interested party was entitled to heightened procedural protections regarding later decisions to modify that permit. However, **none** of the unique circumstances present in the PACREP case are present here and, therefore, due process does not require that the Appeal Petition be considered.

A. PACREP Case.

1. DPP Proceedings.

In PACREP, the Hawaii Supreme Court considered the DPP's approval of two Waikiki Special District (major) permits for the development of a condo-hotel.[31] Unite Here! Local 5 ("Local 5"), a union representing hotel and restaurant employees, actively expressed its concern regarding the first of the two permits considered by the DPP, the 2121 Kuhio Permit, during the DPP's consideration of the permit application.[32] Local 5 submitted written testimony to the DPP objecting to the 2121 Kuhio Permit, arguing that the applicant had not taken measures to ensure the building would be used solely for hotel accommodations and had not ensured adequate parking on the premises for guests and workers.[33] At the public hearing on the 2121 Kuhio Permit, a Local 5 representative also voiced the union's concern regarding the discrepancies in the number of parking spaces, job estimates, and unit types represented in the final environmental assessment and permit application for the project.[34]

When the DPP approved the first of the two permits, the 2121 Kuhio Permit, the Director placed two restrictive covenants into the permit to ensure compliance with the LUO related to parking and park dedication requirements (collectively, "Pro-Union Conditions") at the behest of the Local 5.[35] Local 5 was not copied on the Director's letter to the permittee approving the 2121 Kuhio Permit, but Local 5 was aware the permit had

[31] 145 Haw. 453, 455, 454 P.3d 394, 396 (2019).
[32] Id. at 456, 454 P.3d at 397.
[33] Id
[34] Id.
[35] Id.

been approved subject to the Pro-Union Conditions that Local 5 had advocated for so strongly.[36] Neither the permittee nor Local 5 appealed the 2121 Kuhio Permit.[37] Given that Local 5's Pro-Union Conditions were incorporated into the 2121 Kuhio Permit, the Court noted that Local 5 had no reason to appeal the permit and no reason to request notice of action pursuant to DPP Rules § 6-2.[38]

Sometime after the Director's approval of the 2121 Kuhio Permit, the permittee **verbally requested** that the Pro-Union Conditions be waived.[39] In response to this verbal request, which was never made in writing, the Director removed the Pro-Union Conditions ("Modification Letter").[40] Local 5 was not aware of the Modification Letter removing the Pro-Union Conditions, and Local 5 did not appeal the Modification Letter to the ZBA within 30 days, as required by LUO § 21.140 and ZBA Rules § 22-2, presumably because it had not been notified of the permit modification.[41]

Later, the permittee applied for the second of the two permits, the 2139 Kuhio Permit, for phase two of the project, for which Local 5 again commented at the public hearing that it was concerned with, *inter alia*, the conversion of the hotel into a multi-family dwelling and the associated parking impacts.[42] The 2139 Kuhio Permit was approved by the Director without the Pro-Union Conditions that had previously been placed into the 2121 Kuhio Permit.[43]

2. ZBA and Circuit Court Proceedings.

Local 5 appealed the Director's approval of the 2139 Kuhio Permit to the ZBA, arguing, *inter alia*, that the Director abused his discretion in approving the 2139 Kuhio Permit without the same Pro-Union Conditions as the 2121 Kuhio Permit.[44] The DPP

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[36] Id. at 458, 454 P.3d at 399.
[37] Id.
[38] Id. at 467, 454 P.3d at 408.
[39] Id. at 458, 454 P.3d at 399.
[40] Id.
[41] Id.
[42] Id. at 458-59, 454 P.3d at 399-400.
[43] Id. at 459, 454 P.3d at 400.
[44] Id. at 459-60, 454 P.3d at 400-01.

argued that because the Director had removed the Pro-Union Conditions from the 2121 Kuhio Permit, the two permits were not inconsistent.[45] Local 5 first learned that the Pro-Union Conditions were removed from the 2121 Kuhio Permit at the contested case hearing before the ZBA regarding the 2139 Kuhio Permit.[46]

The ZBA determined that it did "not have jurisdiction in this appeal to determine the validity of any modification or removal of conditions of the [2121 Kuhio Permit]" and stated that "[t]he conditions placed on the 2121 Kuhio project involve a different permit and application than the [2139 Kuhio Permit] and 2139 Application that are the subject of this appeal. As a result, any arguments of improper actions involving the [2121 Kuhio Permit] were not considered in this appeal."[47]

Upon appeal to the circuit court, the circuit court also found that it lacked jurisdiction to adjudicate the modification of the 2121 Kuhio Permit, concluding that the permit was not designated as an "action of the Director" in Local 5's petition.[48] The circuit court also concluded that it did "not have jurisdiction over the 2121 Kuhio Permit, the modification of the 2121 Kuhio Permit, or the effects of the 2121 Kuhio Permit modification on Local 5's due process rights pursuant to HRS § 91-14, in this case."[49]

3. The Hawaii Supreme Court Proceedings.

Before the Hawaii Supreme Court, Local 5 challenged two "decisions" by the Director: the Director's Modification Letter removing the Pro-Union Conditions from the 2121 Kuhio Permit and the Director's approval of the 2139 Kuhio Permit without the Pro-Union Conditions.[50]

With respect to the 2121 Kuhio Permit, the Hawaii Supreme Court held that "**[o]n the facts of this case**, we agree with Local 5 that it was substantially prejudiced when it

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[45] Id. at 460, 454 P.3d at 401.
[46] Id. at 458, 454 P.3d at 399.
[47] Id. at 462, 454 P.3d at 403.
[48] Id. at 464, 454 P.3d at 405.
[49] Id.
[50] Id. at 465, 454 P.3d at 406.

did not receive notice that the Director had removed [the Pro-Union Conditions] from the 2121 Kuhio Permit."[51] The DPP had argued that Local 5's due process rights were not violated by the Modification Letter because the DPP was not required to give affirmative notice to Local 5 that the Director had removed the Pro-Union Conditions from the 2121 Kuhio Permit because Local 5 was not the applicant and had not formally requested notice of the Director's actions under DPP Rules § 6-2[52] for the 2121 Kuhio Permit.[53]

The Court disagreed based on the specific facts of the case and cited the general principle that due process

> is not a fixed concept requiring a specific procedural course in every situation. Rather, due process is flexible and calls for such procedural protections as the particular situation demands. The basic elements of procedural due process of law require notice and an opportunity to be heard at a meaningful time and in a meaningful manner.[54]

The Court noted three distinct factors that amounted to a "**unique circumstance**" for which heightened due process protections should have been afforded to Local 5 with respect to the modification of the 2121 Kuhio Permit.[55] The three factors included: (1) Local 5 actively participated in the public hearing process for the 2121 Kuhio Permit and advocated for the Pro-Union Conditions; (2) Local 5 knew that the 2121 Kuhio Permit had been approved with the Pro-Union Conditions for which it had advocated and therefore had no reason to request notice of the decision; and (3) the 2121 Kuhio Permit was "not modified using the normal procedures for modification" in that (a) there was no evidence in the record to suggest that the permittee had publicly announced or filed a written request seeking to modify the 2121 Kuhio Permit; and (b) there was also no evidence that the Modification Letter removing the Pro-Union Conditions was available at the DPP for

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[51] Id. at 466, 454 P.3d at 407 (emphasis added).
[52] DPP Rules § 6-2 provides that "[t]he director shall mail the written decision to the applicant and, upon request, shall give notice of the decision to other interested persons. The decision shall be available for review by the public at the department of planning and permitting."
[53] PACREP, 145 Haw. at 466, 454 P.3d at 407.
[54] Id. (quoting Price v. Zoning Bd. of Appeals, 77 Haw. 168, 172, 883 P.2d 629, 633 (1994) (citations omitted)).
[55] Id. at 467, 454 P.3d at 408.

review by the public.[56]

Given these highly unusual and unique circumstances, the Hawaii Supreme Court carved out a narrow holding to provide relief to Local 5 and held that:

> where the record demonstrates that the interested party advocated for certain conditions in a permit, the permit was approved with those conditions, and the permitting authority knew the importance of the conditions to the interested party, that interested party is entitled to heightened procedural protections regarding later decisions to modify that permit.[57]

The "heightened procedural protections regarding later decisions to modify that permit", included notice and an opportunity to be heard.[58] Therefore, the Court remanded the case back to the ZBA to determine whether the Director's Modification Letter was a proper modification of the 2121 Kuhio Permit.[59]

B. KNSC's Appeal Petition Raises None of the Same Due Process Concerns as were Raised in PACREP.

The PACREP case could not be any more different from the case at hand. Not one of the factors identified by the Hawaii Supreme Court in PACREP to support the "unique circumstance" in that case to justify heightened due process protections is present in KNSC's Appeal Petition. Unlike in the PACREP case, (1) KNSC never commented regarding the DPP Approvals or any of the applications (prior to the Appeal Petition to the ZBA filed on December 23, 2019) and never advocated for any pro-KNSC conditions to the DPP Approvals; (2) the DPP Approvals never included any pro-KNSC conditions; (3) the Director did not know of the importance of any pro-KNSC conditions as none existed; (4) there was no later action by the DPP to modify the DPP Approvals to remove the non-existent pro-KNSC conditions; and (5) all applications for the DPP

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[56] Id. at 466-67, 454 P.3d at 407-08.
[57] Id. at 467, 454 P.3d at 408.
[58] Id.
[59] Id. In addition, because the Director's decision to approve the 2139 Kuhio Permit rested, in part, on the removal of the Conditions from the 2121 Kuhio Permit, the Court also vacated and remanded the Director's decision to approve the 2139 Kuhio Permit for a redetermination of whether the Director abused his discretion in approving the permit without the Conditions. PACREP, 145 Haw. at 468, 454 P.3d at 409.

Approvals were submitted in writing and have been and continue to be available at the DPP for review by the public.

KNSC's Appeal Petition includes the following "factual" averments related to KNSC's previous involvement and interest in the DPP Approvals. KNSC's Appeal Petition states:

> 28. [KNSC] and its members participated in many of the meetings NPM represented to the Director as having been held in regard to the proposed wind turbine project.

First, it is noteworthy that nowhere in KNSC's Appeal Petition does KNSC identify its president or members, which leaves NPM, the DPP, and ZBA left to speculate regarding who it may have been who participated in the referenced meetings. Second, KNSC states that it and its members participated in "many of the meetings" that were held regarding the Project. NPM believes that this statement refers to meetings conducted by NPM in connection with its environmental impact statements, which was accepted by the State Board of Land and Natural Resources, or general community meetings conducted by NPM voluntarily to inform the community regarding the Project. KNSC and its members did not participate in any meetings with Director or the DPP regarding the DPP Approvals,[60] and KNSC does not aver that it communicated directly to the DPP any objection to any of the DPP Approvals. Third, KNSC only alleges that KNSC and its members "participated" in meetings and does not even claim that they opposed the Project in those non-DPP meetings.

Next, KNSC's Appeal Petition states:

> 29. [KNSC] expressed opposition to the project through its President as well as its member and supporters, in a petition on file for the 2016/CUP-69, 2016/W-3, 2019/MOD-34 & 35, 2016/CUP-49, and 2019/MOD-36 permits.

[60] See Sokugawa Declaration at ¶8.

Again, KNSC has not identified its president, members, or supporters who allegedly expressed opposition to the Project. Second, KNSC's statement does not identify the "petition on file" in which this generic opposition was expressed. The ZBA can only speculate regarding which petition is being referenced, but the only petition of which Director is aware is the Appeal Petition filed with the ZBA on December 23, 2019.[61] Importantly, KNSC does not allege that any condition for which it advocated was included in (or removed from) any of the DPP Approvals.

Then, KNSC makes the following assertion:

> 30. Where petitioners provided specific notice of their concerns with a particular project, and the Director approves the project applications, those petitioners are entitled to appeal the approval, notwithstanding rules limiting appeals to those taken within thirty-days of the Director's decision.

KNSC is attempting to invoke the narrow PACREP exception and transform it into a weapon whereby any project opponent could simply provide notice of its concerns with any project to a permitting agency and then have a perpetual right to appeal permits validly issued to the project by the permitting agency. In that environment, there would be no development and no financing or funding for development

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[61] See Sokugawa Declaration at ¶9. It is possible that KNSC is alluding here to comments attached to NPM's Final Environmental Impact Statement ("2016 FEIS"), which is an argument explicitly raised by Kahuku Community Association ("KCA") in its Appeal Petition, the consideration of which has been consolidated with KNSC's appeal by the ZBA at its meeting on February 20, 2020. NPM's 2016 FEIS, reviewed and accepted by the State Board of Land and Natural Resources ("BLNR") before either of the Subproject A or B CUP Applications was filed, is in DPP's files as the 2016 FEIS was attached to the Project's Subproject A and B CUP Applications.

NPM and DPP have not identified any comments submitted by KNCS that were attached to the 2016 FEIS, with the caveat that Appendix M comprise 707 pages, consisting of approximately 1,612 letters, petitions, emails, and/or signatures, many of which are illegible, received during the EIS process conducted by BLNR, and KNSC has not disclosed in its Appeal Petition who allegedly submitted comments and at what time. Regardless, assuming *arguendo* that KNSC had submitted comments during the EIS process, the Director and NPM have argued why the submission of comments to BLNR during the EIS process is not sufficient to invoke the narrow PACREP exception to the ZBA's mandatory appeal filing deadlines. See NPM and the Director's Motion to Dismiss KCA's Appeal Petition, filed contemporaneously herewith, at § IV.B. As explained therein, comments submitted with NPM's 2016 FEIS were not comments made to DPP, were not comments on any of the DPP Approvals, and did not result in any pro-KNSC Conditions which could trigger the heightened due process protections necessary to excuse KNSC's failure to timely appeal the DPP Approvals. See KCA Motion to Dismiss at § IV.B. Accordingly, although it does not appear KNSC actually submitted comments in opposition to the Project during its EIS process, even if such comments were submitted, it is not sufficient to invoke the Hawaii Supreme Court's narrow PACREP exception that was a remedy tailored to the unique circumstances in that case.

in Hawaii. Completed projects or near-completed projects, like the NPM Project, would be under perpetual threat of challenge. KNSC's attempt should be rejected.

Each factor relied upon by the Hawaii Supreme Court to justify heightened procedural protections for Local 5 is glaringly missing in this case. First, in PACREP, Local 5 "actively participated in the public hearing process for the 2121 Kuhio Permit" and advocated for inclusion of certain Pro-Union Conditions.[62] As explained above, KNSC did not participate in the DPP process relating to the DPP Approvals. KNSC merely alleges that it and its members attended meetings and does not even claim that they opposed or expressed concerns about the Project at those meetings. Further, these meetings are not alleged to have been meetings held by the DPP with respect to any of the DPP Approvals. Most importantly with respect to this factor, there is also no allegation that any of KNSC's objections to the Project were directly communicated to the DPP while it was considering any of the DPP Approvals; rather, KNSC claims its concerns are in a petition "on file" with the DPP, which Director and NPM believe to be solely the Appeal Petition filed with ZBA on December 23, 2019. In PACREP, Local 5's objections were expressed directly to the DPP, and there was no dispute that the DPP was aware that Local 5 advocated for the Pro-Union Conditions in the 2121 Kuhio Permit, and, therefore, no dispute that the permitting authority knew the importance of the conditions to the interested party.[63]

Second, in PACREP, Local 5 was aware that the 2121 Kuhio Permit had been approved with the Pro-Union Conditions for which it had advocated.[64] Here, critically, KNSC has not identified any condition or any pro-KNSC condition in any of the DPP Approvals that was included in any permit because KNSC had advocated for them. [65]

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[62] PACREP, 145 Haw. at 466-67, 454 P.3d at 407-08.
[63] Id.
[64] Id. at 467, 454 P.3d at 408.
[65] KNSC's Appeal Petition suggests that its primary objection to the project is the height and setback encroachment of the project's wind turbines. Assuming *arguendo* that a condition was included in the Subproject A or B CUPs that had been advocated by KNSC with respect to the height/setback requirements of the wind turbines, the subsequent modifications to the Subproject A and B CUPs reduced the heights of

KNSC only states that it expressed opposition to the Project. Because there was no pro-KNSC condition included in any of the DPP Approvals, there was never any pro-KNSC condition to take away and no "heightened procedural protections" required prior to taking away such a condition.

Third, in PACREP, the 2121 Kuhio Permit was "not modified using the normal procedures for modification."[66] In that case, the Applicant did not submit a request for modification in writing, but verbally requested that the Director remove the Pro-Union Conditions and there was no evidence that the Modification Letter was available at the DPP for review by the public.[67] Here, all of the DPP Approvals and applications relating to such approvals have been and continue to be available for review by the public in the DPP's files.[68]

In summary, a finding that KNSC could ignore the ZBA's mandatory appeal filing deadlines under the facts of this case would severely undermine developers' ability to rely on permits issued by the City and County and would ultimately harm citizens in this state by increasing the costs and uncertainty associated with development. This result is not supported by PACREP, which the Hawaii Supreme Court narrowly tailored to the specific facts of that case, and is an unreasonable and untenable extrapolation of the holding in that case.

V. CONCLUSION.

For the reasons stated herein, NPM and the Director respectfully request that the ZBA grant NPM and the Director's Motion to Dismiss in the above-referenced matter.

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the wind turbines and either (1) decreased the amount of setback encroachment for which NPM had been granted a waiver (Subproject A) or (2) the changes had no effect on compliance with setback requirements (Subproject B). KNSC could, therefore, demonstrate no harm by the modification, even if there had been a condition advocated for by KNSC in the Subproject A or B CUPs, which there was not.

[66] PACREP, 145 Haw. at 467, 454 P.3d at 408.

[67] Id.

[68] See Sokugawa Declaration at ¶10.

DATED: Honolulu, Hawaii, March 27, 2020.

BRAD T. SAITO

DEPUTY CORPORATION COUNSEL

Counsel for DIRECTOR OF THE DEPARTMENT OF PLANNING AND PERMITTING, CITY AND COUNTY OF HONOLULU

JODI S. YAMAMOTO
WIL K. YAMAMOTO
BRADLEY S. DIXON

YAMAMOTO CALIBOSO
A Limited Liability Law Company

Counsel for NA PUA MAKANI POWER PARTNERS, LLC

ZONING BOARD OF APPEALS

CITY AND COUNTY OF HONOLULU

THE STATE OF HAWAII

In the Matter of the Petitions of KEEP THE NORTH SHORE COUNTRY, a nonprofit corporation, and THE KAHUKU COMMUNITY ASSOCIATION, a nonprofit corporation, concerning the Na Pua Makani Wind Project – Subprojects A & B, 56-668 Kamehameha Highway, Kahuku, O'ahu, Tax Map Key (1) 5-6-008:006 & 5-6-006:018 From the Actions of the Director of Planning and Permitting, dated October 24, 2016 (2016/CUP-49); January 20, 2017 (2016/CUP-69 & 2016/W-63), & June 7, 2019 (2019/MOD-34, -35 & -36)	)	Case No. 2019/ZBA-7 (Consolidated) DECLARATION OF KATHY SOKUGAWA

DECLARATION OF KATHY SOKUGAWA

1. I am the Director of the Department of Planning and Permitting, City and County of Honolulu ("Director" and "DPP", respectively).

2. As Director, I am familiar with the procedures and processes utilized by the DPP and the files maintained by the DPP.

3. Na Pua Makani Power Partners, LLC ("NPM") and I have jointly filed the Motion to Dismiss Keep the North Shore Country's ("KNSC") Petition to Appeal Director's Approvals of Conditional Use Permits, Waiver, and Modifications filed December 23, 2019 ("Motion to Dismiss"), and I am familiar with the contents thereof.

4. No appeal was filed with the ZBA regarding the Subproject A CUP or Subproject A Zoning Waiver, as defined in the Motion to Dismiss, prior to the mandatory appeal deadline of February 21, 2017.

5. No appeal was filed with the ZBA regarding the Minor Modifications to Subproject A CUP, as defined in the Motion to Dismiss, before the mandatory appeal deadline of July 8, 2019.

6. No appeal was filed with the ZBA regarding the Subproject B CUP, as defined in the Motion to Dismiss, before the mandatory appeal deadline of November 28, 2016.

7. No appeal was filed with the ZBA regarding NPM's Minor Modification to Subproject B CUP, as defined in the Motion to Dismiss, before the mandatory appeal deadline of July 8, 2019.

8. The DPP did not receive any direct communications from KNSC regarding any opposition to the NPM Project or objections to the DPP Approvals, and KNSC did not participate in any meetings with me or DPP regarding the DPP Approvals.

9. The only "petition on file for the 2016/CUP-69, 2016/W-3, 2019/MOD-34 & 35, 2016/CUP-49, and 2019/MOD-36 permits", as described in KNSC's Appeal Petition, filed at the DPP, of which I am aware, is KNSC's Appeal Petition, as defined in the Motion to Dismiss.

10. All of the DPP Approvals, as defined in the Motion to Dismiss, have been and continue to be available for review by the public at the DPP.

11. I declare under penalty of law that the foregoing is true and correct.

FURTHER DECLARANT SAYETH NAUGHT.

[Signature on following page]

Executed on February 20, 2020.

KATHY SOKUGAWA
DIRECTOR OF DEPARTMENT
OF PLANNING AND PERMITTING

TETRA TECH

November 29, 2016 TTCES-PTLD-2016-137

VIA HAND DELIVERY

William Ammons
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Subject: Submittal of Conditional Use Permit Minor (CUPm) and Waiver Permit Application for the Proposed Na Pua Makani Wind Project – Subproject A
Tax Map Key (TMK) (1) 5-6-008:006, Kahuku, Oahu, Hawaii

Dear Mr. Ammons:

Na Pua Makani Power Partners (NPMPP) proposes to develop the Na Pua Makani Wind Project (Project) to be located mauka (inland) of Kahuku Town, within the Koolauloa District. The Project is located within two adjacent parcels, which are identified by Tax Map Key (TMK) parcel number (1) 5-6:008:006 and TMK (1) 5-6-006:018. The Project will consist of up to eight wind turbine generators (WTG) and associated infrastructure with a nameplate generating capacity of up to approximately 25 megawatts (MW).

Land ownership and the ownership and operation of certain Project-related equipment has necessitated that component parts of the Project receive their own, discrete permits. The Project will be comprised of three Subprojects for the purposes of permitting. Subproject A is comprises the DLNR-owned TMK (1) 5-6-008:006, and would include up to four WTGs, a permanent meteorological (met) tower, and below grade supporting infrastructure. Subproject B covers the NPMPP-owned Project components within the Malaekahana Hui West, LLC-owned TMK (1) 5-6-006:018, including four WTGs, a temporary met tower, an operations and maintenance (O&M) building, electrical infrastructure, and at or below grade supporting infrastructure. The application for Subproject B was accepted by the City and County of Honolulu Department of Planning and Permitting (DPP) on September 12, 2016 as file no. 2016/CUP-49. Subproject C, also situated on TMK (1) 5-6-006-018, consists of the HECO-owned electrical switching and transmission infrastructure. The application for Subproject B was accepted on September 13, 2016 as file no. 2016/CUP-50. Permits were issued for Subprojects B and C on October 27, 2016.

Enclosed for review is the application document for Subproject A. The proposed land use is identified as Wind Machine which includes devices and facilities, including appurtenances, associated with the production and transmission of wind generated energy per §21-10.1, Revised Ordinances of Honolulu (ROH), which is a conditional use in the underlying zoning districts AG-1 (Restricted Agriculture) and AG-2 (General Agriculture). Because of constraints pertaining to the parcel geometry, topographical conditions, energy production requirements, and community input, the locations of Turbine 1 and Turbine 2 would be nearer to the property line than would otherwise be allowed by the Land Use Ordinance (LUO). Pursuant to §21-2.130, ROH, a waiver from

Tetra Tech, Inc.
737 Bishop Street, Suite 2340, Honolulu, Hawaii 96813
Tel (808) 441-6608 Fax (808) 836-1679 tetratech.com

the strict application development standards specified in ROH 21-4.60(c)(7) and ROH 21-5.700(a) is being requested. Therefore, the enclosed application is for both a CUPm and the associated Waiver Permit.

The Project site is suitable for the installation of wind machines and appurtenances. As such improvements will not alter the character of the surrounding area in a manner that would be substantially limiting, impairing, or precluding the existing and future uses of the subject parcels and surrounding properties for the uses permitted in the underlying zoning districts. The site is located within the State Agricultural District and the permanent footprint of the Subproject A is located on lands designated B, C, D and E by the Land Study Bureau (LSB). Subproject A would remove 1.8 acres of LSB B-rated land and an additional 19.8 acres of lands with lower ratings from potential agricultural productivity but would preclude no LSB A-rated land from potential cultivation. On a district-wide scale, the proposed Subproject A will impact less than 0.1 percent of the A- and B-rated agricultural lands in the Koolau Loa District. Additionally, the land within the Subproject A site is mostly vacant and not currently utilized for cultivated agriculture. TMK (1) 5-6-008:006 was officially removed from the Kahuku Agricultural Park in 2015 per Executive Order No. 4482 as the land was not being utilized for its intended purposes presumably due to lack of irrigation water, steep slopes, and poor soil quality.

The construction and operation of the Na Pua Makani Wind Project is expected to contribute to the general welfare of the community-at-large. This proposed wind facility exhibits a major effort to achieve the goals set forth by the renewable portfolio standard that requires HECO and its affiliates to generate renewable energy equivalent to 30 percent by 2020, 40 percent by 2030, 75 percent by 2040, and 100 percent by 2045. In addition, NPMPP has engaged in outreach efforts with affected stakeholders to define its Community Benefits Package. This may include up to $80,000 to $100,000 per year over a 20- to 25-year project life or the equivalent of approximately $2,000,000 of direct economic benefits to the Kahuku Community. Throughout the development and environmental review of the Project, NPMPP conducted wide-reaching community outreach efforts aimed at communicating to the surrounding community and garnering input on the Project. Community input received has been taken into account in the planning and design of the proposed Project.

Enclosed is the CUPm and Waiver Permit application package for the proposed Subproject A, prepared on behalf of NPMPP. The application package includes two complete copies of the combined CUPm and Waiver Permit application, each inclusive of the signed master application form, the CUPm and Wavier Permit written statement, and three digital copies of the Final Environmental Impact Statement on compact disc. The application processing fee is included, provided as four checks made payable to the City and County of Honolulu, two in the amount of $200.00 for application review and two for $400.00 for the remaining balance of the processing fee. If you have any questions regarding the Project or need further clarification, please contact Leslie McClain at (503) 222-4536 or me at (808) 441-6608.

TETRA TECH, INCORPORATED

Neal Dixon
Environmental Planner

Enclosures

cc: Mike Cutbirth, Champlin Hawaii Wind Holdings, LLC.

Tetra Tech, Inc.
737 Bishop Street, Suite 2340, Honolulu, Hawaii 96813
Tel (808) 441-6600 Fax (808) 836-1679 tetratech.com

City and County of Honolulu

Conditional Use Permit (Minor) and Waiver Permit Application

For a proposed

Renewable Wind Energy Project

Kahuku, Oahu, Hawaii: Subproject A

Tax Map Key No: (1)5-6-008:006

Applicant:

Na Pua Makani Power Partners, LLC
2020 Alameda Padre Serra, Suite 105
Santa Barbara, CA 93103

Prepared by:

Tetra Tech Inc.
737 Bishop St. Suite 2340 Mauka Tower
Honolulu, Hawaii 96813-3201

November 2016

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PROJECT SUMMARY

Project Name:	**Na Pua Makani Wind Project: Subproject A**
Applicant:	Na Pua Makani Power Partners, LLC 2020 Alameda Padre Serra, Suite 105 Santa Barbara, CA 93103 Contact: Mike Cutbirth Telephone: (805) 568-0300
Location of Proposed Action:	Kahuku; Koolau Loa District; Oahu, Hawaii
Land Ownership:	State of Hawaii
Tax Map Key (TMK):	(1) 5-6-008:006 (wind farm)
Parcel Area:	232 acres (94 hectares)
Project Size:	Permanent Disturbance Area – approx. 21.7 acres (8.8 hectares) Temporary Disturbance Area – approx. 0.7 acres (0.3 hectares)
State Land Use Designations:	"A" Agricultural
Sustainable Community Plan Designations:	Agricultural
County Zoning:	AG-1 Restricted Agricultural and AG-2 General Agricultural
Special Management Area:	Outside Special Management Area
HRS 343 Accepting Agency:	Board of Land and Natural Resources Kalanimoku Building 1151 Punchbowl Street Honolulu, HI 96813 (808) 587-0400
Existing Use:	Vacant lands
Proposed Action:	Na Pua Makani Power Partners, LLC (NPMPP) proposes to construct and operate the Na Pua Makani Wind Project (Project) which would consist of up to eight wind turbine generators and associated infrastructures, with a nameplate generating capacity of up to approximately 25 megawatts (MW). The proposed Project would be located on portions of two parcels (Tax Map Key [TMK] (1) 5-6-008:006 and (1) 5-6-006:018). Three Conditional Use Permits (minor) (CUPm) will be submitted for the proposed Project, based on land and equipment ownership. This CUPm covers the components of the Project on TMK (1) 5-6-008:006 designated as Subproject A, and includes in its scope up to four turbines, access roads, underground collector lines, and a permanent met tower. Access to (1) 5-6-008:006 is provided through a non-exclusive access easement with the Department of Agriculture. A waiver permit application for the uses proposed on TMK (1) 5-6-008:006 is being submitted concurrently with this CUPm for Subproject A. The components of the Project on TMK 5-6-006:018 (Subproject B) are addressed in a separate CUPm. A third CUPm application was submitted for the HECO owned switching station located on TMK (1) 5-6-006:018 (Subproject C).

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Tables

Figures

Appendices

Attachment

1 Na Pua Makani Wind Project Final Environmental Impact Statement

Acronyms and Abbreviations

ALISH	Agricultural Lands of Importance to the State of Hawaii
amsl	above mean sea level
APE	Area of Potential Effect
BLNR	Board of Land and Natural Resources
CO_2	Carbon dioxide
CUPm	Conditional Use Permit minor
dBA	A-weighted decibels
DLNR	Department of Land and Natural Resources
DOE	U.S. Department of Energy
DOH	State of Hawaii Department of Health
DPP	City & County Department of Permitting & Planning
EIS	Environmental Impact Statement
FAA	Federal Aviation Administration
FIRM	Flood Insurance Rate Map
FMP	Fire Management Plan
FTE	Full-time equivalent
GHG	Greenhouse gases
HCEI	Hawaii's Clean Energy Initiative
HCP	Habitat Conservation Plan
HECO	Hawaiian Electric Company
Hg	Mercury
HRHP	Hawaii Register of Historic Places
HRS	Hawaii Revised Statutes
JDA	joint development agreement
Koolau Loa SCP	*Koolau Loa Sustainable Communities Plan*
kV	Kilovolts
LSB	University of Hawaii Land Study Bureau
LUO	Land Use Ordinance
MW	Megawatts
MWh	Megawatt hours
NO_x	Nitrogen oxides
NPMPP	Na Pua Makani Power Partners
NRHP	National Register of Historic Places
O&M	Operation and maintenance
PPA	Power purchase agreement

Project	Na Pua Makani Wind Project
ROH	Revised Ordinances of Honolulu
RPS	Renewable Portfolio Standard
SCP	Sustainable communities plan
SMA	Special Management Area
SO_2	Sulfur dioxide
SWPPP	Storm Water Pollution Prevention Plan
TESC	Temporary Erosion and Sediment Control
TMK	Tax Map Key

Master Permit Application

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CITY AND COUNTY OF HONOLULU
DEPARTMENT OF PLANNING & PERMITTING
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

LAND USE PERMITS DIVISION MASTER APPLICATION FORM

Additional data, drawings/plans, and fee requirements are listed on a separate sheet titled "Instructions for Filing." ***PLEASE ASK FOR THESE INSTRUCTIONS.***

All specified materials described in the "Instructions for Filing" and required fees must accompany this form; incomplete applications will delay processing. You are encouraged to consult with Zoning Division staff in completing the application. Please call the appropriate phone number given in the "Instructions for Filing."

Please print legibly or type the required information. **SUBMITTED FEE: $** 1,200.00

PERMIT/APPROVAL REQUESTED (Check one or more as appropriate):

Cluster:
- ☐ Agricultural
- ☐ Country
- ☐ Housing

Conditional Use Permit:
- ☒ Minor ☐ Major
- ☐ Existing Use: _____ (Indicate Type of Use)

Environmental Document:
- ☐ Environmental Impact Statement
- ☐ Environmental Assessment
- ☐ Supplemental
- ☐ Minor Shoreline Structure

- ☐ Modify Approved Permit: _____ (Indicate Reference File No.)
- ☐ Plan Review Use

Planned Development:
- ☐ Housing
- ☐ Commercial (WSD Only)
- ☐ Resort (WSD Only)
- ☐ Interim Transit (IPD-T)
- ☐ Shoreline Setback Variance

Special District Permit:
- ☐ Minor ☐ Major _____ (Indicate District)
- ☐ Downtown Height >350 Feet

Special Management Area Use Permit:
- ☐ Minor ☐ Major
- ☐ Temporary Use Approval
- ☐ Variance from LUO Section(s): _____
- ☒ Waiver from LUO Section(s): 21-4.60(c)(7) and 21-5.700(a)
- ☐ Zoning Adjustment, LUO Section(s): _____
- ☐ HRS Section 201H-38 Project

TAX MAP KEY(S): (1) 5-6-008:006
LOT AREA: 232 acres
ZONING DISTRICT(S): AG-1; AG-2 **STATE LAND USE DISTRICT:** Agricultural
STREET ADDRESS/LOCATION OF PROPERTY:
Parcel 006: 56-668 Kamehameha Highway

RECORDED FEE OWNER:
Name (& title, if any) Suzanne Case, Chairperson BLNR
Mailing Address 1151 Punchbowl Street
Honolulu, Hawaii 96813
Phone Number 808-587-0422
Signature _____

PRESENT USE(S) OF PROPERTY/BUILDING:
Fallow lands

PROJECT NAME (if any): Na Pua Makani Wind Project - Subproject A

APPLICANT:
Name Mike Cutbirth, Na Pua Makani Power Part
Mailing Address P.O. Box 540
Santa Barbara, California 93102
Phone Number (805) 568-0300
Signature [signature]

AUTHORIZED AGENT/CONTACT PERSON:
Name Neal Dixon, Tetra Tech, Inc.
Mailing Address 737 Bishop Street, Suite 2340
Honolulu, Hawaii 96813
Phone Number (808) 441-6608
Signature [signature]

REQUEST/PROPOSAL (Briefly describe the nature of the request, proposed activity or project): Na Pua Makani Power Partners proposes to to construct and operate the Na Pua Makani Wind Project, a wind farm with a nameplate generating capacity of up to approximately 25 MW, located near the town of Kahuku, Oahu, Hawaii. The wind farm would include up to 8 wind turbine generators, access roads, assembly lay down areas, overhead and underground transmission and collector lines, an operations and maintenance building, and an electrical substation. This CUPm and waiver request application covers the portions of the project on TMK (1) 5-6-008: 006, designated as Subproject A, and includes in its scope 4 turbines, 1 permanent met tower, access roads, and underground collector lines. A waiver from the strict enforcement of setback requirements is being requested for two turbines.

POSSE JOB NO. _____

REV. 2/17/2015

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Written Statement

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1.0 INTRODUCTION

1.1 Introduction to the Overall Na Pua Makani Wind Project

This Conditional Use Permit minor (CUPm) and Waiver Permit application is one of three CUPm applications prepared for the Na Pua Makani Wind Project (Project), a renewable energy generation development to be constructed and operated by Na Pua Makani Power Partners (NPMPP), a wholly-owned subsidiary of Champlin Oahu Wind Holdings, LLC. The purpose of a CUP, as described in Chapter 21, Land Use Ordinance (LUO), Revised Ordinances of Honolulu (ROH), is to permit compatible land uses that are deemed appropriate for specified zoning districts if minimum standards and conditions are met. This CUPm application has been prepared pursuant to LUO §§ 21-2.90, 21-90-1, and 21-90-2. This permit application is being submitted concurrently with an application for a waiver from the strict application of the development standard listed under LUO §21-5.700(a), as allowed by the waiver of requirements provision under LUO § 21.2-130.

The proposed Project will be located mauka (toward the mountains) of Kahuku Town, within the Koolau Loa District (Figure 1). The Project is located within two adjacent parcels, which are identified by Tax Map Key (TMK) parcel numbers (1) 5-6:008:006 and (1) 5-6-006:018. The Project will consist of up to eight wind turbine generators and associated infrastructure, with a nameplate generating capacity of up to approximately 25 megawatts (MW). The use—wind energy generation—is defined under LUO §21-10.1 as "wind machines." The lands underlying the Project are wholly designated as City & County of Honolulu agricultural zoned districts, specifically AG-1, Restricted Agriculture and AG-2, General Agriculture. Pursuant to Table 21-3, Article 3, LUO, wind machines are permitted in both zoning districts with an approved CUPm.

An Environmental Impact Statement (EIS) was prepared for the Project, which is included with this application as Attachment 1. The technical studies from the Final EIS are referenced within this CUPm application. The Board of Land and Natural Resources (BLNR) accepted the Final EIS on July 22, 2016. The Final EIS acceptance letter from BLNR, published in the Office of Environmental Quality Control's *The Environmental Notice* on August 8, 2016, is included in Appendix A of this application.

1.2 Conditional Use Permit Subprojects

Land ownership and the ownership and operation of certain Project-related equipment has necessitated that component parts of the Project receive their own, discrete CUPm. As stated above, the Project will occupy lands within two adjacent parcel. TMK (1) 5-6:008:006, is owned by the State of Hawaii and administered by the Department of Land and Natural Resources (DLNR) and TMK (1) 5-6-006:018 is owned by Malaekahana Hui West, LLC. NPMPP has secured leases and executed agreements with each landowner individually. See Section 2.3.1 of this written statement for further discussion on land ownership.

NPMPP met with the City & County Department of Permitting & Planning (DPP) July 15, 2015 to discuss the particular attributes of the Project. DPP determined at this meeting that granting of two

separate CUPm permits (one for each parcel) for the construction and operation of the Project would provide adequate permissions and protections. Additionally, while NPMPP will own and operate the wind farm, the switching station located adjacent to the NPMPP owned substation will be owned and operated by Hawaiian Electric Company (HECO). The switching station equipment allows the electric utility to accept or not accept the electrical output of the Project based on grid demand, and conveys the electricity to the grid. Separate ownership and operation of the switching station necessitates that HECO hold a CUPm for the switching station.

In total, for the purposes of permitting, the Project will be comprised of three Subprojects. Subproject A consists of the NPMPP-owned Project components within the DLNR-owned TMK (1) 5-6-008:006, including up to four wind turbine generators, a permanent meteorological (met) tower, and an at- or below-grade electrical collection system. Subproject B consists of the NPMPP-owned Project components within the Malaekahana Hui West, LLC-owned TMK (1) 5-6-006:018, including four wind turbine generators, a temporary met tower, an operations and maintenance (O&M) building, electrical infrastructure, and below grade supporting infrastructure. Subproject C, also situated on the Malaekahana Hui West, LLC-owned TMK (1) 5-6-006-018, consists of the HECO-owned electrical switching and transmission infrastructure. See Table 1-1, below, and Figure 2.

Table 1-1. Na Pua Makani Wind Project Subproject Organization

TMK Landowner	**(1) 5-6-008:006 DLNR**	**(1) 5-6-006:018 Malaekahana Hui West, LLC**	
CUPm Subproject Applicant	Subproject A NPMPP	Subproject B NPMPP	Subproject C HECO
Project Components	• Up to four wind turbine generators • Electrical collection system • New and improved access roads • Permanent met tower	• Up to four wind turbine generators • Electrical collection system • New and improved access roads • O&M Building • Electrical substation enclosed in a 155 by 121.5-foot (47.3 by 37 meters) fenced in yard • Construction laydown area • Temporary met tower	• Electrical switching station enclosed in a 155- by 121.5-foot (47.3- by 37-meter) fenced in yard • 3,960 feet (1,207 meters) of electrical transmission line

It is important to note the Project was conceived, scoped, and developed as one singular project. Throughout environmental review, which included the preparation of an EIS, the Project and its associated impacts have been presented and evaluated as one indivisible entity. Furthermore, from an operational standpoint, NPMPP has determined that financial feasibility of the Project is dependent on its specified generation capacity, and for the Project to move forward, it must be permitted in full. Accordingly, the overall development, its cumulative impacts and associated benefits should be considered as a whole.

Nevertheless, the CUPm application requires analysis of the components subject to the permit. In response to this requirement, subproject-specific attributes are provided in this application when it is feasible. Conversely, when attributes are not discreet (e.g., operational employment numbers, economic benefits, etc.), it will be noted that descriptions are general and reflective of the Project as a whole. All technical information provided in the subproject CUPm applications is drawn from the Final EIS.

1.3 Subproject A Summary and Location

The Project is located in the Koolau Loa District, south of the town of Kahuku in the City & County of Honolulu. Subproject A includes portions of TMK (1) 5-6-008:006, which would be leased from DLNR. Though the parcel has an area of approximately 232 acres (94 hectares), activities associated with Subproject A would occur within a smaller area, consisting of approximately 21.7 acres (8.8 hectares) permanently disturbed and an additional approximately 0.7 acres (0.3 hectares) temporarily disturbed during construction. As such, when the encompassing parcel or its characteristics are discussed, the parcel will be referred as "TMK (1) 5-6-008:006" whereas subproject-specific portions of the parcel will be referred to as the "Subproject A Site."

TMK (1) 5-6-008:006 is located south of Kamehameha Highway and southeast of the existing Kahuku Wind Farm (Figure 2). Subproject A is accessible via an unnamed agricultural road (TMK (1) 5-6-006:055) owned by the State of Hawaii Department of Agriculture (HDOA). This existing agricultural access road ties into Kamehameha Highway north of the Subproject A Site (Figure 3). See subsection 2.3.1 of this written statement and Appendix C for more information regarding the long-term access easement agreement NPMPP has with HDOA.

The proposed Subproject A Site is located entirely within the State Land Use District "A" Agricultural District (Figure 4). The underlying City & County of Honolulu zoning is AG-1, Restricted Agricultural District and AG-2, General Agricultural District (Figure 5). The majority of TMK (1) 5-6-008:006 contains currently vacant lands and none of the Subproject A footprint is located on actively cultivated agriculture land as most of the parcel is fallow. The area is dominated by a mixture of non-native weedy vegetation and common native vegetation. The Subproject A Site is surrounded by a mixture of cultivated land and undeveloped land dominated by non-native or common native vegetation.

The proposed Subproject A includes up to four Vestas V136 wind turbine generators, each with a generating capacity of up 3.45 MW. The Subproject A wind turbine generators will be installed with hub heights of 367 feet (112 meters) in order to ensure maximum operational efficiency given the wind resource. Subproject A and Subproject B together are expected to produce approximately 88,000 megawatt hours (MWh) of electricity per year (assuming an installed capacity of up to approximately 25 MW), and Subproject A should account for up to approximately half of the aggregate energy production.

In addition to the four wind turbine generators, Subproject A also includes access roads, turbine assembly and lay-down areas, underground collector lines, and a permanent met tower. The energy generated by the wind turbine generators would be collected through the below grade electrical

collector system and fed to the substation within the Subproject B Site where it will connect to HECO's grid. No substation or operations and maintenance building will be located on the Subproject A Site.

1.4 Purpose and Need

NPMPP's purpose 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. Hawaii's Clean Energy Initiative (HCEI) has set a goal for the state to source 100 percent of its electricity from locally generated renewable sources by 2045 (HCEI 2014). The cost of electricity from renewable energy is currently about one-half the cost of electricity from burning oil and other non-renewable sources (Department of Business, Economic Development and Tourism 2013). The power generated by the Project would be sold to HECO pursuant to the power purchase agreement (PPA) under a long-term, fixed-price contract with fixed annual escalation providing long-term price stability for consumers.

NPMPP anticipates that operation of the proposed 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, contribute to the State's energy independence and security, and reduce the imports of foreign oil. 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 (GHG) emissions and other forms of pollution that are detrimental to the environment and human health. The aggregate energy potentially generated by the proposed Project would eliminate the use of approximately 13.44 barrels of oil for every hour of operation, which in turn would reduce emissions of carbon dioxide (CO_2) by approximately 5.78 tons as well as other air pollutants including sulfur dioxide (SO_2), nitrogen oxides (NO_X), and mercury (Hg).

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 30 percent by 2020, 40 percent by 2030, 75 percent by 2040, and 100 percent by 2045. In addition, the Global Warming Solutions Act of 2007 requires that Hawaii's GHG emissions be reduced to levels at or less than 1990 levels by January 2020. On January 28, 2008, Hawaii also signed a Memorandum of Understanding with the U.S. Department of Energy (DOE) that established the HCEI, under which at least 70 percent of Hawaii's energy needs would be supplied by renewable resources by the year 2030.

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. As proposed, the Project in its entirety could provide 88,000 MWh per year (MWh/year) of electricity to HECO's power grid, enough to provide electricity to approximately 8,000 households based on the average statistics reported by the American Wind Energy Association (2014).

1.5 Hawaii Revised Statutes, Chapter 343 Environmental Impact Statements

An EIS was prepared for the Project pursuant to Hawaii Revised Statutes (HRS) Chapter 343 and the Final EIS was accepted by the BLNR on July 22, 2016 (see Appendix A). Due to portions of the Project being located on state lands, the construction and operation of the proposed Project constitutes an action requiring compliance with HRS Chapter 343. BLNR served as the accepting authority for the EIS. The majority of the information presented in this application has been adopted from the Final EIS. This written statement contains summaries of the EIS affected environment and environmental consequences for the infrastructure, public services, physical, natural, and socio-economical resources.

The EIS was prepared with the intent of assessing to the full extent the potential impacts of the Project. As such, parameters of the preferred alternative (Alternative 2a-Modified Proposed Action Option) were expanded to ensure comprehensive potential impacts were disclosed. As a result, the project description of the preferred alternative presented in the Final EIS includes some components not present in the final design of the Project, such as microwave communications equipment.

2.0 SITE DESCRIPTION

2.1 Topography

The Project is located at the base of the northern part of the Koolau Range, sloping to the coastal plain near the town of Kahuku. TMK (1) 5-6-008:0006 ranges in elevation from approximately 56 feet (17 meters) above mean sea level (amsl) on the northeastern edge to approximately 614 feet (187 meters) amsl on the southwestern edge of the parcel and consists of steep, dissected ridges surrounding gently sloping valleys as well as flat, coastal plains (Hobdy 2013a).

2.2 History of Site

Traditional accounts of the natural resources and existing conditions of the Kahuku Ahupuaa indicate that during Hawaiian settlement prior to the arrival of Europeans, many parts of the landscape were used for traditional agriculture, habitation, and ceremony, varying from moderate to intense. At the time of the initial contact period, a good portion of the land lay fallow due to severe population decline and was overgrown in some areas with exotic plant species. Thus, there are several conflicting accounts of what the landscape was like and how it was used prior to European contact. After European contact, it appears that there was a marked population decline with an associated decrease in agricultural activity.

Ranching in the Kahuku area began in the 1850s when the Kahuku Ranch was established on land purchased from Kamehameha III (Korn 1958). The ranch grew and soon the once rich vegetation of Kahuku began to disappear, as the result of free-range overgrazing (Stride et al. 2003:16). This took a toll on the natural resources, the small unprotected family gardens, and the native population -- "At the same time the hala forests began to disappear, the Hawaiian population also began to

disappear" (Stride et al. 2003). Presumably the population continued to decline between the 1830s and the 1850s.

By the 1890s, James Campbell had control of a large portion of the Kahuku tract which laid the groundwork for the creation of the Kahuku Plantation (Stride et al. 2003). This was the start of large-scale commercial agriculture that altered the landscape of Kahuku with agriculture and a railroad segment that changed the landscape and redefined the region. Much of the uplands above Kahuku Village were once planted in sugar cane and pineapple. These fields were established wherever possible except on steep hillsides and on the crests of ridges and knolls (Stride et al. 2003).

The plantation continued to expand into the 1930s when Japanese, Filipino, and Portuguese worked the fields (Stride et al. 2003). The plantation was responsible for shaping the town of Kahuku and the life of its workers by introducing "concrete stoves for laborer's cottages and sanitation drains that were used as models for other plantations…Kahuku…introduced the first plantation day nursery and high school…baseball diamond, the first golf course …" (Stride et al. 2003:22). The growth quickly slowed when in 1955 the last of locomotives hauling sugarcane stopped. In 1971, the Kahuku Plantation closed (Stride et al. 2003).

2.3 Existing Conditions

2.3.1 Land Ownership

The parcel underlying the Subproject A site, TMK (1) 5-6-008:006, is owned by the State of Hawaii and administered by the DLNR. NPMPP has a lease agreement with DLNR for the use of TMK (1) 5-6-008:006 for the Project. The lease agreement was approved by the BLNR on October 14, 2016. See Appendix B. The lease with DLNR consists of a 40-year term, which would give NPMPP the ability to repowering the windfarm, and the option to terminate the lease earlier under certain circumstances.[1] The lease will be executed upon commencement of operations and includes a 1-year right-of-entry after expiration or termination of the lease in order to allow NPMPP to remove its improvements from the premise and to restore the premises to the condition that existed prior to its occupancy, as required by the lease agreement.

The land within the Subproject A site is mostly vacant and not currently being utilized for actively cultivated agriculture. TMK (1) 5-6-008:006 was officially removed from the Kahuku Agricultural Park in 2015 per Executive Order No. 4482 as the land was not being utilized for its intended purposes presumably due to lack of irrigation water, steep slopes, and poor soil quality.

The primary access route from Kamehameha Highway to the Subproject A Site would be via an existing unnamed State-owned road through the adjacent Kahuku Agricultural Park. NPMPP has a long-term easement from the State of HDOA to use this road for the construction and operation of

[1] The 40-year term exceeds the 20-year term of the PPA. The lease term keeps open the option for NPMPP to repower the project. Repowering the project would require independent regulatory approval and environmental review at the appropriate time.

the wind farm. See Appendix C for a copy of the Non-Exclusive Access Easement with a duration of 20 years, plus a one-year right of entry for the purposes of removing wind farm equipment, to be executed upon commencement of wind farm operations. The Board of Agriculture approved a right-of-entry for the purposes of construction on September 30, 2014.

2.3.2 Land Use District and Zoning

The Subproject A Site is located entirely within the State Land Use District "A" Agricultural (Figure 4). City & County of Honolulu land use districts AG-2 General Agricultural and AG-1 Restricted Agricultural districts underlie the Subproject A Site (Figure 5).

The Subproject A Site is located within the boundaries of the Koolau Loa planning region of Oahu. The comprehensive plan applicable to this area is a sustainable communities plan (SCP), the Koolau Loa Sustainable Communities Plan (Koolau Loa SCP), which designates the Subproject A Site for agricultural use (City & County of Honolulu, DPP 2012).

Within the vicinity of the Pproject, the Special Management Area (SMA) extends mauka (away from the ocean, inland) from the shoreline to a boundary aligned along Kamehameha Highway. All components of the proposed Subproject A are located mauka of Kamehameha Highway and, thus, outside of the SMA. Accordingly, no SMA review or permits will apply to Subproject A.

2.3.3 Agricultural Land and Existing Uses

The University of Hawaii Land Study Bureau (LSB) Detailed Land Classification rates the agricultural productivity of soils throughout the state based on characteristics of soil properties, topography, and climate. The productivity ratings were established to classify soils as Category A, B, C, D, or E, with Category A representing the most productive soils and Category E the least productive soils. LSB A- and B-rated agricultural lands are considered to be of high value and have special protections set forth in state regulations. See Section 4.2.1 of this document for a discussion on the compatibility of Subproject A with applicable state regulations.

Analysis provided in this section utilized digital TMK data as made available by the City and County of Honolulu through the State of Hawaii Office of Planning and differs from the legal description found in tax records and legal documents. In the land use analysis, the available data reflects an area of 248.9 acres (100.7 hectare) whereas tax records and legal descriptions indicate an area of approximately 232 acres (94 hectares). It is assumed that representative portions of the project would be consistent despite the discrepancy in parcel area and that the nominal areas calculated from the digital data will be larger and, thus, provide a more conservative estimate.

The majority of the soils within TMK (1) 5-6-008:006 are classified as LSB Category E (68.5 percent), followed by Category C (16.5 percent, Category B (14.2 percent each), Category A (0.6 percent), and Category D (0.2 percent). See Table 2-1 and Figure 6.

The Agricultural Lands of Importance to the State of Hawaii (ALISH) is a classification system for identification of agriculturally important lands in the State of Hawaii. Three classes of agriculturally important lands have been established for the State of Hawaii:

- Prime Agricultural Land
- Unique Agricultural Land, and
- Other Important Agricultural Land.

Land considered for ALISH classification may or may not currently be in agricultural use. Approximately 20.4 percent of the land within TMK (1) 5-6-008:006 has been designated under the ALISH classification system. See Table 2-1 and Figure 7). This includes approximately 26 acres (10.5 hectares) of Prime Agricultural Land and 25 acres (10 hectares) of Other Agricultural Land. The majority of land found within the DLNR owned parcel, 198 acres (80 hectares), is not classified under the ALISH system.

Table 2-1. Agricultural Land Classifications for TMK (1) 5-6-008:006

Land Classification	Acres	Percent of Parcel
LSB Agricultural Productivity Rating		
A	1.4	0.6
B	35.5	14.2
C	41.0	16.5
D	0.5	0.2
E	170.5	68.5
Total[1]/	248.9	
ALISH Classification		
No Data	198.0	79.6
Other Agricultural Land	24.8	10.0
Unique Agricultural Land	0.0	0.0
Prime Agricultural Land	26.0	10.4
Unclassified Agricultural Land	0.0	0.0
Total[1]/	248.8	
[1] Column and row totals may not sum exactly due to rounding		

2.3.4 Abutting Uses

The land uses immediately surrounding the Subproject A Site are vacant and agricultural lands, both active and fallow. West and south of the TMK (1) 5-6-008:006 boundary are active military training lands known as the Kahuku Training Area (KTA). North of the TMK (1) 5-6-008:006 is the adjacent Kahuku Wind Farm with 12 wind turbines and a nameplate generating capacity of 30 MW. Also along the northern boundary of TMK (1) 5-6-008:006 is the Kahuku Agricultural Park owned and managed by HDOA. There are several legal residences located on the HDOA land. Uses not immediately adjacent but in proximity to the Subproject A Site include the residential community known as Kahuku Mauka Village to the northeast and Kahuku Town to the east (Figure 3).

3.0 PROJECT DESCRIPTION

The proposed Subproject A would include up to four wind turbine generators and associated foundations and transformers; an electrical collector system; one permanent meteorological (met) tower; and access roads (Figure 3). Construction staging areas and temporary parking will be provided within the temporary impact footprint associated with the turbine pads and access roads. Electricity generated by the wind turbine generators on both the Subproject A and Subproject B Sites will be transmitted through the underground collector system to the Project substation and HECO switching station (both located on TMK (1) 5-6-006:018). From the HECO switching station, an overhead transmission line will be constructed on TMK (1) 5-6-006:018 to connect the proposed substation and switching station to the HECO grid. Each of the major Subproject A components are described in detail below. The location and details of the proposed structures are shown in the site plans and drawings contained in Appendix D. Details pertaining to the other subproject facilities are provided within their respective CUPm applications.

A total of approximately 22.4 acres (9.0 hectares) on the Subproject A Site will be disturbed during construction, of which 21.7 acres (8.8 hectares) will be permanently disturbed and 0.7 acres (0.3 hectares) will be temporarily disturbed. Temporary disturbance areas will be subject to temporary actions such as clearing, grubbing, and grading and these areas would be replanted with non-aggressive resident species that are compatible with Project operations in order to minimize erosion. Up to 2 acres (0.8 hectares) around each turbine would be maintained with permanent low-growing vegetation or gravel pads to allow for O&M requirements. An additional area up to 4 acres (1.6 hectares) per pad would be maintained to facilitate post-construction mortality monitoring efforts, as practicable.

NPMPP anticipates employing three to six full-time employees upon commencing commercial operation of the Project. Operation and maintenance activities for each Subproject component would generally occur during normal work day hours from Monday to Friday. Power would be generated based on demand from the HECO Oahu grid.

The anticipated life of the Project is 21 years, which accounts for1 year of construction and 20 years of commercial operation. After that time, NPMPP will evaluate whether to continue operation of the project or to decommission it. Should the period of operations be extended, the facility may also be upgraded and repowered with renegotiated leases (and any necessary extensions of permits and approvals).

If, at the end of its anticipated life, the Project is decommissioned, the goal of decommissioning would be to remove the power generation equipment and return the site to a condition as close to its pre-construction state as possible within 1 year as contractually required in both the land lease with DLNR and the PPA with HECO. All decommissioning- and restoration-related waste would be properly handled and disposed of or recycled, as appropriate, in accordance with county, state, and Federal laws and permit requirements. Foundations would be removed to a depth below grade, and roads would be left for use. Decommissioning would restore, to the extent practical, the visual and

ecological character of the landscape and also remove effects to other environmental and public resources that may have occurred as a result of Project operations. NPMPP would provide the land owners with security as may be required under the terms of the leases to ensure decommissioning obligations are met.

The following is a discussion of each component of Subproject A. Additional detail, including a discussion of siting and design adjustments to accommodate community concerns, is provided in the Final EIS for the project (Attachment 1).

3.1 Wind Turbine Generators

NPMPP has selected the Vestas V136 wind turbine generators, which will be mounted on a tower height of 368 feet (112 meters) which is most suited for the wind resources and site constraints. Table 3-1 describes the specific turbine configurations and assigns each type to the turbine location on Drawing D-1 of Appendix D. Also see Drawings D-3, D-4, and D-5 in Appendix D for dimensional drawings of the turbine tower, blades, and nacelle. A Federal Aviation Administration (FAA) approved lighting plan will be developed for the Project. This plan will specify the installation of flashing red lights on designated turbines and met towers to improve nighttime visibility for aviation.

Table 3-1. Key Dimensions and Specifications of the Turbine Configurations

Description	V136 Turbine Configuration Specifications
	112m Hub Height
Turbine number[1]	1, 2, 3, 4
Power generation	Up to 3.45 MW
Hub height	368 feet (112 meters)
Rotor type	3-bladed, horizontal axis
Rotor diameter	Up to 447 feet (136 meters)
Blade length	Up to 219 feet (66.7 meters)
Number of blades	3
Total height above ground (tower hub height + ½ rotor diameter)	Up to 591 feet (180 meters)
Rotor swept area	Up to 156,368 feet^2 (14,527 meters^2)
Rotor speed	5.6 – 15.3 rotations per minute
Minimum operational wind speed	9.8 ft./s (3 m/s)
Maximum operational wind speed	Up to 73.8 ft./s (22.5 m/s)
ft./s = feet per second; m/s = meters per second [1] See Drawing D-1 of Appendix D for Turbine layout and numbering.	

Construction

Each turbine would be transported from Kalaeloa Harbor via highways (see Section 6.3 for a description of the construction access route) and assembled on a constructed foundation. Each turbine would require multiple deliveries, consisting of at least 12 separate loads, of which seven

(7) will be superloads, of equipment and materials to its pad. Towers are generally delivered in three or four sections. Each of a turbine's three blades would be delivered separately, as would a turbine's nacelle, rotor, and down-tower components (e.g., controllers, ladders and platforms, pad-mount transformers, and pad-mounted transformer vaults). Deliveries would be made using transport vehicles that conform to road weight limits; any variances would be incorporated into permits submitted to the Hawaii Department of Transportation (HDOT). Transportation of turbine components would primarily occur between the hours of 9 pm and 5am, pursuant to permit restrictions, as to avoid impacts to daytime traffic. A Traffic Assessment Report is included as Appendix B of the Final EIS.

A work area would be cleared and graded at each turbine location to provide space for delivery and laydown of turbine components, crane access, and foundations, as well as turbine construction. An area of approximately 4 acres (1.6 hectares) would be required at each turbine for the crane pad and construction laydown area. See Drawing D-6 of Appendix D.

Foundations would be either soil anchored or rock anchored. See Drawing D-7 in Appendix D. Foundation depth would depend upon the results of geotechnical tests conducted at each final tower location and final structural engineering. Each turbine foundation will consist of up to approximately 150 to 200 cubic yards (115 to 153 cubic meters) of concrete, reinforcing bars, and anchor bolts. Up to approximately 20 to 25 trucks of concrete will be required per foundation. NPMPP anticipates that for each turbine pad, concrete deliveries and pouring would occur as a continuous operation over a 1-day period.

Concrete typically needs to be poured within 90 minutes of being mixed with water. Concrete will either be supplied from an existing plant on Oahu or may be batched on the Subproject B Site. Aggregate would be sourced from an existing supply or quarry on Oahu.

General fill would be needed for grading of turbine pads (concrete foundations plus surrounding cleared areas) and access roads. Fill material would be utilized from onsite excavations and earthwork. Additional sources of fill, if needed, include nearby pits or excess material taken from within the property.

Construction would be completed during daylight hours, typically from 7am to 5pm. There may be instances where those hours need to be extended earlier or later and nighttime construction may occur to avoid traffic and to facilitate schedule. All proper communication channels would be followed and compliance with applicable permits will be maintained.

Once the foundations are constructed, the turbines would be assembled and erected using a combination of forklifts, medium-size cranes with a lift capacity of 99 to 143 tons (90 to 130 metric tons), and a main erection crane with a lift capacity of 660 tons (600 metric tons), located on a compacted earthen or gravel crane pad. Construction equipment requiring access to these areas would include both wheeled and tracked vehicles. Cranes used to assemble the turbine components would be delivered to the wind farm site in multiple legal-weight loads.

Operation and Maintenance

After construction, a portion of the turbine pad area would be revegetated through replanting with non-aggressive resident species that are compatible with Project operations in order to minimize erosion. Permanent low-growing vegetation or gravel pads up to 2 acres (0.8 hectare) around each turbine would be maintained to allow for O&M requirements. An additional area up to 4 acres (1.6 hectares) per pad would be maintained to facilitate post-construction mortality monitoring efforts, as practicable. See the attached Final EIS for more information on post-construction mortality monitoring.

During Project operation, technicians would perform routine maintenance on each turbine. Routine maintenance and repairs require service vehicle access. Should there be a need for major component replacement (e.g., blades, generator, supporting tower), heavy equipment similar to that used during construction would be required. In that case, the access road, crane pad, and staging area would be used in a manner similar to their use during the original tower assembly and construction process.

3.2 Electrical Collector System

Power generated by the turbines would be stepped up to 34.5 kilovolts (kV) at pad-mounted transformers and then collected through an underground electrical collection system (Figure 3). This system would convey power to the electrical substation located on TMK (1) 5-6-006:018, which would step up the voltage to 46 kV and transmit the power to the point of interconnect at the adjacent HECO-owned and operated switching station. The switching station is addressed within the Subproject B CUPm application and HECO's switching station and the new 0.9-mile (1.4-kilometer) HECO-owned and operated transmission line that will connect the switching station with Oahu's general transmission system at Kamehameha Highway are addressed under the Subproject C application.

Construction

The electrical collector system would consist of up to two separate 34.5-kV feeder circuits installed underground. Cables would be directly buried in trenches and would terminate at the onsite substation. Depending on the subsurface conditions, blasting is not expected but may be required to install the trenches. Each trench would contain three sets of power cables, plus a ground wire and a fiber optic communication cable for the supervisory control and data acquisition (SCADA) system (to transmit data from the turbine controllers to the substation and O&M building located on TMK (1) 5-6-006:018). The cable trench would be backfilled with select fill material to protect the cables from damage or possible contact and to provide appropriate media for heat dissipation from the cables. It is estimated that approximately 1.32 miles (2.12 kilometers) of collector cable would be required. Trenches would be approximately 24 inches (61 centimeters) wide excavated by rubber tire or tracked equipment and, where the collector system parallels Subproject access roads, the cable would be buried directly alongside access roads. In these areas, no additional ground disturbance would occur in association with construction of the underground electrical collector

system (i.e., disturbance is accounted for in association with the access roads). It may be necessary to install portions of the collector system above ground to respond to construction challenges or to avoid impacts to streams and other resources in the wind farm site.

Construction of the electrical collector system would utilize standard industry procedures including surveying, corridor preparation, materials hauling, pull sites, staging areas, structure assembly and erection, ground wire, conductor stringing, cleanup, and replanting with non-aggressive resident species that are compatible with wind farm operations.

3.3 Met Towers

Subproject A would include one permanent lattice-frame met tower that would support weather instruments that measure and record weather data to measure performance and guide Project operation. The met tower would be approximately 185 feet (56 meters) tall and would have a footprint of approximately 70 square feet. See Drawing D-8 in Appendix D.

Construction

Construction of the met towers would require on-site tower assembly on a constructed footing. Approximately 1 acre (0.4 hectares) would be disturbed during construction. Following construction, the temporary construction areas would be re-vegetated using non-aggressive resident species that are compatible with Project operations. A 12-foot-wide (3.6-meter-wide) met tower access road may be constructed, extending from the internal access road (Figure 2).

Operation and Maintenance

The area of permanent impact would consist of an approximately 0.1-acre (0.04-hectare) gravel pad, which would be maintained around the base of the met tower to allow for O&M requirements. The permanent met tower would require routine monitoring and maintenance during the period of operation. Routine monitoring and maintenance activities would require vehicle access, but met towers do not typically require heavy equipment for servicing.

3.4 Access Roads

Access roads for Subproject A include the use of existing roads, modifying existing roads, and grading new roads (Figure 2). Access to the Subproject A Site will be provided from Kamehameha Highway via the unnamed existing State-owned roads through the Kahuku Agricultural Park. Provision of access has been guaranteed through a long-term, non-exclusive lease with HDOA (see Appendix C). Internal Subproject A Site access will require new roads that will connect the project components.

Construction

New access roads would be constructed to approximately 16 feet (5 meters). The road surfaces of the existing unnamed State-owned roads through the Kahuku Agricultural Park would be improved

as needed and widened to meet construction and maintenance activity requirements, per the conditions in the long-term easement agreement with HDOA (See Appendix C for a copy of the Non-Exclusive Access Easement). In total, 1.5 miles (2.4 kilometers) of new internal access roads would be required for Subproject A. Disturbance during construction would occur within a wider buffer to allow adequate passage for the crawler crane and transport trucks, as well as turn-around locations for equipment, bringing the width of the corridor to be disturbed temporarily to approximately 50 feet (15 meters) along the access roads in some areas. The total temporary disturbance required during construction of the roads will depend on the amount of cut-fill in any one area and could expand to 100 feet (30 meters) wide in certain defined areas. All access roads would have a gravel surface and will be constructed with storm water erosion and control features.

Operation and Maintenance

During operation, service vehicles and equipment would continue to use these roads for routine maintenance of the turbines and associated Project infrastructure. Permanent roadway surfaces would be maintained in good working order by NPMPP through periodic grading and compacting to minimize naturally occurring erosion.

4.0 JUSTIFICATION

4.1 Compliance with General Requirements for Conditional Uses

4.1.1 Permitted Use in Zoning District

The LUO, provided in ROH Chapter 21, regulates the use of land in the City and County of Honolulu. The proposed land use is identified in §21-10.1, ROH, falling under the definition of a Wind Machine. Table 21-3, Master Use Table of the LUO, indicates Wind Machines are allowed within the AG-1 Restricted Agriculture and AG-2 General Agriculture zones as a special accessory use or with a CUP (minor), subject to standards in Article 5 of the LUO. The generating capacity of the proposed wind turbine generators exceeds the threshold specified in the development standards for those allowed as a special accessory use; as such, the Project is dependent upon receiving a CUPm. Compliance with the development standards in Article 5 of the LUO is discussed in Section 4.2.

4.1.2 Suitability of the Site

To determine a suitable location for the proposed Project, alternatives were considered for their ability to achieve the Project's purpose and needs. These alternatives are discussed in Chapter 2 of the Final EIS (Attachment 1). Through input received from the community and from Federal and State agencies, NPMPP developed screening criteria that were used to help refine the siting process. These criteria are described below.

Wind Resource. For a project site to be viable and economically competitive, it must have a very good wind resource. It is well documented that the north shore of Oahu has the best wind resource

on the island. Beginning in 2009, temporary met towers were installed within the Na Pua Makani wind farm site to obtain in-depth information about the onsite wind resources. The results of 4 years of data collection indicate that the wind regime (in terms of strength, direction, duration, turbulence, and temporal and spatial variations) throughout the wind farm site is strong due to its location and exposure to the trade winds, which accelerate as they ascend from ocean through the Wind farm site into the mountains. The data determined that there is sufficient wind resource within the wind farm site for a viable project.

Utility Interconnection and Transmission Capacity. Additionally, for a project site to be viable it must have access to adequate and available transmission capacity, and be located in proximity to existing transmission lines. These factors help determine the viability and economic feasibility of a project; projects located in areas where there is no transmission capacity are not viable. Projects in locations that are not adjacent to transmission lines incur greater construction costs, due to the need for longer connector lines, and thus may result in greater environmental impacts than projects located closer to an existing transmission line. The Na Pua Makani wind farm site is located within approximately 1 mile (1.6 kilometers) of HECO's existing transmission system, which was determined by HECO to have an adequate capacity to support a wind project of up to approximately a 25 MW without substantial transmission upgrades.

Land Availability. Wind projects require available contiguous land that is designated to allow wind energy development. The land underlying the Subproject A Site is generally classified as "A" Agricultural District by the State Land Use District. Lands underlying the Project are zoned as AG-1, Restricted Agricultural and AG-2, General Agricultural by the City & County of Honolulu. Wind energy facilities are a permitted use on State "A" Agricultural District lands. Wind energy facilities of the subject size are permitted within City & County of Honolulu Agricultural zoned lands with a CUPm.

Site Conditions. Much of the Federal land adjacent to/south of the current Subproject A wind farm site boundary is characterized by steep topography that is not feasible to locate wind turbine generators on. Topography within the Subproject A wind farm site was assessed to identify areas that would be too steep for construction or that would be inaccessible by construction vehicles. The presence of several steep ridges and deep gullies trending in southwest-to-northeasterly directions eliminated some portions of the wind farm site from consideration because construction in these areas would be logistically infeasible and/or terrain ruggedness would inflate construction costs. After portions of the wind farm site were eliminated due to topography, the remaining land area was determined to have a sufficient area for a viable project.

Potential Impacts. The initial design of the Project was refined during the environmental review process based on input from the surrounding communities regarding visual impacts and concerns about City & County of Honolulu setback distances which are the distance equal to the maximum turbine tip height above ground. The Project design eliminated locations that were the closest and most visible from the Kamehameha highway and from Kahuku Town. Turbine locations have been sited to avoid known biological, and cultural and archaeological resources.

4.1.3 Impact on Character of Surrounding Area

The existing Kahuku Wind Farm is located immediately north of the Subproject A Site. Therefore, the introduction of wind turbine generators will not be a new element to the existing character of the community. The original site plan for the Project has gone through a number of revisions since the start of community outreach in the spring of 2013, including the relocation and/or elimination of five turbines to increase the distance between the wind farm site and the community and key points of community interest. See Section 7.2.2 for additional discussion on impacts to public views and see Section 7.6 for discussion regarding community concerns including public safety.

Lands adjacent to the Subproject A Site 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. The Project is also located adjacent to the existing Kahuku Agricultural Park. South of the Subproject A Site are military lands.

On January 20, 2016, NPMPP signed an Agreement with the Department of Defense under 32 CFR Section 211 that de-conflicts the construction and operation of the NPM Wind Project from the U.S. Army's operation of the Kahuku Training Area. This agreement confirms that the proposed Project is compatible with existing military uses in the surrounding area.

The majority of TMK (1) 5-6-008:006 will continue to be open space. After the Project facilities are constructed, only 3,217 square feet (298.8 square meters), or 0.032% of total parcel area, will be covered by non-agricultural buildings and structures (i.e. permanent lot coverage).

4.1.4 Contribution to the Welfare of the Community

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 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. Toward that end, NPMPP will sell power to HECO 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 import of foreign oil. Production of wind-generated energy would replace a portion of the State's electricity that is currently generated by burning fossil fuels, thus reducing GHG emissions and other forms of pollution that are detrimental to the environment and human health. The energy potentially generated by the proposed Project would eliminate the use of approximately 13.44 barrels of oil, for every hour of operation, which in turn would reduce emissions of CO_2 and other air pollutants including SO_2, NO_x, and Hg.

NPMPP has engaged in outreach efforts with affected stakeholders to define its Community Benefits Package. This may include honoring the commitment of the prior developer to pay $10,000 per

wind turbine per year over the life of the project to the Kahuku Community. This translates into $80,000 to $100,000 per year over a 20- to 25-year project life or the equivalent of approximately $2,000,000 of direct economic benefits to the Kahuku Community. It is anticipated that Project funds would be administered by a board of local community members who would make decisions as to the use of the proceeds and which activities, programs, groups, and events would be sponsored.

Throughout the development and environmental review of the Project, NPMPP conducted a wide-reaching community outreach effort aimed at communicating to the surrounding community and garnering input on the project. NPMPP has engaged in consultations with governmental agencies, public entities, community members, and stakeholders, providing information and opening communication channels through numerous public meetings and a project website. Input received has been taken into account in the planning and design of the proposed Project. Further detail regarding outreach is provided in Section 7.5.

4.2 Compliance with Development Standards and Request for Waiver

4.2.1 Land Use Districts and District Regulations

City and County of Honolulu Zoning Districts (LUO Article 3)

The City & County of Honolulu LUO identified uses that are considered appropriate in specified zoning districts and sets forth minimum standards and conditions that should be met. The Subproject A Site is located within the AG-1, Restricted Agricultural District and the AG-2, General Agricultural District. Agricultural uses are addressed in LUO §21-3.50-4(a), which refers to the LUO Article 3, Table 21-3, Master Use Table for permitted uses. Statutory definitions applicable for the purposed of the LUO are provided in Article 10. LUO §21-10.1 states: *"Wind machines" means devices and facilities, including appurtenances, associated with the production and transmission of wind generated energy.* The proposed Project fits within the LUO definition of wind machines.

Pursuant to Table 21-3, Article 3 of the LUO, wind machines are permitted in both the AG-1 and AG-2 districts with an approved CUPm contingent on specific use standards set forth in LUO Article 5. Compliance with Agricultural District, general, and specific use standards will be discussed in sections 4.2.2, 4.2.3, and 4.2.4 of this statement, respectively.

Hawaii State Land Use Law (HRS Chapter 205)

Compatibility of the proposed Subproject A based on State land use regulations has also been analyzed. The Subproject A Site is located within the State "A" Agricultural District. HRS §205-4.5(a) and HAR §15-15-25, which take into consideration the LSB productivity ratings, set forth permissible uses on agricultural land with a rating of A or B, which include: (14) *Wind energy facilities, including the appurtenances associated with the production and transmission of wind generated energy; provided that the wind energy facilities and appurtenances are compatible with agriculture uses and cause minimal adverse impact on agricultural land.* HAR 15-15-25(b) states that

uses identified as permissible on agricultural lands with A and B ratings are also permissible on lands with C, D, E or N (unrated) ratings. Pursuant to provisions laid out in HRS §205-4.5 and HAR §15-15, the proposed use is permitted within the "A" Agricultural District as the proposed Project meets the definition of wind energy facilities and it will be compatible with agriculture uses and cause minimal adverse impacts on agricultural land as none of TMK (1) 5-6-008:006 is actively cultivated agriculture. The immediately adjacent lands to the north of TMK (1) 5-6-008:006, are part of the Kahuku Agricultural Park and include active agricultural lands but the continued operation of these lands will not be impacted by the Project.

Subproject A would have a permanent footprint that occupies lands designated under LSB productivity ratings B, C, and E. Table 4-1 lists the area falling under each LSB classification within TMK (1) 5-6-008:006 and the area of permanent disturbance for Subproject A. As with analysis of agricultural land previously in this document, the analysis provided in this section utilized digital TMK data as made available by the City and County of Honolulu through the State of Hawaii Office of Planning. The available data reflects an area of 248.9 acres (100.7 hectares) whereas tax records and legal descriptions indicate an area of approximately 232 acres (94 hectares).

Table 4-1. Area of Land within Parcel and Subproject A Footprint by LSB Classifications

LSB Land Productivity Ratings	Area of Each LSB Classification within TMK (1) 5-6-008:006 (acres)	Area of Each LSB Classification within Permanent Footprint (acres)	Percent of Area by LSB Classification within TMK (1) 5-6-008:006 Occupied by Permanent Footprint
A	1.4	0	0.0%
B	35.5	1.8	5.0%
C	41.0	5.3	12.9%
D	0.5	0	0.0%
E	170.5	14.5	8.5%
Total[1]/	248.9	21.6	-

[1] Column and row totals may not sum exactly due to rounding

Within TMK (1) 5-6-008:006, Subproject A's permanent footprint would remove 1.8 acres (0.7 hectares) or 5.0 percent of LSB A- and B-rated land and an additional 19.8 acres (8.0 hectares) or 21.4 percent of LSB lower rated lands (C, D, and E) from potential agricultural productivity. On a district-wide scale, the proposed Subproject A will impact less than 0.1 percent of the A- and B-rated agricultural lands in the Koolau Loa District.

Considering the limited nature of the subproject footprint and that there will be no loss in active cultivation, the proposed development will a negligible impact on agriculture.

4.2.2 District Standards (AG standards)

TMK (1) 5-6-008:006 is located within the City & County of Honolulu AG-1 Restricted Agricultural zoning District and the AG-2, General Agricultural District. The development standards for the underlying zoning districts are discussed in Article 3 of the LUO. Specifically, ROH §21-3.50-4,

Agricultural uses and development standards, and Table 21-3.1 of the LUO address the development standards for the City & County of Honolulu agricultural districts. These standards are presented in Table 4-2, below, and includes a description of how the Subproject complies with those standards, or requests a waiver from the standards.

Table 4-2. LUO General Agricultural District Development Article 3

LUO Standards	AG-1 District Provisions	AG-2 District Provisions	CUP Project Area
Minimum Lot Area	5 acres	3 acres for major livestock production, 2 acres for all other uses	(1) 5-6-008:006 covers 232 acres
Minimum Lot Width / Depth	150 feet	150 feet	(1) 5-6-008:006 is an irregular-shaped lot with a minimum lot width of approximately 160 feet (49 meters). Generally, the lot measures approximately 4,900 feet (1,500 meters) by 4,300 feet (1,300 meters).
Front Yard Setback Side and Rear Yard Setback	15 feet 10 feet	15 feet 10 feet	(1) 5-6-008:006 has no frontage on public roads; as such, there is no clear distinction of a front, side or rear yard. The wind turbines will be located no closer than 15 feet from all boundary lot lines of TMK (1)5-6-008:006. Setbacks specific to wind machines will be determined according to LUO §21-5.700(a). A waiver from the wind machine setback standard is requested for Turbines #1 and #2. See further discussion under Section 4.2.3.
Maximum Building Area	10 percent of zoning lot area for non-agricultural structures (23.4 acres)	10 percent of zoning lot area for non-agricultural structures (23.4 acres)	No non-agricultural structures currently exist. Area to be occupied by wind turbines: 3,217 SF The coverage composed of non-agricultural structures is less than 0.1% lot coverage.
Maximum Building Height	25 feet (if setbacks are provided)	25 feet (if setbacks are provided)	Per LUO 21-4.60(c)(7) wind machines, which includes appurtenances associated with the production and transmission of wind generated energy, are exempt from zoning district height limits.

As noted in Table 4-2 above, TMK (1) 5-6-008:006 meets the development standards. With non-agricultural structures occupying only 3,217 square feet (298.8 square meters), TMK (1) 5-6-008:006 will be well below the maximum 10 percent lot coverage. TMK (1) 5-6-008:006 and all Subproject A components conform to the development standards of the AG-1 Restricted Agricultural and AG-2 General Agriculture zoning districts. A waiver request from the setback standards specific to wind machines is further discussed in Section 4.2.3 below.

4.2.3 General and Specific Use Development Standards

LUO Article 4, General Development Standards, identifies development standards for any use, regardless of the zoning district. LUO §21-4.60(c) specifies exceptions to height standards and includes an exception specific to wind machines under subsection LUO §21-4.60(c)(7): Where permitted, wind machines are exempt from zoning district height limits provided that each machine shall be set back from all property lines one foot for each foot of height, measured from the highest vertical extension of the system. LUO Article 5, Specific Use Development Standards, identifies development standards for specific uses, regardless of the zoning district. LUO §21-5.700 specifies standards specific to wind machines and under subsection (a) specifies that "all wind machines shall be set back from all property lines a minimum distance equal to the height of the system. Height shall include the height of the tower and the farthest vertical extension of the wind machine." As the definition of wind machines includes appurtenances associated with the production and transmission of wind generated energy, it is understood that all of Subproject A facilities (including the met tower) would qualify under the definition and would also be exempt from height standards provided the setbacks are met. All four proposed turbines on the Subproject A Site will have a total vertical extent of 591 feet (180 meters) and therefore are required by the LUO to be set back a minimum of 591 feet (180 meters) from all property lines (see Drawing D-2 of Appendix D). Setback requirements will be met for the permanent met tower and for Turbine 3 and Turbine 4 (see Drawing D-2 of Appendix D).

Request for Waiver from Strict Application of Development Standards

NPMPP is requesting a waiver from the strict application of development standards LUO §21-4.60(c)(7) and LUO §21-5.700(a) for Turbine 1 and Turbine 2. Pursuant to LUO 21-2.130(a)(1), a waiver from the strict application of the LUO development or design standards may be granted for utility installations. The proposed Project is a utility installation and is therefore eligible for the granting of a waiver from the strict application of development standards.

Turbines 1 and 2 would have heights of 591 feet and, therefore have a required setback of 591 feet. For the purposes of this written statement, this distance is referred to as the setback radius. The locations of Turbine 1 and Turbine 2 would be nearer to the property line than would otherwise be allowed by the LUO due to constraints pertaining to the irregular shape of the parcel, topographical conditions as they relate to ground-based activities such as grading and transportation, and the impacts on energy production resulting from siting turbines behind hills and other topographic

features. Turbine 1 will be located 284 feet (87 meters) inward from the nearest property line, resulting in a setback that is a 48 percent reduction of the LUO-required setback of 591 feet. Turbine 2 will be located 372 feet (113 meters) inward from the nearest property line, resulting in 63 percent reduction of the LUO-required setback of 591 feet (see Drawing D-2 in Appendix D). The entirety of the wind turbine generator structures and all earth works associated with the grading of the turbines will be located within the Subproject A Site. More detail regarding the spatial relation of the wind turbine generators to neighboring properties is provided in the section below.

Justification of Waiver from Strict Application of Development Standards

The PPA between NPMPP and HECO includes minimum production requirements for the Na Pua Makani Wind Project, which if not met, has serious consequences. In order to meet those requirements, the project must optimally site turbines and select turbine models so that the turbines maximize energy production. Locations that would adversely impact production based on topography must be avoided. Prices set during the negotiation of the PPA, which were approved by the PUC, were based on construction cost estimates for the Project. In order to optimize energy production and not exceed the expected costs to construct the Project, detailed micro-siting and engineering of turbine locations has been performed and takes into consideration topography, construction-related constraints, and wind resources. The proposed turbine locations have been identified so that the wind turbine generators have adequate access to wind resources, wind turbine components can be feasibly transported to the turbine pad areas, and the turbine pads can be constructed in a way that minimizes recontouring of the hillside. In order to meet the strict setback requirements, turbines would need to be sited behind hills and in low spots, which would effectively block a portion of the wind flow and adversely impact energy production. Additionally, in order to construct the turbines in those locations, substantial additional costs would need to be incurred by the Project in order to grade roads and turbine pads. Those additional costs were neither anticipated nor incorporated into the cost estimates to calculate the price of electricity under the PPA.

One intent of the LUO setback requirements is to protect adjacent and nearby landowners from bearing undue burden from development. In such circumstances, the protections afforded by the setback requirements would be intended to address instances when the parcels are owned by different parties. In the case of the Subproject A, the relief of setback requirements in this waiver request would be toward parcels owned by the same landowner or with an identical land use. Although Turbine 1 and Turbine 2 would no longer meet the LUO setback requirements for wind machines, Subproject A is proposed to be built on land owned by the State of Hawaii and is surrounded largely by parcels owned by the State or parcels with identical or compatible land uses.

Other options to address the setback requirements could include the modification of parcel lines via subdivision or jointly developing the Project parcel with neighboring parcels. However, these processes have lead times ranging from several months to more than a year and the Na Pua Makani Wind Project is subject to strict deadlines set by the PUC-approved PPA for Project construction

and start of operation. These time constraints preclude the consideration of alternative ways forward to address compliance with the setbacks.

Alternative Turbine Locations and Arrays:

Alternative turbine layouts have been considered and include locating turbines within different portions of the parcel and altering the relative spatial arrangement of the turbines, such as decreasing the spacing between each turbine. For various reasons, including site accessibility, construction impacts and costs, safety, turbine manufacturer's requirements, loss of production as a result of wake losses from turbines with inadequate spacing, and accessibility of wind resources, alternate turbine layouts were deemed unsuitable. Throughout the project development and design process, NPMPP has been committed to considering and incorporating input from the community. This responsiveness to community input resulted in removing potential turbine location discussion of the alternative layouts that were considered but not carried forward for reasons described below.

Locating turbines in the northeastern portion of the parcel. During preliminary project planning phases, **t**he northeast portion of the parcel, in the vicinity of the permanent met tower, was under consideration for the placement of four wind turbine generators. The area is known locally as Cross Hill. The community leaders consulted during Project scoping and environmental review requested that the turbines be relocated off of Cross Hill. A cornerstone of community support has been the Project's willingness to listen to concerns of the community and be responsive to those concerns. In response to the community's input, turbines were not located on Cross Hill.

In addition to community input, engineering constraints eliminated this portion of the parcel from further consideration due to engineering constraints and access to this area from the east and per the land owners' request it was not considered.

In addition to community input, the Cross Hill area was removed from further consideration due to lack of adequate access to deliver wind turbine generator components to this area of the Subproject A parcel. Construction of an access road from the Malaekahana Hui West property to Cross Hill was eliminated from consideration in response to a request from the Malaekahana Hui West land owner. Transporting turbine components requires certain specifications in terms of road design and constraints based on maximum slopes. Although the proposed layout shows an access road from the southernmost portion of the Subproject A Site to Cross Hill (see Drawing D-1 of Appendix D), this road would not meet turbine transport specification in terms of slope. The topography in this area includes features with slopes higher than 23 percent, thus precluding turbine component transportation without major recontouring of the hillside.

Locating turbines in the southern region of the parcel. The southernmost portion of the parcel, had also been considered. The geometry of the parcel boundaries in that portion could accommodate a turbine with its full setback but the region was deemed unsuitable for development due to topographical features that severely limit the wind resources. In addition to the poor wind resource in this location, major recontouring efforts would be required to accommodate a turbine and turbine pad. Site preparation for one appropriately-sited turbine in the southern region would

have necessitated displacing an estimated 100,000 cubic yards (76,455 cubic meters) of earth and grading an approximately of 11 acre (4.5 hectare) area.

Micro-siting Adjustments to Current Locations. Adjustments to Turbines 1 and 2 significant enough to establish compliant setbacks would require moving these two turbines off the top of the ridgeline and placing them downslope (mauka) of the ridgeline. Such adjustments would require the turbine towers to be taller in order to capture the same wind resource as the turbine would if located at the top of the ridge, thus still leading to nonconforming setbacks at these two turbine locations. Also, the construction of the turbine pads, if sited downslope of the ridge top, would require additional grading and removal of fill. In comparison to the proposed turbine locations depicted in Drawing D-1 of Appendix D, which would require approximately 18.6 acres (7.5 hectares) of grading and 160,000 cubic yards (122,329 cubic yards) of earth removal, the siting of the four turbines downslope (mauka) of the ridge would require a total of approximately 28 acres (11.3 hectares) of grading and over 400,000 cubic yards (305,822 cubic yards) of earth removal. This would be an increase of approximately 9.4 acres (3.8 hectares) of grading and over 240,000 cubic yards (183,493 cubic meters) of earth removal.

Alternate arrangements to the turbine array have also been considered such as spacing the turbines closer together as well as shifting the entire turbine array east. A denser array is not feasible because of minimum spacing requirements of the turbine manufacturers as well as considerations associated with operational safety and efficiency. Shifting the array eastward would lead to similar deficiencies as discussed above in siting a turbine in the southern portion of the parcel.

Conformance with Waiver Standards

The LUO specifies a limited number of land uses and circumstances that qualify for waivers. The Project is a utility installation use, which represents a land use for which waivers are permitted. In order for the City and County of Honolulu to grant a waiver from the strict application of the LUO, the applicant must demonstrate that the granting of the waiver will not adversely affect the health or safety of persons and that it will not be materially detrimental to public welfare or injurious to nearby property improvements. Applicant bears the burden of proof in showing the reasonableness of the proposed waiver. Considering the reliability and safety of the proposed improvements and the location-specific parameters of the proposed locations, granting of the waiver will not adversely affect health or safety, be materially detrimental to public welfare, or injurious to nearby property improvements.

The first consideration in the analysis is the location of the proposed turbines in relation to other properties, inclusive of structures and improvements within the properties. The extent of non-conformance, as discussed above, is based on the nearest property line. However, in this analysis, all properties located nearer to the turbines than the setback radius, as defined by the LUO, are being considered. Five such adjacent and nearby properties have been identified and are provided in the table below.

Table 4-3. Adjacent parcels, uses, and extent of nonconformance

Parcel	Owner	Use	Turbine 1 Nonconformance	Turbine 2 Nonconformance
(1) 5-6-005:007	Kahuku Wind Power, LLC	Wind farm	54 ft (16m)	n/a
(1) 5-6-006:048	State of Hawaii	Agriculture	85 ft (26m)	n/a
(1) 5-6-006:049	State of Hawaii	Agriculture	307 ft (94m)	219 ft (67m)
(1) 5-6-006:050	State of Hawaii	Agriculture	56 ft (17 m)	n/a
(1) 5-6-006:055	State of Hawaii	Road	131 ft (40m)	n/a

The setback radius of Turbine 1 would extend into five adjacent and nearby properties while the setback radius of Turbine 2 would extend into only one adjacent property, identified by TMK. (1) 5-6-006:049. Turbine 1 and Turbine 2 have been sited so that their setback radii would not overlay occupied structures. Furthermore, activities associated with the construction and maintenance of the turbine and the operational area to the most outward extension of the turbine blade tips, which would be a radius of approximately 229 feet (69 meters) would be within the Subproject A Site. No construction, operation, or maintenance activities would extend outside of the Subproject A Site.

As discussed in this written statement, wind generation is a compatible use within the agricultural land use designation and with active agricultural land uses. The area of the neighboring parcels that would fall within the setback radii of Turbine 1 and Turbine 2 are also zoned for agricultural use and are used for agriculture and are, thus, compatible with the proposed wind turbine generators.

The parcels identified by TMKs (1) 5-6-006:048, (1) 5-6-006:049, and (1) 5-6-006:050 are agricultural parcels within the Kahuku Agricultural Park. The parcel identified by TMK (1) 5-6-006:055 consists of the agricultural road, which will be used for wind farm access and the transportation of wind turbine generator components. Like the Subproject A Site, these four parcels are owned by the State of Hawaii.

The parcel identified by TMK (1) 5-6-005:007 is owned by Kahuku Wind Power, LLC and is part of the Kahuku Wind Farm site. Land uses are identical so it is expected that the siting of Turbine 1 will be compatible with the use of that parcel.

Risk Assessment

The impact on public welfare and neighboring properties must also consider the intrinsic characteristics of the proposed use, such as safety and operational procedures. NPMPP engaged DNV / GL, a wind energy industry engineering and consulting firm, to prepare the *Setback Waiver Risk Assessment* in order to determine whether there would be impacts to public safety or potential for damage to property associated with non-compliance with setbacks (See Appendix E). The risk assessment provides an analysis of wind turbine structural reliability, reported occurrences of turbine collapse, and an evaluation of the typical scenarios under which turbine failure could occur. This safety analysis was considered in the context of the proposed waiver request.

According to the *Setback Waiver Risk Assessment report*, risk of wind turbine collapse is inherently low due to the design standards set forth by the International Electrotechnical Commission (IEC), which ensures that wind turbines are appropriately engineered against damage from hazards

within their planned lifetime. Should a turbine collapse occur, the available evidences suggests that it would most likely fall in a downwind direction. Taking into consideration the site geography and wind characteristics, the risk to public safety would be expected to remain low. As shown in the *Setback Waiver Risk Assessment*, winds generally come from the east and move across the site east to west. In other words, the majority of the time, the downwind direction would be mauka or west of the turbines. The minimum setback would be exceeded to the north and east of Turbine 1 and to the east of Turbine 2. Based on the results of *Setback Waiver Risk Assessment* report, it is unlikely that a turbine would fall in an upwind direction (i.e. into the area where the setbacks would be exceeded). In addition, there are no occupied residences within the setback exceedance areas, therefore there would be no increased risk to public safety in comparison to a setback-compliant turbine array.

Impacts to adjacent and neighboring parcels are not expected from a construction or operational standpoint. The entirety of the turbine pads and the total extent of the blades (i.e. 229 feet of the turbine tower base) are within the Subproject A Site. Construction and maintenance activities will, therefore, all take place from within the Subproject A site.

Conclusion

The scope of the preferred alternative in the Final EIS (see Attachment 1) included up to five wind turbine generators on the Subproject A Site. The array proposed in this CUPm application consists of four wind turbine generators, all of which are within the range of sizes and heights disclosed in the Final EIS. Furthermore, environmental impacts associated with the waiver array would be within the range of those discussed in the EIS. See the relevant sections in Chapter 7 of this written statement for information on impacts associated with the Subproject A. The EIS stated that the project would conform to applicable City and County of Honolulu Code, including setback requirements. Although Turbine 1 and Turbine 2 would not meet the setback requirements set forth in the LUO, per LUO Sec. 21-2.130 (A) a waiver from the strict application of development standards may be granted for utility installations. Therefore the granting of a waiver would ensure the Project, including the non-conforming Turbines 1 and 2, would be in conformance with ROH. The Project, therefore, remains substantially unchanged in terms of size, scope, intensity, use, and in conformance with applicable regulations as it was presented in the EIS.

4.2.4 Off-street Parking and Loading

LUO Article 6 Off-street Parking and Loading Standards sets minimum off-street parking requirements for various uses. Table 21-6.1 lists wind machines under “Utilities and communications” and notes that off-street parking will be determined by the Director of City and County of Honolulu, DPP.

Parking during construction will be provided on site primarily in the staging areas located within the temporary impact footprint associated with the turbine pads and access roads. During operations, there will be approximately three to six full-time employees on site to perform operations and maintenance duties. Parking for operations technicians will be provided at the

substation, located on TMK (1) 5-6-006:018, within the Subproject B Site. Refer to the Subproject B CUPm application for a discussion on on-site parking.

5.0 Consistency with County Plans and Policies

5.1 City and County of Honolulu General Plan

The General Plan (Department of General Planning, City and County of Honolulu 1992, amended in 2002) includes a list of county-wide goals, objectives, policies, and implementing actions. Specific General Plan goals and policies applicable to Subproject A are discussed in detail below.

<u>*Natural Environment*</u>

- *Objective A – To protect and preserve the natural environment*
  - *Policy 1 – Protect Oahu's natural environment, especially the shoreline, valleys, and ridges from incompatible development.*
  - *Policy 7 – Protect the natural environment from damaging levels of air, water, and noise pollution.*
  - *Policy 8 – Protect plants, birds, and other animals that are unique to the State of Hawaii and the Island of Oahu.*
- *Objective B – To preserve and enhance the natural monuments and scenic views of Oahu for the benefit of both residents and visitors.*
  - *Policy 1 – Protect the Island's well-known resources: its mountains and craters; forests and watershed areas; marshes, rivers, and streams; shoreline, fishponds, and bays; and reefs and offshore islands.*
  - *Policy 2 – Protect Oahu's scenic views, especially those seen from highly developed and heavily traveled areas.*
  - *Policy 3 – Locate roads, highways, and other public facilities and utilities in areas where they will least obstruct important views of the mountains and the sea.*

Environmental due diligence conducted to date includes comprehensive biological surveys of the wind farm site to identify native habitats, wetlands and streams, and threatened and endangered species. Subproject A does not coincide with any natural reserves or other sensitive areas. Natural gulches, streams, and drainages were identified and have been excluded from the Project footprint to the maximum extent possible. The Project will be in compliance with Federal, State, and local regulations pertaining to water quality, air quality, and noise.

Measures to avoid and minimize impacts to vegetation, wildlife, and threatened and endangered species are identified in Sections 4.9, 4.10, and 4.11 of the Final EIS (Attachment 1), respectively. However, because incidental take of listed wildlife species is not completely avoidable, NPMPP has prepared a Habitat Conservation Plan (HCP) that outlines mitigation measures for these impacts.

Mitigation measures proposed for the Hamakua marsh and Poamoho mitigation areas would benefit the natural environment on Oahu.

A visual analysis was conducted to assess the potential effect of the Project on the North Shore's scenic resources (see Section 4.16 of the Final EIS). Consideration was taken with regard to maximizing the distance of associated project components from Kamehameha Highway and sensitive viewpoints (see Section 4.16 of the Final EIS for additional detail). To the extent possible, visual impacts will be minimized by undergrounding the electrical collector system and installing down-shielded and motion sensor activated lighting. Although the Project is expected to have a visual impact, alternative energy sources such as wind are an integral part of meeting the State's and City & County of Honolulu's renewable energy goals.

Energy

- *Objective A – To maintain an adequate, dependable, and economical supply of energy for Oahu residents.*
  - *Policy 3 – Support programs and projects which contribute to the attainment of energy self-efficiency on Oahu.*
- *Objective D – To develop and apply new, locally available energy resources.*
  - *Policy 1 – Support and participate in research, development, demonstration, and commercialization aimed at producing new, economical, and environmentally sound energy supplies from :*
    - *Solar insolation;*
    - *Biomass energy conversion;*
    - *Wind energy conversion;*
    - *Geothermal energy; and*
    - *Ocean thermal* energy conversion.

The nature of the Proposed Action meets the County General Plan's energy objectives and policies as stated above.

Public Safety

- *Objective B – To protect the people of Oahu and their property against natural disasters and other emergencies, traffic and fire hazards, and unsafe conditions.*
  - *Policy 7 – adequate fire protection and effective fire prevention programs.*

A Fire Management Plan (FMP) (Appendix C of the Final EIS) has been prepared for the Project. Engineering design measures, O&M activities, and fuels management practices outlined in the plan would minimize the fire risk posed by the Project to acceptable levels (also see Sections 4.7 – Hazardous and Regulated Materials and Wastes of Final EIS and 4.18 – Public Health and Safety of Final EIS for additional information). See Section 7.6 for more information about addressing the community's concerns regarding public safety.

5.2 Koolau Loa Sustainable Community Plan

The proposed Project is located within the boundaries of the Koolau Loa SCP (City & County of Honolulu, DPP 2012), which includes the communities of Kahuku, Laie, Hauula, Punaluu, Kahana, and Kaaawa. TMK (1) 5-6-008:006 is underlain by land within Agricultural designation (City & County of Honolulu, DPP 2012).

Koolau Loa SCP Guidelines and Policies relating to Subroject A are as follows:

- *Mountain Areas and Trails: Avoid the establishment of utility corridors and other uses that would disturb areas with high concentration of native and endangered species.*

Discussion:

The Na Pua Makani Project requires compliance with the Federal Endangered Species Act and Migratory Bird Treaty Act, and the State HRS 196-D which prohibits the "take" of any endangered or threatened species (see Section 4.1, 4.9, 4.10, 4.11, 5.1, and 5.2 of the Final EIS). The proposed wind farm site meets siting criteria including, but not limited to, minimizing adverse impacts to native and endangered species. The proposed Project is not located within any natural reserves or other sensitive biological areas.

Measures to avoid and minimize impacts to vegetation, wildlife, and threatened and endangered species are identified in Sections 4.9, 4.10, and 4.11, respectively, of the Final EIS. However, because incidental take of listed wildlife species is unavoidable, NPMPP has prepared an HCP that outlines mitigation measures of these. Section 2.5.1 of the Final EIS outlines onsite mitigation measures including but not limited to:

- The temporary met tower was fitted with bird flight diverters and/or white poly tape (1 inch [2.5 centimeters]) to increase visibility and, as a result, the likelihood of avoidance by Covered Species.
- The temporary met tower will be removed during construction.
- The majority of the wind farm site is sited in disturbed habitat dominated by non-native vegetation, which minimizes impacts to most native species.
- The wind farm site does not have suitable listed waterbird breeding or foraging habitat thereby minimizing Hawaiian stilt, Hawaiian coot, and Hawaiian moorhen use of the wind farm site and minimizing potential impacts to these species.
- To minimize potential impacts to wildlife, onsite lighting at the O&M building and substation will be shielded and/or directed downward, triggered by a motion detector, and fitted with non-white light bulbs. Lighting is only expected to be used when workers are at the site at night. Most O&M activities are expected to occur during daylight hours.
- Flashing red lights on the nacelle have been shown not to be attractive to birds and will be used in accordance with FAA requirements.
- The collector line will be placed below ground to the maximum extent practicable, thereby reducing the risk of collision of the Covered Species.

The HCP offsite mitigation measures propose research funding, and improvements to Hamakua marsh and Poamoho mitigation areas. These measures would benefit the natural environment on Oahu, providing a net benefit to Covered Species. HCP measures to avoid and minimize as well as provide a net benefit to endangered species would do the same for other native species.

- *Agriculture: Protect and preserve the agricultural lands from conversion to uses that are primarily residential, industrial, or commercial in purpose. l*

Discussion: Construction and operation of Subproject A would impact approximately 5.0 percent of lands within TMK (1) 5-6-008:006 rated A or B by the LSB over the long-term and less that 0.1 percent of the approximately 3,771 acres (1,526 hectares) of LSB A- or B-rated lands within the Koolau Loa District. The development of Subproject A would have no impacts on actively cultivated lands as the Subproject A Site contains no active farming.

- *Agriculture: Allow recreational or educational programs or other activities which provide supplemental income necessary to sustain the primary agricultural activity, as long as they are compatible with the character of the rural agricultural area and are accessory to the primary agricultural use of the site.*

Discussion: The Subproject A Site is zoned AG-1 Restricted Agricultural and AG-2 by the City & County of Honolulu. Wind energy facilities are a permitted use within these zoning districts with an approved CUPm. As such, it is understood that a wind energy facilities can be considered consistent with the surrounding agricultural activity.

Prior to 2008, TMK (1) 5-6-008:006 was part of the Kahuku Agricultural Park. The lands, however, were not used for the intended farming in large part because of lack of irrigation water, steep slopes, and poor soil quality. In 2015, per Executive Order No. 4482, these lands were withdrawn from the Kahuku Agricultural Park and returned to the DLNR Land Division so that other economic uses could be considered.

- *Electrical Systems: Locate and design system elements such as renewable energy facilities (e.g. wind and solar), electrical sub-stations, communication sites, and transmission lines, including consideration of underground transmission lines, to avoid or mitigate visual impacts on scenic and natural resources, as well as public safety considerations.*

Discussion: Five criteria that were used to select the Project site that would meet the Project purpose and need. The five criteria are 1) good wind resource, 2) access to adequate and available transmission capacity, 3) land availability where wind energy development is a permitted use, 4) site conditions such as topography, and 5) potential impacts including visual impacts and operational safety. At least some visual impact from a utility-scale wind farm is unavoidable no matter where a project is located on Oahu. Although the Project is expected to have a visual impact, alternative energy sources such as wind are an integral part of meeting the State's renewable energy goals.

- *Electrical Systems: Encourage the development and use of renewable energy sources and energy conservation measures.*

Discussion: The purpose of the Project is to provide clean, renewable wind energy for the island of Oahu. The implementation of the Project would be consistent with this SCP policy.

6.0 INFRASTRUCTURE REQUIREMENTS

The following describes the infrastructure requirements for listed resources. Additional information is provided in the FEIS in Section 11.

6.1 Wastewater

Construction of the project would generate a minor amount of wastewater from portable toilets, which will be provided and serviced on a contracted basis. The contractor will dispose of sanitary wastewater pursuant to applicable regulations. The existing wastewater infrastructure in Kahuku and its treatment plant (Kahuku Wastewater Treatment Plant, located north of the town and east of the Kamehameha Highway) have adequate capacity to accommodate the temporary increase in sanitary wastewater during construction. No connection to public wastewater infrastructure is required for the Project.

6.2 Water Facilities

Construction of the entire Project would require up to approximately 10,000 to 15,000 gallons (37,854 to 56,781 liters) per day for dust control, equipment washdown, and emergency fire suppression (see Section 4.4 – Hydrology and Water Resources of the Final EIS for more information). Water requirements specific to Subproject A would be proportional to the amount of active construction on Subproject A components. Construction of the Project would require excavation and may require blasting, which could result in physical disturbance of existing agriculture water wells in the immediate vicinity; however, both excavation and blasting (if necessary) would be relatively shallow and would not impact the deeper aquifers typically used for potable water supplies. NPMPP will coordinate with landowners and tenants to identify the location of private wells within the wind farm site, if any, and will adjust the final layout to avoid impacting existing wells. Should an impact to an existing well prove unavoidable, NPMPP will work with the landowner to provide appropriate mitigation.

No public water system infrastructure is situated within the wind farm site.

6.3 Traffic, and Off-Street Parking and Loading

Construction related traffic to build the Project would include transporting the major turbine components, hauling in cement and aggregate, miscellaneous deliveries, and construction worker traffic. As outlined in Section 4.17.3 of the Final EIS and in the Traffic Assessment Report (Appendix B of the Final EIS), the major turbine components, including the blade, tower, and nacelles, will be off-loaded at Kalaeloa Harbor and transported to the Subproject B Site using three proposed routes: route 1 for the longer nacelle components, route 2 for the taller tower sections and nacelle components, and route 3 for the turbine blades. See Figure 8.

Due to the size and weight of these components, permits to transport these oversized and overweight loads would need to be obtained from HDOT and the City & County of Honolulu. The following are anticipated requirements of these permits:

- The roundtrips must be performed Monday through Saturday between the hours of 9:00 p.m. and 5:00 a.m.
- No oversized loads are allowed to be transported on Sundays or holidays.
- A minimum of four police escorts per load are required to help the oversized load navigate turns.
- Police escorts and/or flag persons must provide traffic direction at the entrance to the Project site on Kamehameha Highway during construction.

It is anticipated that up to 50 nighttime roundtrips of oversized loads would be needed extending over approximately 20 days during the construction of the Subproject A.

Other construction-related trips include cement, aggregate, and miscellaneous deliveries as well as construction worker trips. Deliveries are anticipated to occur outside of the morning and afternoon peak hour traffic times, and construction workers are expected to work between the hours of 7:00 a.m. and 3:30 p.m.

Based on an analysis of anticipated number of vehicle trips during construction and the existing traffic levels on Kamehameha Highway, it is expected the potential construction –related traffic could result in less than 2 percent increase in the highest peak-hour traffic levels. The Traffic Assessment Report (Appendix B of the Final EIS) provides more details on this analysis.

During construction, parking will be provided on site primarily in the staging areas located within the temporary impact footprint associated with the turbine pads and access roads. During operations, there will be approximately three to six full-time employees on site to perform operations and maintenance duties. Parking for operations technicians will be provided at the substation, located on TMK (1) 5-6-006:018, within the Subproject B Site. Refer to the Subproject B CUPm application for a discussion on on-site parking. During both construction and operation, ample parking to meet parking needs will be provided off-street.

7.0 OTHER IMPACTS

7.1 Public Services

7.1.1 Refuse Collection

Solid wastes generated during construction of the Project would be taken to the City & County of Honolulu's Waimanalo Gulch landfill or the H-power facility in Kapolei; both facilities are operated by Waste Management. The City & County of Honolulu estimates that the physical capacity of the landfill would enable it to continue to receive solid wastes for at least the next 15 years (City & County of Honolulu, Department of Environmental Services 2014), and diversion of waste for incineration at H-power would potentially extend this lifespan. Alternatively, construction waste

could be taken to the privately-owned PVT landfill, which is authorized specifically to receive construction and demolition waste. Waste generated during construction of the Project may include scrap metal, wood, plastic and cardboard from shipping of turbine components, and incidental waste from construction workers (e.g. food and beverage containers). The amount of waste generated is not expected to adversely impact existing waste management services or facility capacity.

7.1.2 Fire Protection

Subproject A could increase the potential for wildfires associated with the use of vehicles and electrical equipment and increased human presence during construction of the project. Sparks from vehicles and construction equipment, spark producing construction activities such as welding, and improper disposal of matches or cigarettes, for example, could start a fire. There would also be increased presence and use of petroleum products, including oils and lubricants on-site, thereby increasing the potential for fires. Climatic conditions in the vicinity of the wind farm site, including high relative humidity and high precipitation; however, tends to prohibit the production of fires.

An FMP has been prepared for the proposed project (see Appendix C of the Final EIS). The FMP analyzed the available pertinent information including fuel conditions, weather and climate conditions, fire history in the vicinity of the project, firefighter access, and other factors. The FMP concluded that the likelihood of a wildfire ignition during construction of the Project is very low and that no mitigation measures beyond normal construction best management practices (BMP) would be required to mitigate the threat.

Similar to construction of the project, O&M activities would increase the potential for wildfires associated with the use of vehicles and electrical equipment and increased human presence during O&M. Implementation of the FMP would be required during O&M activities. The risk of fire will also be minimized by the design features of the wind turbines, such as over-temperature sensors that will shut down the turbine if normal temperature limits are exceeded. In addition, undergrounding of the electrical collection system would reduce the risk of fire. The Project does not include a battery storage facility. The fire risk associated with Project operations and maintenance is similar to risks associated with other industrial and storage facilities.

Water tanks will be maintained onsite for emergency fire suppression during construction. Additional fire suppression measures to be implemented during construction and operation will be developed in coordination with the City & County of Honolulu Fire Department and will be incorporated into a Site Safety Handbook. These measures may include, but are not limited to requiring vehicles to carry fire suppression equipment when onsite such as fire extinguishers, flappers, and shovels, and storing fire suppression tools at designated locations within the wind farm.

7.1.3 Police Services and Emergency Services

Construction of the Project would have no direct impact to existing health care facilities and emergency services and is not expected to place substantial additional demands on health care or emergency services in the area. The wind farm site and vicinity are well served by a community hospital, fire and emergency medical services, and police service. Should an incident occur during construction of the Project, response times will be short. The implementation of a Site Safety Plan and observance of safe working practices during construction are expected to substantially reduce the potential for serious accidents that could place an undue burden on the local health care facilities and emergency services. Measures to limit traffic impacts during construction, such as movement of most large loads at night and the implementation of a traffic management plan, would also serve to prevent disruptions to the provision of emergency services.

7.1.4 Schools

Subproject A construction would not directly impact any school or educational facility in the area; however, it could indirectly impact people at the two nearest schools, the Kahuku Elementary School and the Kahuku High and Intermediate School located approximately 1.2 miles (2.0 kilometers), and 1.3 miles (2.2 kilometers), respectively, from the closest turbine on the Subproject A Site. Impacts would be limited to temporary increases in traffic and/or noise during construction.

Project-related construction traffic is unlikely to adversely impact the schools or buses bringing students to school. Scheduling the movement of large and oversized loads at night would largely eliminate potential traffic conflicts. The implementation of a traffic management plan and traffic control as needed during construction would limit potential disruptions to traffic in the area, and keep delays to a minimum. The relatively small workforce needed to construct the Project would cause only a minor, temporary increase in morning traffic that may coincide with school buses, while worker commuting in the evenings would not overlap with school bus route timing.

Construction of the project would create noise that may affect nearby schools. Both schools are considered noise-sensitive receptors. Construction noise is temporary, and periods of particularly loud noise would be intermittent. Sounds generated by construction activities would likely require a permit, to be obtained from the State of Hawaii Department of Health (DOH), to allow the operation of construction equipment that result in exceedance of the maximum permissible at property line locations. While the permits do not limit the sound level generated at the construction site, time restrictions may be placed on when the loudest construction activities are likely to occur, i.e. 7:00 a.m. and 7:00 p.m., Monday through Friday and between 9:00 a.m. and 6:00 p.m. on Saturday. The DOH would require reasonable and standard practices be employed to minimize the impact of noise resulting from construction activities (See Section 4.20 of the Attached Final EIS).

7.2 Physical Environment

7.2.1 Natural Landforms

Grading and Drainage

Ground-disturbing activities including clearing and grubbing, topsoil stripping, grading, compaction, utility trenching, and placement of aggregate surfacing would occur during the construction of wind turbine generators with their associated foundations and transformers and the electrical collection system. Grading activities would consist of the removal, storage, and/or disposal of earth, gravel, vegetation, organic matter, loose rock, and debris. Fill material would be utilized from onsite excavations and earthwork. Additional sources of this fill, if needed, include nearby pits or excess material taken from within the property.

Grading and other construction activities have the potential to alter drainage patterns within the wind farm site. During the EIS scoping period, concern was raised over potential impacts associated with flooding, particularly at the Kahuku football field. Prior to obtaining a grading permit for the project, the construction contractor will confirm stormwater runoff requirements and, if necessary, incorporate stormwater control measures such as seepage pits, drywells, and/or detention basins. New Subproject A access roads would be located to follow natural contours and minimize side hill cuts to the extent possible and would include other BMP such as ditches and culverts to capture and convey storm water runoff. Additionally, with the exception of areas where permanent surface recontouring is required, disturbed areas would be restored to pre-existing grades and all disturbed areas where permanent gravel or aggregate is not required would be revegetated. These measures would reduce the potential for erosion and adverse effects on drainage patterns. A Preliminary Drainage Study is included in Appendix H of the Final EIS.

Ground disturbance during construction of the project would also increase the potential for sediment and other pollutants present on-site to be conveyed in stormwater runoff into streams within the wind farm site, and potentially into downstream receiving waters. A site-specific Storm Water Pollution Prevention Plan (SWPPP) would be prepared for the Project. The SWPPP would identify BMPs that would be used to minimize or eliminate the potential for sediments and pollutants to reach surface waters through stormwater runoff. To minimize impacts associated with soil erosion, NPMPP would prepare a Temporary Erosion and Sediment Control (TESC) Plan that would be implemented by the construction contractor. The TESC Plan would include standard stormwater BMPs to reduce the risk of erosion including constructing during the summer months when rainfall potential is low, using silt fences or hay bales to prevent eroded soil from being transported off-site, and contouring to stop drainage from entering the site and to prevent runoff. Temporary ditches and culverts used to capture and convey stormwater would be installed in areas of temporary disturbance. Permanent stormwater control structures would be installed to prevent erosion where access roads, buildings, storage areas, and parking areas are constructed. Upon completion of construction, disturbed areas would be revegetated. Erosion control measures

included in the TESC Plan would also prevent water quality degradation from stormwater runoff during the construction phase of the Project.

Jurisdictional waters

Two streams—Keaaulu and Ohia—run through the Subproject A Site. Keaaulu Stream runs along the southern border of the TMK (1) 5-6-008:006 and Ohia Stream runs along the northwestern border of the parcel. Both Keaaulu Stream and Ohia Stream are considered intermittent non-Relatively Permanent Waters as they flow for only 1 to 5 days, one to three times a year, following larger rains storms (Hobdy 2013b). A preliminary jurisdictional determination was issued by the U.S. Army Corps of Engineers on April 6, 2015 (USACE 2015) concluding that Keaaulu and Ohia streams may be waters of the U.S. requiring a Department of Army permit for any activity resulting in the discharge and/or placement of dredged or fill materials into these waters. The footprint of Subproject A has been designed to avoid potentially jurisdictional features.

7.2.2 Public Views

The Subproject A wind farm site is located in the northeastern portion of Oahu. The visual setting surrounding the wind farm site consists of steep, dissected ridges surrounding gently sloping valleys, with elevations ranging from approximately 56 feet (12 meters) amsl) on the northeastern side to 614 feet (187 meters) amsl on the southwestern edge. The Subproject A site exhibits the typical landscape character of Oahu, with a mixture of dense forests, urbanized use, and agricultural lands. The immediately adjacent lands surrounding the Subproject A Site include agricultural lands and the existing Kahuku Wind Farm to the north, residential, community infrastructure, and agricultural lands to the east; undeveloped forest lands to the south and to the west.

The James Campbell National Wildlife Refuge is approximately one half mile (0.83 kilometers) to the northeast of the Subproject A Site and Malaekahana State Recreation Area is approximately 1.7 miles (2.74 kilometers) to the east. A number of primarily residential communities are located along the Kamehameha Highway, including Kahuku, Laie, Hauula, Punaluu, Kahana and Kaaawa. The Kamehameha Highway is the only arterial roadway linking these areas with the North Shore.

A viewshed analysis was conducted as part of the HEPA EIS to identify locations within the analysis area from which the Project would potentially be visible. Using the results from the viewshed analysis and a desktop visual resource analysis, 21 specific viewpoints were identified and further investigated through a field review to photo-document existing conditions. Locations of those viewpoints are indicated in Figure 4.16-4 of the attached Final EIS. Four of those 21 viewpoints were selected for the development of visual simulations of Subproject A wind turbines (see Figure 9). The four viewpoints are the Kahuku Community Center, James Campbell National Wildlife Refuge, Kahuku Golf Course and Malaekahana Bike and Pedestrian Path (see Figures 10a, 10b, 10c, 10d, and 10e). Although the exact location of turbines in the Final EIS are slightly different from the final locations that were micro-sited during detailed engineering and described in this CUPm application, these micro-siting adjustments would not be noticeable in the visual simulations. Turbine #5, originally included in the Final EIS turbine array on the DLNR parcel, is not included in

the final turbine array included in this CUPm and is indicated as such on Figures 10a, 10b, 10c, 10d, and 10e.

Subproject A would be most visible at viewpoints close to the wind farm site (within about 1 mile), including the Kahuku Community Center, Kahuku High and Intermediate School, Kahuku Elementary School, Kahuku Golf Course, Kahuku Hospital and Medical Center, Malaekahana Bike and Pedestrian Path near the Malaekahana State Recreation Area, along Kamehameha Highway near the entrance of the Malaekahana State Recreation Area, and James Campbell National Wildlife Refuge. Individuals most likely to experience visual impacts include recreation users, residents, and travelers on the highway. The turbines would be significantly taller than most existing structures in or immediately adjacent to the wind farm site, with the exception being the existing turbines at the Kahuku Wind Farm. Visibility of the wind turbines would be blocked or partially obscured by topography in some locations and could be diminished in other locations because of factors such as distance from viewers, the angle of observation, atmospheric conditions, and the presence of vegetation and/or structures. However, given the height of the wind turbines, their placement on ridgelines, and the rural nature of the site, the turbines would be highly visible from certain viewpoints and visual impacts of the wind turbines cannot be completely avoided because of their size and exposed location. Subproject A would not dominate the landscape character because there is already a substantial degree of landscape modification in most views, including residential and commercial development and the existing Kahuku windfarm adjacent to the proposed project.

At nighttime, some of the turbines would be minimally lit pursuant to FAA guidelines. This would create a new light source in the wind farm site. Much like the motion of the blades during daytime operations, flashing safety lights can draw the attention of a casual observer (see Figure 12e for a night time visual simulation of Subproject B turbines).

The results of the visual impact analyses, and a detailed discussion of those results, are provided in the attached Final EIS (see Attachment 1).

7.2.3 Natural Habitats

The Subproject A Site is surrounded by agricultural farm lands to the north and east and by undeveloped forested lands to the west and south (Hobdy 2013a). Vegetation in the wind farm site consists mostly of low, windblown shrubs and trees on the ridge tops with larger trees and brush on slopes and in gullies.

Currently, the vegetation within the Subproject A Site is characterized as predominantly non-native shrubland and forest dominated by a mixture of aggressive non-native weedy species that took over following the abandonment of agricultural production of sugar cane. Only a few persistent native plants have been able to compete and survive (Hobdy 2013a). Common ironwood (*Casuarina equisetifolia*), a non-native tree, was the most abundant species observed in the Subproject A Site during field surveys in 2013. No Federal or State threatened, endangered, or candidate plant species were detected. Additionally, no plant species proposed for listing or special status plant

species were detected. No portion of the Subproject A Site has been designated as critical habitat for any listed plant species.

Wildlife habitat in the Subproject A Site consists of agricultural lands, grassland, shrub-scrub, and dryland forest. The Subproject A Site 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 Subproject A Site and there are no areas where congregations of birds occur.

Most of the wildlife species likely to breed or forage within the Subproject A Site are common, non-native, and widespread, and the habitats affected are abundant in the surrounding area. Therefore, vegetation removal would not result in a substantial local loss of wildlife habitat.

There is no breeding or foraging habitat within the Subproject A Site for any seabird, shorebirds, waterfowl, or wading bird species protected by the Migratory Bird Treaty Act. Therefore, construction would not result in terrestrial or aquatic habitat removal or modification for these species, with the exception of the Pacific golden-plover which could use the newly cleared turbine pads and roads for foraging.

Eight State and/or Federally threatened and endangered species are known to occur, or have the potential to occur, in the vicinity of the Subproject A Site including:

- Hawaiian hoary bat (*Lasiurus cinereus semotus*),
- Newell's shearwater (*Puffinus newelli*),
- Hawaiian goose (*Branta sandvicensis*),
- Hawaiian stilt (*Himantopus mexicanus knudseni*),
- Hawaiian coot (*Fulica alai*),
- Hawaiian moorhen (*Gallinula chloropus sandvicensis*),
- Hawaiian duck (*Anas wyvilliana*), and
- Hawaiian short-eared owl (*Asio flammeus sandwichensis*).

No portion of the Subproject A Site has been designated as critical habitat for any listed wildlife species. Each of these species are covered under the Project HCP which discusses anticipated direct and indirect impacts from the Project, mitigation for impacts, and avoidance and minimization measures.

7.2.4 Historic Sites

Archaeological and cultural assessment work was conducted for the Project and is described in detail in Pacific Legacy's *Archaeological Inventory Survey for the Na Pua Makani Wind Project, Kahuku, Keana, and Malaekahana Ahupuaa, Koolau Loa District, Island of Oahu, Hawaii* (Archaeological Impact Assessment; See Final EIS Appendix F) and *Cultural Impact Assessment for*

the Na Pua Makani Wind Project, Kahuku, Keana, and Malaekahana Ahupuaa, Koolau Loa District, Island of Oahu (Cultural Impact Assessment; See Final EIS Appendix G).

In 2014, Pacific Legacy conducted a pedestrian survey of close to 100 percent of the area of potential effect (APE), excluding only areas that were too steep to traverse, to identify archaeological sites. The APE includes an area that represented the maximum footprint of the Project within which all ground disturbing activities would occur and which would be occupied by permanent Project facilities. However, further refinements to the wind project's design has decreased the maximum footprint to an area smaller than the APE. In the portion of the APE within the Subproject A Site, the Archaeological Inventory Survey identified a total of 7 new (not identified during previous archaeological investigations) archaeological sites, consisting of 19 distinct features. Over half of these features (11) were associated with a single archaeological site (SIHP No. 50-80-12-7844) that is a large discontinuous district of structural remnants of the former Kahuku Sugar Plantation. Of the remaining 8 sites located within the Subproject A Site, three were traditional Hawaiian pre-Contact activities and five were historic.

Survey data were used by Project engineers to refine the location of proposed facilities to avoid archaeological features. All 7 sites (including all 19 distinct features) are located within the APE. Of these sites, one site (State Inventory of Historic Places (SIHP) No. 50-80-02-7840) was not assessed as significant and 6 sites were assessed as significant for their information potential under Criterion (a) or Criterion (d) of 36 Code of Federal Regulations §60.4. Each of these 6 sites has either yielded or has the potential to yield information important to state and national history. A summary of each of the 6 significant sites follows:

- No Further Work is required: these sites have already yielded information they contain during the current AIS investigations and no further archaeological work is recommended. Site 7845 was recommended to be eligible for listing on the Hawaii Register of Historic Places (HRHP).
    - SIHP No. 50-80-02-7841 (site had information potential that was realized during AIS; site to be destroyed; identified function as pre-contact or early post-contact stone mound marker)
    - SIHP No. 50-80-02-7845 (outside of the area of disturbance; identified function as historic agriculture terrace)
- Recommended for preservation: These sites appear to be eligible for listing on the HRHP. Site 50-80-02-7843 is associated with WWII and also appears eligible for listing on the NRHP. All of these sites are outside of the area of disturbance.
    - SIHP No. 50-80-02-7842 (outside of the area of disturbance; identified function as pre-contact or early post-contact habitation platform)
    - SIHP No. 50-80-02-7843 (outside of the area of disturbance; identified function as historic/military bunker)
    - SIHP No. 50-80-02-7847 (outside of the area of disturbance; identified function as pre-contact or early post-contact agriculture terrace)

- Recommended for data recovery: SIHP No. 50-80-02-7844. This site consists of multiple components of the sugar complex of the historic Kahuku Plantation. Four of these components were recorded in the APE within Subproject A and all four components are eligible to be listed on the HRHP and recommended for data recovery in the form of historical documentation and analysis of the irrigation network. Although none of the components of this site located within Subproject A are within the area of disturbance, data recovery is recommended as some components of this site located within Subproject B will be modified or destroyed; therefore, the site is recommended for data recovery.

See the Final AIS in Appendix G of the FEIS for more information.

7.2.5 Flood Hazards

Potential flood hazards are identified by the Federal Emergency Management Agency (FEMA) National Flood Insurance Program and are mapped on the Flood Insurance Rate Maps (FIRM). The maps classify land into zones depending on the potential for flood inundation.

The Subproject A Site lies within two flood zones. Designations for these flood zones include (FEMA 2013a; 2013b):

- Zone X - areas determined to be outside the 0.2-percent-annual-chance (or 500-year) floodplain
- Zone D – areas where analysis of flood hazards has not been conducted and flood hazards are undetermined.

According to the FIRM, the Subproject A Site is located predominantly within Flood Zone D and a minor portion of the wind farm site is located in Flood Zone X (see Figure 11). Improvements within the floodway are limited to surface pavements and underground power transmission lines which are not expected to change the conveyance capacity of the floodway (Belt Collins Hawaii LLC 2016). All the proposed wind turbines would be located within areas classified as Zone D.

7.3 Employment, Housing and Population

Construction of the Na Pua Makani Power Project is expected to result in total direct employment of 43 full-time equivalent (FTE) jobs, to which Subproject A will contribute proportionally. FTE calculations are based on 12 month, full-time employment, where 2,080 hours worked is considered one FTE job. These numbers do not translate into individual workers who may be employed for shorter periods but, instead, aggregate hours worked. Local workers would be employed where possible, including workers from nearby communities and the greater Honolulu urbanized area, approximately one hour's drive from the Project Site. Other workers would likely temporarily relocate to the analysis area for the duration of their employment. Very few, if any, of the non-local workers employed during the construction phase of the Project would be expected to be accompanied by family members or permanently relocate to the analysis area. In a worst case scenario, assuming 90 percent of the peak workforce were to temporarily relocate from elsewhere, the Na Pua Makani Power Project would result in a temporary population gain of approximately 38

people and the commensurate proportion thereof for Subproject A. This is a small share of the total number annual visitors to the region.

Review of the housing resources in the vicinity of the project suggests that limited housing options exist for construction workers, with the majority of temporary accommodation oriented towards tourism. More temporary housing options are available further from the site, especially in the urbanized Honolulu area, and will become available with the development of a new hotel near the Polynesian Cultural Center located south of the project in the Laie community. The temporary relocation of construction workers is not expected to reduce the available supply of temporary housing for other tourists and other visitors.

During operations and maintenance of the project, there will be approximately three to six full-time employees on site. This estimated change in population would not be expected to affect demand for housing near the Project.

7.4 Parks and Recreation

Public recreation resources within five miles of the Subproject A Site include one State recreation area, one district park, one community park, one neighborhood park, nine beach parks, a State wayside, a public golf course, and one undeveloped park property. Designated trails are found in three of the forest reserves and along the western edge of the Kahuku Training Area.

Important privately-owned recreation and tourism resources near the wind farm site include the Kaena Farms zip-line course, the Turtle Bay Resort and its two associated golf courses, the Kahuku Motocross Course, and the Hukilau Beach Park. The Polynesian Cultural Center (PCC) is also located nearby in Laie town.

The open space map in the Koolau Loa SCP indicates a “mountain access” route that begins in Kahuku and extends to the southwest, passing through the wind farm site, within the Subproject B Site. No other information regarding this route is included in the plan; it does not appear to be a formal trail or recognized public access, and is therefore not considered further in this analysis. The public facilities map in the Koolau Loa SCP (City & County of Honolulu, DPP 2012) identifies a future bike route along Kamehameha Highway. Similarly, the Hawaii Bike Master Plan (HIDOT 2002) calls for shared bike usage on the Kamehameha Highway in the future. This signage project is a Class III priority recommendation, to occur more than 20 years in the future. However, the Koolau Loa SCP notes that recreational use of the highway, and in particular the number of organized bicycling events that use it, has been increasing and sometimes causes delays.

Construction of the Project would not cause a direct loss of opportunity to any recreation or tourism resource in the area. No Project infrastructure would be placed within any existing recreation resource area.

7.5 Community Concerns

Since 2013 NPMPP has conducted numerous meetings that were open to the community, with small focus groups, and with individual community leaders and elected officials. This includes

presentations made at numerous Koolau Loa Neighborhood Board and Laie and Kahuku community association meetings. These meetings were a means of keeping community members informed about the status of the proposed Project, design changes, and the environmental review process and topics addressed therein; they also provided an opportunity to solicit community input and have focused discussions about topics of particular interest. For example, in January 2014 NPMPP hosted a talk story meeting in Kahuku on wind energy health and safety issues and potential effect of the proposed Project on rooftop photovoltaic system installations, two topics the community voiced concern about. Invited guests included Representative Richard Fale, Mark Glick and Noreen Kam of the State Energy Office, and Dr. Robert McCunney, an internationally recognized expert in wind energy health issues from the Massachusetts Institute of Technology. A summary of key public meetings is included in Table 7-3 and a copy of the Koolau Loa Neighborhood Board meeting agendas and minutes for the January 9, 2014 and February 13, 2014 presentations are included in Appendix F.

Table 7-2. Summary of Project Public Meetings

Meeting	Date
Kahuku Community Association presentation	May 30, 2013
Kahuku Community Association update	August 15, 2013
Scoping Meeting (NEPA)	Nov 13, 2013
Scoping Meeting (HEPA)	Jan 10, 2014
Koolau Loa Neighborhood Board presentation	Jan 9, 2014
Talk story meeting: Health Impacts and HECO/rooftop photovoltaic system installation	Jan 15, 2014
Laie Community Association presentation	Feb 6, 2014
Koolau Loa Neighborhood Board presentation	Feb 13, 2014
Laie Community Association presentation	Mar 6, 2014
Hauula Community Association presentation	2014
Scoping Meeting #2 (HEPA)	Nov 19, 2014
Kahuku Community Association update	Feb 19, 2105
Kahuku Community Association update	May 20, 2015
Office of Environmental Quality Control site visit	June 17, 2015
Draft EIS Public Meeting (HEPA and NEPA)	June 24, 2015
Laie Community Association site visit	July 27, 2015
Kahuku Community Association update	Aug 20, 2015
Kahuku Community Association update	Nov 19, 2015
Endangered Species Recovery Committee meeting (Habitat Conservation Plan)	Dec 17, 2015
Endangered Species Recovery Committee meeting #2 (Habitat Conservation Plan)	Feb 23, 2016
Second Draft EIS Public Meeting (HEPA)	May 25, 2016

A website for the project, napuamakaniwind.com, was launched in 2014. The site includes links to current news and the latest information from NPMPP and provides an overview of the Project as well as information on public health and safety and other issues of interest to the community, such

as setback requirements, agriculture, traffic, weather, visual impacts, property values, and effects to rooftop photovoltaic system installation. The website also provided a contact email address and an electronic contact box for the public to ask questions about the Project or to express concerns.

Five public meetings were held specifically for the HRS 343 environmental review process. During the public comment periods on the original Draft EIS and the Second Draft EIS, many letters were received from residents that live in Kahuku that support renewable energy in general, and support the proposed Project. Some letters expressing opposition to the Project, or concern over specific issues, were also received. The topics most commonly brought up included traffic, visual impacts, project siting, socioeconomics, public health and safety, and community benefits. All comment letters received from members of the Kahuku Community and associated responses are included in Appendix M of the Final EIS. The Final EIS, which was approved by the BLNR on July 22, 2016, recognizes there will be impacts associated with the proposed Project. However, the process of undergoing environmental review has allowed NPMPP to receive public input, develop the project in a way as to reduce and mitigate environmental impacts to the extent possible, and to respond to public concerns using the best available science.

NPMPP has engaged in outreach efforts with affected stakeholders to define its Community Benefits Package. See Section 4.1.4 for a discussion of the Project's contribution to the welfare of the community including the Community Benefits Package.

7.6 Potential Nuisances

7.6.1 Noise

A noise analysis was conducted for the Project and is included in Appendix D of the attached Final EIS. The acoustic analysis area includes parcels located within 1.2 miles of the Project. Subproject B components, such as wind turbines and the substation, would be located on agriculturally zoned parcels or HAR 11-46 Class C districts. The remaining parcels within the noise analysis area are mostly agriculturally zoned; however, north and west of Subproject A there are Class A (mostly residential) and Class B (mostly commercial) parcels. The nearest parcels which are zoned as more restrictive in terms of noise are Class A residential parcels located approximately 1,600 feet (488 meters) from the nearest proposed wind turbine within Subproject A. Temporary construction noise and permanent operational noise from the project would result in changes in noise levels in the acoustical analysis area.

The construction of the Project may cause short-term but unavoidable noise impacts depending on the construction activity being performed and the distance to receiver. Sounds generated by construction activities would likely require a permit, obtained from the DOH, to allow the operation of construction equipment that result in exceedances of the maximum permissible noise level at property line locations. While the permit and permitting procedures do not limit the sound level generated at the construction site, time restrictions may be placed on time periods when the loudest construction activities are likely to occur, i.e., 7:00 a.m. and 7:00 p.m., Monday through Friday, and between 9:00 a.m. and 6:00 p.m. on Saturday.

During operations, the wind turbines are expected to generate sound on a regular basis. Based on the results from the acoustic monitoring and comparison of those results to the measured existing ambient sound levels, the predicted wind turbine sounds are expected to increase the ambient sound levels by no more than 4 decibels at the nearest sensitive Zone A receptor. For the purposes of the Project acoustic analysis, sound levels are expressed in A-weighted decibels (dBA), which compensates for the frequency response of the human auditory system. A 3 dBA increase is generally not discernable to the average person, but a 5 dBA increase is; therefore, a 4 dBA increase may be discernable to some people but only considered a minor impact. Class B parcels are predicted to experience increases in noise over baseline conditions of 1-2 dBA, which is not discernable to the average human and therefore considered a negligible impact. Class C parcels located adjacent to the Subproject A would experience the highest increases in sound levels. Most of these Class C parcels have no residences; however, there are some Class C TMKs that have residences and that are predicted to experience increases over baseline conditions in excess of 5 dBA. A 5 dBA increase is considered perceptible to the average human and a 10 dBA increase is perceived as a doubling of sound. While these increases would be perceptible Class C parcels intentionally allow for higher sound levels to accommodate sound from sources such as tractors for agricultural activities.

7.6.2 Lights

Nighttime lighting has been shown to attract and disorient seabirds. To minimize these risks, NPMPP will maximize the amount of construction activity that can occur in daylight during the seabird breeding season to minimize the use of nighttime lighting that could be an attraction to seabirds. To the extent practicable, NPMPP will avoid nighttime construction during the peak fledging period. Should nighttime construction be required, to minimize the attractiveness of construction lights to wildlife, NPMPP will use shielded lights and non-white lights to the extent practicable and allowable, taking into account safety considerations. Necessary lighting would be controlled with motion sensors, timers or similar features such that the lights are on only when needed. Lighting is only expected to be used when workers are at the site at night. These measures will reduce the potential for seabird attraction to project lights.

The turbines would not be lighted, with the exception of synchronized red flashing lights on select turbines as required to satisfy FAA marking and lighting requirements. The implementation of these measures would minimize the potential impacts to recreation and tourism resources associated with Project visibility.

7.6.3 Dust

Soil disrupting activities associated with construction of the Project would result in the generation of fugitive dust. As the increased fugitive dust levels would be temporary (with elevated fugitive dust levels occurring only in a localized area), would occur at relatively low levels compared to the State and Federal ambient air quality standards, and BMP would be implemented to minimize the

effects of the dust, construction of the Project is expected to have a minor effect to air quality.
Operation and Maintenance Impacts

The Project should have a long-term beneficial indirect effect to air quality and climate conditions. Currently, approximately 75 percent of the electricity generated on Oahu is a result of burning oil; this proposed Project has the potential to off-set some of the adverse effects associated with power generating facilities that burn fossil fuels, assuming that the power that would be generated by this wind-facility would have been generated by facilities that burn fossil fuels if this Project is not implemented.

7.6.4 Odors

No odors will be produced from the proposed Project.

8.0 References

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DEPARTMENT OF PLANNING AND PERMITTING
OF THE CITY AND COUNTY OF HONOLULU

STATE OF HAWAII

IN THE MATIER OF THE APPLICATION OF NA PUA MAKANI WIND PROJECT SUBPROJECT A FORA CONDITIONAL USE PERMIT (MINOR) AND ZONING WAIVER	FILE NO. 2016/CUP-69(WA) 2016Nv-63

FINDINGS OF FACT, CONCLUSIONS
OF LAW, AND DECISION AND ORDER

I. APPLICATION

A. Basic Information:

PROJECT:	Na Pua Makani Wind Project - Subproject A
LANDOWNER:	State of Hawaii (Department of Land and Natural Resources (DLNR))
APPLICANT:	Na Pua Makani Power Partners, LLC (Mike Cutbirth)
AGENT:	Tetra Tech, Inc. (Neal Dixon)
LOCATION:	56-668 Kamehameha Highway - Kahuku (Exhibit A)
TAX MAP KEY:	5-6-8: 6
LAND AREA:	232 Acres
STATE LAND USE:	Agricultural District (Exhibit B)
ZONING:	AG-1 Restricted Agricultural District and AG-2 General Agricultural District (Exhibit C)
EXISTING USE:	Vacant Land
SURROUNDING LAND USE:	Kahuku Military Training Area; Kahuku Wind Farm; and Kahuku Agricultural Park

This application was processed in accordance with Sections 21-2.40-1 and 21-2.90 et seq. of the Land Use Ordinance (LUO).

B. Proposal:

1. Conditional Use Permit (CUP): The Applicant proposes to construct and operate a 25 megawatt (MW) wind farm consisting of a total of nine wind turbines and accessory infrastructures on an approximately 232 acre parcel. However, this application is one of three proposed CUP (Minor) (CUPm) for the Project designated as Subproject A, and includes four wind turbines, access roads, underground collector lines, and a met tower.

The clean, renewable power from the approximately 25 MW wind farm would be generated in response to demand from the Hawaiian Electric Company (HECO) grid.

The Applicant has proposed this Project in three CUPm's rather than opt for joint development of the two adjacent parcels Tax Map Keys (TMKs) 5-6-6: 18 and 5-6-8: 6 because the two parcels are under different ownership. The wind farm will be owned and operated by the Applicant and the switching station located adjacent to the wind farm will be owned and operated by HECO (see Exhibits A-1 through A-11). The wind farm will consist of the following items.

a. Wind Turbine Generators: Subproject A consists of four wind turbines. Turbines No. 1 and 2 will be 591 feet in height (measured from grade to rotor tip). Turbine No. 1 will be set back from the nearest property line, a minimum of 284 feet, and No. 2 will be set back a minimum of 372 feet from the nearest property line. Thus, a zoning waiver will be required. Turbines No. 3 and 4 will be set back a minimum of 591 feet from the nearest property line. All the turbines are white, which is the industry standard.

b. Electric Collector System and Substation: Power generated by the turbines will be stepped up to 34.5 kilovolts (kV) at pad-mounted transformers and then collected through an underground electrical collection system. This system will feed into an onsite electrical substation, will step up the voltage to 46 kV and transmit the power to the point of interconnect at the adjacent HECO-owned and operated switching station. The substation will be enclosed within an 18,832-square-foot fenced area.

c. Met Tower: One 185-foot temporary guyed tower will be installed at the site. This tower supports weather instruments that measure and record weather data to measure performance and guide project operation.

d. Access Roads: On-site access will be provided via existing private access roads which will be modified and via the grading of new private roads. Access from the public right-of-way to the site will be via Malaekahana Valley Road from Kamehameha Highway.

Once construction is completed, the Project will employ five full-time employees. Maintenance of the wind farm will occur Monday through Friday during normal work day hours. Power will be generated based on demand from the HECO grid.

The Applicant states that the anticipated life of the wind farm Project is 21 years. After that time the Project will be evaluated and a determination will be made to continue operation or decommission it. Should a decision be made to continue operations, the facility may be upgraded and repowered with renegotiated leases and necessary permit approvals. If the Project is decommissioned, the Applicant will remove all equipment and return the site as close to preconstruction conditions as possible within 12 months, as required by the land lease.

2. Zoning Waiver: The wind farm also requires a zoning waiver from LUO Section 21-4.60(c)(7) and LUO Section 21-5.700(a) related to wind machine setbacks (see Exhibits A-1 and A-2).

II. FINDINGS OF FACT

On the basis of the evidence presented, the Director has found:

A Description of Site and Surrounding Uses: The Project is located on Oahu's north shore, at the base of the northern part of the Koolau Range, sloping to the coastal plain near the town of Kahuku (see Exhibit D). The elevation ranges from approximately 56 feet (17 meters) Above-Mean Sea Level (AMSL) on the northeastern edge to approximately 614 feet (187 meters) AMSL on the southwestern edge of the parcel and consists of steep, dissected ridges surrounding gently sloping valleys as well as flat, coastal plains. The site is accessible via Malaekahana Valley Road, a private access road that directly joins Kamehameha Highway.

The 232 acre Project site is zoned AG-1 Restricted Agricultural District and AG-2 General Agricultural District. Higher elevations of the site are fallow ridges not actively used for agriculture. The site was assessed by the Applicant to identify areas that would be too steep for construction or that would be inaccessible by construction vehicles. The presence of several steep ridges and deep gullies trending in southwest-to-northeasterly directions eliminated some portions of the wind farm site from consideration because construction in these areas would be logistically infeasible and/or terrain ruggedness would inflate construction costs. After portions of the site were eliminated due to topography, the remaining land area was determined to have a sufficient area for a viable project.

The site consists of five different Land Study Bureau (LSB) ratings of Category A, B, C, D, and E with Category A (most productive) which includes the majority of the site to Category E (least productive) soil which covers a small western portion of the site. The majority of the site (68 percent) is rated Category D. A very small portion of the site (0.6 percent) is rated Category A, no turbines are located near this area.

Surrounding land uses include the existing vacant agricultural lands, both active and fallow. To the west and south is the military training area. To the north is the adjacent Kahuku Wind Farm with 12 wind turbines, as well as the Kahuku Agricultural Park which is owned by the Hawaii Department of Agriculture. There are several farm dwellings located on the parcel adjacent to TMK 5-6-6: 49 which are occupied by farm workers. Other uses near the site, but not adjacent, are the Kahuku Fire Station and Police Substation, Kahuku Medical Center, and Kahuku Elementary and High Schools. Keana

Farms operates an agri-tourism business which includes agricultural educational tours and a zipline.

B. Special Management Area (SMA): The parcel is not located in the SMA, and is not subject to the requirements of Chapter 25, Revised Ordinances of Honolulu (ROH).

C. Koolauloa Sustainable Communities Plan (KSCP): The KSCP contains guidelines and policies relating to the Project. The guidelines and policies are discussed in the Analysis section of this report.

D. Other Permits and/or Approvals: The following permits and approvals were approved for the subject properties:

1. CUP: Wind machines are permitted in the AG-1 Restricted Agricultural District and AG-2 General Agricultural District, subject to the approval of a CUPm, and as a special accessory use subject to standards enumerated in Article 5 of the LUO.

2. Grading Permits: The proposed wind turbines, buildings, and structures associated with the Applicant's request will require grading and grubbing permits.

3. Building Permits: The proposed buildings and structures associated with the Applicant's request will require building permits.

4. State of Hawaii Department of Transportation (SOOT) Approval: Transportation of turbine components via transport vehicles will require approval from the SOOT and implementation of an approved traffic control plan.

E. Environmental Review Requirements: The Project is partially located on State of Hawaii lands, triggering environmental review under the Hawaii Environmental Policy Act (HEPA) Chapter 343, Hawaii Revised Statutes (HRS). The Hawaii DLNR served as the accepting Agency for the Environmental Impact Statement (EIS). A portion of the proposed Project's transmission line is located within the SOOT right-of-way, which also triggers environmental review under HEPA.

The Draft EIS, published on June 8, 2015, in The Environmental Notice, was prepared as a joint Federal and State document in accordance with HRS Chapter 343 and HAR§11-200-25 and with National Environmental Policy Act (NEPA) implementing regulations, specifying that federal agencies shall cooperate with State and local agencies to the fullest extent possible to avoid duplication between NEPA and State requirements. The U.S. Fish and Wildlife Service is the Federal lead agency. Due to differences in procedural requirements, the HEPA and NEPA processes have diverged and will continue along separate paths. The Final EIS was accepted by DLNR on July 22, 2016.

F. Flood District: The Federal Emergency Management Agency Flood Insurance Rate Map Community Panel Number 0045H, revised November 5, 2014, indicates that the Project site is within Flood Zone D, undetermined, but possible, and Flood Zone X areas determined to be outside the 0.2 percent annual chance floodplain (see Exhibit E).

G. Compliance with Chapter 205: Pursuant to HRS Section 205-4.S(a), wind energy facilities are permissible uses on agricultural district lands with an overall LSB productivity rating of Category A or B, provided that such facilities and appurtenances are compatible with agriculture uses and cause minimal adverse impact on agricultural land. The Project site has an LSB mixed rating of Category A, 8, C, D, and E. The Project is mainly in the Category E rated portion of the site. The proposed Project will impact less than 0.6 percent of the Category A-rated agricultural lands in the Koolauloa District.

The site is also in the State Land Use Agricultural District (see Exhibit 8). The OPP has determined that the proposal does not require an Special Use Permit since the proposed use is compatible with existing diversified agricultural activities. The use should have minimal adverse impact on the land for future agricultural uses.

H. Public Notification and Comments: The Applicant has held numerous public meetings with small focus groups, individual community leaders, and elected officials. The Applicant submitted the following table listing key public meetings.

Meetlna/Presentatlon/Update/SiteVisit	Date
Kahuku Community Association	May 30, 2013
Kahuku Community Association	August15,2013
ScoJ)ing Meeting (NEPA)	November 13, 2013
Scoping Meeting {HEPA)	January 10, 2014
Koolauloa Neighborhood Board No. 28	Janua_ry 9, 2014
Talk Story MeetinQ: Health Impacts and HECO/Rooftop Photovoltaic System Installation	January 15, 2014
Laie Community Association	February 6, 2014
Koolauloa Neighborhood Board No. 28	February 13, 2014
Laie Community Association	March 6, 2014
Hauula Community Association	2014 date not SJ)_ecified
Scoping Meeting No. 2 (HEPA)	November 19, 2014
Kahuku Community Association	February 19, 2014
Kahuku Community Association	May 20, 2015
Office of Environmental Quality Control	June 17, 2015
Draft EIS Public Meeting (HEPA and NEPA)	June 24, 2015
Laie Community Association	July 27, 2015
Kahuku Community Association	August20,2015
Kahuku Community Association	November 19, 2015
Endangered Species Recovery Committee Meeting (Habitat Conservation Plan)	December 17, 2015
Endangered Species Recovery Committee Meeting (Habitat Conservation Plan)	February 23, 2016
Second Draft EIS Public Meetin_g_(HEPA)	May 15, 2016

Five required public meetings were held for the HRS 343 environmental review process. During the public comment periods on the original Draft EIS and the second Draft EIS, many letters were received from residents in the Kahuku community. Some letters of opposition to the Project and concern over specific issues were received. The topics most commonly brought up included traffic, visual impacts, Project siting, socioeconomics, public health and safety, and community benefits. The Applicant responded to all the questions and concerns.

I. Community Benefits: The Applicant has proposed to honor the commitment of the prior developer to pay $10,000 per wind turbine per year over the life of the Project to benefit the Kahuku Community. This translates into $90,000 per year over a 20-to 25-year

Project life or the equivalent of approximately $2,000,000 of direct economic benefits to the Kahuku Community.
It is anticipated that the Project funds would be administered by a board of local community members who would make decisions as to the use of the proceeds and which activities, programs, groups, and events will be sponsored.

J. The OPP Public Hearing: No Public Hearing was held by the OPP. The CUPm does not require a Public Hearing.

K. Applicant's Justification: The Applicant provided justification statements which are part of the file.

III. ANALYSIS

The Director of the OPP may allow a conditional use upon finding that the proposed use satisfies the following criteria:

A. The proposed use is permitted as a conditional use in the underlying zoning district and conforms to the requirements of the LUO. Pursuant to LUO Section 21-3.50-4(a) [Table 21-3], a wind farm is permitted in the AG-1 Restricted Agricultural District and AG-2 General Agricultural District with an approved CUPm.

1. AG-1 Restricted Agricultural District Standards:

LUO Standards	LUO Provisions	Project Site
Minimum Lot Area (Acres)	5 acres	232 acres (10,105,920 square feet) - Complies
Minimum Lot Width/Depth	150 feet	160 feet minimum - Complies
Yards: Front Side/Rear	 15 feet 10 feet	Irregular shaped parcels Complies Complies
Maximum Building Area	10 percent zoning lot area (for non-agricultural structures) (23.2 acres)	Less than 0.001 percent (3,217 square feet) - Complies
Maximum Height	25-30 feet	Exempted Wind turbines: 591 feet Met tower: 185 feet

AG-2 General Agricultural District Standards:

LUO Stahdarcls	LUO .Provisions	Prdject; lte
Minimum Lot Area (Acres)	Three acres for major livestock production, two acres for all other uses	452.7 acres (19,719,612 square feet) - Complies
Minimum Lot	150 feet	160 feet minimum - Complies

CUO Standards	l:UO Provisions	Project Site
Width/Depth		
Yards: Front Side/Rear	 15 feet 10 feet	 Complies Complies
Maximum Building Area	10 percent zoning lot area (for non-agricultural structures) (23.2 acres)	Less than 0.001 percent (3,217 square feet) - Complies
Maximum Height	25-30 feet	Exempted Wind turbines: 591 feet Met tower. 185 feet

Pursuant to LUO Section 21-4.60(c)(7), the maximum permitted wind machine height is based on a setback from all property lines of one foot for every foot of wind machine height. Two of the proposed structures do not meet the one-to-one setback requirement and will require a zoning waiver.

2. <u>LUO Section 21-5.700, Specific Use Standards for Wind Machines:</u>

LUO Standard	LUO Provisions	Project Site
Setback of Structures	All wind machines shall be set back from all property lines a minimum distance equal to the height of the system. Height shall include the height of the tower and the farthest vertical extension of the wind machine.	Does Not Comply Turbine No. 1 height and minimum set back: 591 feet Proposed set back: 284 feet Encroaches: 307 feet Turbine No. 2 height and minimum set back: 591 feet Proposed set back: 372.5 feet Encroaches: 218.7 feet Complies Turbine Nos. 3 and 4 height and minimum set back: 591 feet
Wind Machine Rated Capacity	In the agricultural and country zoning districts, accessory wind machines shall have a rated capacity of no more than 100 kW. Wind machines with a rated capacity of more than 100 kW shall require a CUPm.	Complies The wind machines have a rated capacity of 3.45 MW. Thus, the Project requires a CUPm.

This project will meet the specific use standards for wind machines.

3. LUO Sections 21-4.70 and 21-4.70-1. Landscaping. Screening, and Buffering:

St@n.dard	LUO P,rovlslons	Project Site
Parking Lots of Five or More Spaces	Minimum 5-foot wide landscape strip *adjacent* to any adjoining street right-of-way.	Not Applicable.
	The 5-foot landscape strip shall contain a continuous screening hedge not less than 36 inches in height at 18 inches on center. A minimum 36-inch-height wall/fence *may* be placed behind the setback line in lieu of a hedge with a vine or shrub along the front side of the wall.	Not Applicable.
	One canopy-form tree, a minimum of 2-inch caliper, shall be planted in the landscape strip for each 50 feet of street frontage.	Not Applicable.
Open Parking Lots With More Than Ten Parking Stalls	One canopy-form tree, a minimum of 2-inch caliper, for every 6 parking stalls, or one canopy-form tree of 6-inch caliper for every 12 parking stalls.	Not Applicable; only six parking stalls proposed.
Outdoor Trash Storage Area	Screened on a minimum of three sides by a wall or hedge at least six feet in height.	Not Applicable; no trash storage area proposed.

The Applicant states that solid wastes generated during construction of the Project will be taken to the Waimanalo Gulch Sanitary Landfill or the H-Power facility in Kapolei.

4. LUO Article 6. Off-Street Parking and Loading Requirements: The Applicant proposes to provide a minimum of six off-street parking spaces to be located adjacent to the O&M Building located on the adjacent parcel. [Note: Parking lots with more than ten parking spaces will require parking Jot trees as enumerated in the table above]. Pursuant to LUO Section 21-6.20 [Table 21-6.1), the off-street parking requirement for wind machines shall be "as determined by the Director". During normal operating hours, as many as six regular employees are expected to be on the site at, any given time. Six off-street parking spaces are acceptable given the Applicants' proposal and the fact that the LUO provides no parking standard for this use.

5. Signs: No signs are proposed for the site.

B. The site must be suitable for the proposed use considering size, location, topography, infrastructure and natural features. The size, location, topography, and terrain of the site and the infrastructure available are suitable for the proposed installation. There are notable natural features on the property.

1. Size, Location, Topography. and Natural Features: The 232-acre site is within the Koolauloa District, west of the town of Kahuku where the best wind resources on the island are located. The site has several steep ridges and deep gullies trending in southwest-to-northeasterly directions which eliminated some portions

of the wind farm site from consideration because construction in these areas is unsuitable. After those portions of the site were eliminated, due to the topography, the remaining land area was determined to have a sufficient area for a viable Project.

The Project also made adjustments based on input from the surrounding communities regarding visual impacts and concerns about City and County of Honolulu setback distances. The Project eliminated locations that were the closest and most visible from Kamehameha Highway and Kahuku Town. The wind turbines have been sited to minimize impacts to existing agricultural cultivation on the site.

2. Infrastructure:

a. Water: During construction of the Project approximately 10,000 to 15,000 gallons of water per day will be needed for dust control, equipment wash down, and emergency fire suppression. If concrete is batched on site, water would be delivered to the site and stored in an onsite water tank. The water would be drawn from existing irrigation lines or come from a similar source. Excavation for the Project may require blasting which could result in physical disturbance of existing agricultural water wells in the immediate vicinity. Both excavation and blasting, if necessary, would be relatively shallow and would not impact the deeper aquifers typically used for potable water supplies. The Applicant will coordinate with landowners and tenants to identify the location of private wells within the wind farm site and will adjust the final layout to avoid impacting any existing wells. Should an impact to an existing well be unavoidable, the Applicant will work with the landowner to provide appropriate mitigation. No public water system infrastructure is located on the wind farm site.

b. Wastewater: The Project will generate a minor amount of wastewater from portable toilets which will be provided and serviced on a contracted basis during construction. The contractor will dispose of sanitary wastewater in accordance with all applicable regulations. The existing wastewater infrastructure in Kahuku and its wastewater treatment plant will have adequate capacity to accommodate the temporary increase in sanitary wastewater during construction. During operation of the wind farm, minimal amounts of wastewater will be produced from the O&M Building which will be processed using an on-site septic system approved by DOH. There is no wastewater infrastructure located on site. The Project will not have any impacts on wastewater infrastructure.

c. Fire: A Fire Management Plan (FMP) has been prepared for the proposed Project. The FMP analyzed the information regarding fuel conditions, weather and climate conditions, fire history in the vicinity of the Project, firefighter access, and other factors. The FMP concluded that the likelihood of a wildfire during construction of the Project is very low. Water tanks will be maintained onsite for emergency fire suppression during construction. The Honolulu Fire Department is located near the site and additional fire suppression measures will be included into the Site Safety Handbook.

d. Police: There is a Honolulu Police Substation near the Project site. Should an incident occur during construction of the Project or during the operation, the response times will be short. With the implementation of the Site Safety Plan and observance of safe working practices during construction, potential for serious accidents will be greatly reduced.

e. Solid Waste: The Applicant will dispose of solid waste generated during construction of the Project at the Waimanalo Gulch Sanitary Landfill or the H-Power facility in Kapolei. The amount of waste generated is not expected to adversely impact existing waste management services or facility capacity.

f. Drainage: The Applicant will confirm storm water runoff requirements and if necessary incorporate storm water control measures such as seepage pit, drywells, and/or detention basins prior to grading and other construction activities. This will ensure there is no potential to alter drainage patterns within the wind farm site. As a condition of approval the Applicant shall provide verification of storm water control measures.

Disturbance during construction would occur within a wider buffer to allow adequate passage for the crawler crane and transport trucks, as well as turn-around locations for equipment. The road width of the corridor to be temporarily disturbed would be approximately 50 feet along the access roads. All access roads would have a gravel surface and will be constructed with storm water erosion and control features.

C. The proposed use will not alter the character of the surrounding area in a manner substantially limiting, impairing or precluding the use of surrounding properties for the principal uses permitted in the underlying zoning district. The Project site is in the AG-1 Restricted Agricultural District and AG-2 General Agricultural District. Uses which support wind farm development are permitted, subject to an approved CUPm.

1. Koolauloa Sustainable Communities Plan (SCP):

The following are guidelines and policies relating to the Project within the Koolauloa SCP:

- *Mountain Areas and Trails: Avoid the establishment of utility corridors and other uses that would disturb areas with high concentration of native and endangered species.*

  The Project requires compliance with the Federal Endangered Species Act (ESA) and Migratory Bird Treaty Act (MBTA), and the State Hawaii Revised Statutes 196-0 which prohibits the taking of any endangered or threatened species. The Applicant has taken measures to avoid and minimize impacts to vegetation, wildlife, and threatened and endangered species. Incidental take of wildlife species is unavoidable and the Applicant has prepared a Habitat Conservation Plan (HCP) that outlines mitigation measures of these impacts.

- *Agriculture: Protect and preserve the agricultural lands from conversion to uses that are primarily residential, industrial, or commercial in purpose.*

  The Applicant states that construction and operation of the Project would impact less than seven percent of LSB rated A and B agricultural lands within the wind farm site over the long term, and less than one percent within the Koolauloa District.

- *Agriculture: Allow recreational or educational programs or other activities which provide supplemental income necessary to sustain the primary agricultural activity, as long* as *they are compatible with the character of the rural agricultural area and are accessory to the primary agricultural use of the site.*

  In 2008, the Board of Agriculture withdrew the portion of the wind farm site that is owned by the State DLNR from the Kahuku Agricultural Park as the lands were not used for the intended farming purposes because the area acted as a buffer between the Kahuku Agricultural Park, the military training area, and the existing Kahuku Wind Farm. The land is steep with no road access and no water infrastructure; therefore, it is not conducive to farming in the area. Therefore, the Board of Agriculture returned the lands to the DLNR Land Division for other economic uses.

- *Electrical Systems: Locate and design system elements such as renewable energy facilities (e.g., wind and solar), electrical substations, communication sites, and transmission lines, including consideration of underground transmission lines, to avoid or mitigate visual impacts on scenic and natural resources,* as *well as public safety considerations.*

  Some of the visual impacts from a utility-scale wind farm site are unavoidable no matter where the Project is located.

- *Electrical Systems: Encourage the development and use of renewable energy sources and energy conservation measures.*

  The purpose of the Project is to provide clean, renewable wind energy for the island of Oahu.

- *Wildlife preserve management plans should emphasize conservation and restoration of native plants, birds, fish and invertebrates. Private landowners should be encouraged to investigate the various State and Federal programs that provide incentives for landowners to manage their lands for the benefit of the wildlife.*

  See "Mountain Areas and Trails", above.

2. Short-Term Impacts: Fugitive dust and noise may be generated during grading and construction activities. The Applicant will comply with all applicable State Department of Health's (DOH's) rules and regulations pertaining to dust and noise control during grading and construction activities.

3. Long-Term Impacts: The proposed wind farm will comply with the development standards of the AG-1 Restricted Agricultural District, and should not alter the character of the surrounding area in a manner substantially limiting, impairing, or precluding the use of the surrounding properties. Some of the visual impacts from a utility-scale wind farm site are unavoidable. Although the Project is expected to have a visual impact, alternative energy sources, such as wind, are an integral part of meeting the State's renewable energy goals. To ensure that the proposed wind farm does not significantly impact surrounding land uses, the Applicant shall be made aware, as a condition of approval, that the CUPm will be re-evaluated if it is determined that the impacts of the wind farm are greater than anticipated.

a. Visual: A viewshed analysis was conducted to identify locations within the analysis area from which the proposed Project would potentially be visible. It was determined that the wind turbines would be most visible at viewpoints within approximately one mile of the wind farm site. The turbines would be significantly taller than most existing structures in the area with the exception of the existing wind turbines from a previously approved wind farm project. Visibility of the wind turbines would be blocked or partially obscured by topography in some locations and could be diminished in other locations because of factors such as distance from viewers, the angle of observation, atmospheric conditions, and the presence of vegetation and/or structures. The height of the wind turbines makes them highly visible, which is an unavoidable consequence. Although the Project is expected to have a visual impact, alternative energy sources (such as wind) are an integral part of meeting the State's renewable energy goals.

b. Natural Habitats: The Project site is predominantly non-native shrub land and forest primarily a mixture of aggressive non-native weedy species that took over following abandonment of agricultural production of sugar cane. Only a few native plants have been able to survive. No Federal or State threatened, endangered, or candidate plant series were found. No plant species proposed for listing or special status plant species were found. No portion of the site has been designated as critical habitat for any listed plant species.

The Project site provides a wildlife habitat for a variety of birds, most of which are non-native, as well as several non-native mammal species and numerous invertebrates. There are no wetlands or water bodies within the Project site. There is no breeding or foraging habitat for seabirds, shorebirds, waterfowl, or wading bird species protected by the Migratory Bird Treaty Act. However, there are eight State and/or Federally threatened and endangered species known to occupy the Project site and surrounding areas. These include the Hawaiian hoary bat, Newell's shearwater, Hawaiian goose, Hawaiian stilt, Hawaiian coot, Hawaiian moorhen, Hawaiian duck, and Hawaiian short-eared owl. Each of these species are covered under the Project Habitat Conservation Plan which discusses anticipated direct and indirect impacts from the Project, mitigation for impacts, and avoidance and minimization measures.

c. Historic Sites/Cultural Resources: The Applicant conducted an archaeological and cultural assessment. In 2014, Pacific Legacy conducted a pedestrian survey of close to 100 percent of the Area of Potential Effect (APE), excluding only areas that were too steep to traverse, to identify archaeological sites. The APE includes an area that represented the maximum footprint of the Project within which all ground disturbing activities would occur and which would be occupied by the wind farm. In the portion of the APE within the Project, the Archaeological Inventory Survey identified a total of 22 new (not identified during previous archaeological investigations) archaeological sites, consisting of 93 distinct features. A majority of these features (59) were associated with a single archaeological site (SIHP No. 50-80-12-7844) that is a large discontinuous district of structural remnants of the former Kahuku Sugar Plantation. Of the remaining 21 sites located within the Project site, 19 were traditional Hawaiian pre-contact activities and 2 were historic.

Survey data were used by project engineers to refine the location of proposed facilities to avoid archaeological features. This resulted in a revision of the APE. Three features of the Kahuku Sugar Plantation site and 14 of the other 21 documented sites within the Project area are now located outside of the APE and would not be affected by the Project footprint. This leaves 56 features of the Kahuku Sugar Plantation site and 7 other sites (consisting of 12 distinct features) within the revised APE. Each of these 8 sites (Kahuku Sugar Plantation plus 7 other sites) has either yielded or has the potential to yield information important to state and national history. The Project will be developed and operate in a way that is respectful to Hawaii's culture and natural resources.

d. Noise Impacts: The Applicant indicates a noise analysis was conducted for the Project. The acoustic analysis area includes parcels located within 1.2 miles of the Project. Construction of the Project may cause short-term, but unavoidable, noise impacts. Sounds generated by construction activities would likely require a permit from the DOH, to allow the operation of construction equipment that exceed the maximum permissible noise level at property line locations. Time restrictions may be placed on time periods when the loudest construction activities are likely to occur between 7:00 a.m. and 7:00 p.m., Monday through Friday, and between 9:00 a.m. and 6:00 p.m. on Saturday.

During operation, the wind turbines are expected to generate sound on a regular basis. Based on the results from the acoustic monitoring and comparison of those results to the measured existing ambient sound levels, the predicted wind turbine sounds are expected to increase the ambient sound levels by no more than four decibels at the nearest sensitive receptor. The nearest residential area to the Project site is a distance of approximately one mile away and is a sufficient distance so that the wind turbine sounds are predicted to be at or below acceptable ambient noise levels of no more than four decibels.

The Applicant has adequately considered noise nuisance issues as part of its planning, design, and operations. Since the Applicant is required to comply with applicable State laws relating to noise generated during the construction phase, a condition of approval does not appear to be necessary.

D. The use at its proposed location will provide a service or facility which will contribute to the general welfare of the community-at-large or surrounding neighborhood. The proposed wind farm will provide clean, renewable energy that will contribute to the general welfare of the community at large. The proposed wind farm can benefit the North Shore community and Oahu by providing clean, renewable wind energy. The Kahuku Community will also receive a Community Benefits package that equates to approximately $2 million dollars over the 20- to 25-year life of the Project.
The community benefits package from the Applicant will provide funding directly to the Kahuku community. The wind farm will contribute to the general welfare of the community-at-large and the surrounding neighborhood.

E. Zoning Waiver: Pursuant to LUO Section 21-2.130(a)(1), public or public/private uses and structures and utility installations, are eligible for a waiver from the strict development and/or design standards of the LUO, subject to the following: The granting of the waiver shall not, under the circumstances and conditions applied in the particular case, adversely affect the health or safety of persons, and shall not be materially detrimental to the public welfare or injurious to nearby property improvements.

Turbine No. 1 will be located 284 feet from the nearest property line and Turbine No. 2 will be located 372 feet from the nearest property line. The Applicant states that establishing compliant setbacks would require moving these two turbines off the top of the ridgeline and placing them down slope or mauka of the ridgeline. This would require a greater height for the turbines in order to capture the same wind resource as the turbine would if located at the top of the ridge. Furthermore, construction of the turbine pads, if sited down slope of the ridge top, would require additional grading and removal of fill.

Alternative arrangements to the turbine array were considered such as spacing the turbines closer together or shifting the four turbine array east. The Applicant concluded that a denser array is not feasible because of minimum spacing requirements associated with safety and efficiency recommended by the turbine manufacturers. Further, shifting the array eastward would lead to poor wind due to topographical features that severely limit the wind resources.

The Applicant also prepared a Setback Waiver Risk Assessment which concluded that the likelihood of turbine collapse in the direction of the several farm dwellings located on the adjacent parcel is very low due to the design standards set forth by the International Electrotechnical Commission (IEC) as applied to the proposed siting of the wind turbines.

IV. CONCLUSIONS OF LAW

The Director hereby makes the following Conclusions of Law:

A. The proposed wind machines are permitted as a conditional use in the underlying AG-1 Restricted Agricultural District and AG-2 General Agricultural District with an approved CUPm.

B. The site is suitable for the proposed wind farm use considering its size, shape, location, topography, infrastructure, and natural features.

C. The proposed wind machines will not alter the character of the surrounding area in a manner substantially limiting, impairing, or precluding the use of the surrounding properties for the principal uses permitted in the underlying zoning district, provided appropriate conditions of approval are imposed.

D. The use at its proposed location will provide a service or facility which will contribute to the general welfare of the community-at-large.

E. The granting of the waiver will not, under the circumstances and conditions applied in the particular case, adversely affect the health or safety of persons, and shall not be materially detrimental to the public welfare or injurious to nearby property improvements.

V. DECISION AND ORDER

Pursuant to the Findings of Fact and Conclusions of Law, the Director of the Department of Planning and Permitting (OPP) hereby **APPROVES** the application for a Conditional Use Permit (Minor) (CUPm) and Zoning Waiver (W) from LUO Section 21-4.60(c)(7) and LUO Section 21-5.700(a) related to wind machine setbacks to allow in the AG-1 Restricted Agricultural District and AG-2 General Agricultural District, subject to the following conditions:

A. Development and operation of the wind farm shall be in general conformance with the approved Project, as described herein and shown on Exhibits A-1 through A-11, attached hereto, which shall be deemed the approved plans for the Project. Any modification of the approved Project and/or plans shall be subject to the prior review of and approval by the Director of the OPP. Minor modifications shall be processed in accordance with Section 21-2.20(k) of the Land Use Ordinance (LUO). Major modifications shall require a new CUPm and/or a new Waiver.

B. Upon termination of the Project, the Applicant shall be required to decommission and remove all equipment, and restore and re-vegetate the Project site within 12 months after the end of operations.

C. Prior to the application of building permits, the Applicant shall submit to the OPP a parking plan which shall show a minimum of six off-street parking spaces, the dimensions of the spaces and maneuvering areas, and the parking surface material to be used. The parking area shall consist of crushed rock, limestone or gravel, or an acceptable all-weather surface.

D. Prior to the application of building permits, the Applicant shall submit a Final Drainage Report upon completion of the drainage study.

E. The Applicant shall implement quiet hours between the hours of 7:00 p.m. and 6:00 a.m., daily, with respect to construction activity. Activities which may generate noise impacts to the surrounding communities shall not be permitted during the stipulated quiet hours.

F. This application has only been reviewed and approved pursuant to the provisions of LUO Section 21-5.40 (Wind Machines) and LUO Section 21-4.60(c)(7) and LUO Section 21-5.700(a) related to wind machine setbacks. The Project shall comply with all other applicable LUO provisions.

G. Approval of this CUPm and Waiver shall not constitute compliance with other LUO or governmental agencies' requirements, including building and/or sign permit approval. These are subject to separate review and approval. The Applicant shall be responsible for insuring that the final plans for the Project approved under this permit comply with all applicable government agencies' provisions and requirements.

H. The Applicant and/or landowners shall notify the Director of the OPP in writing within 30 days concerning:

1. Any proposed change in use, including discontinued use and/or termination of any use on the property; and/or

2. Transfer in ownership of the property or of any use on the property.

In the case of a change in use, the Director of the OPP will determine if the proposed change requires a minor or major modification of the CUP and/or Waiver. In the event of a change of ownership, the Director of the OPP shall notify the new owner (by copy of the CUP report) that the site and/or facility is permitted and/or governed by the CUP and Waiver, and that compliance with all the conditions of approval is required.

I. The Applicant shall obtain the first development or building permit for the approved wind farm within two years from the date of this approval, or the CUPm and Waiver shall lapse.

J. If, during construction, any previously unidentified archaeological sites or remains, (such as artifacts, shell, bone, or charcoal deposits, human burials, rock or coral alignments, pavings, or wall) are encountered, the Applicant shall stop work and contact the State Historic Preservation Division (SHPD) immediately. Work in the immediate area shall be stopped until SHPD is able to assess the impact and make further recommendations for mitigative activity.

K. The Director may modify the conditions of this permit by imposing additional conditions, modifying existing conditions, or deleting conditions deemed satisfied upon a finding that circumstances related to the approved Project have significantly changed so as to warrant a modification to the conditions of approval.

L. The Director may re-evaluate the CUPm after construction of the facility to determine if visual, noise, or other impacts are significantly greater than anticipated (i.e., as represented by the Applicant). The Director may impose additional conditions to mitigate greater adverse impacts, or revoke the CUPm if adverse impacts cannot be mitigated.

M. In the event of the noncompliance with any of the conditions set forth herein, the Director may terminate all uses approved under this permit or halt their operation until all conditions are met or may declare this CUPm and Waiver null and void or seek civil enforcement.

Dated at Honolulu, Hawaii, this 20th day of January, 2017.

Department of Planning and Permitting
City and County of Honolulu
State of Hawaii

By _____
Kathy K. Sokugawa
Acting Director

Attachments

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 768-8000 • FAX: (808) 768-6041
DEPT. WEB SITE: www.honoluludpp.org • CITY WEB SITE: www.honolulu.gov

FILE

KIRK CALDWELL
MAYOR

KATHY K. SOKUGAWA
ACTING DIRECTOR

TIMOTHY F. T. HIU
ACTING DEPUTY DIRECTOR

2016/CUP-69(WA)
2016/W-63

January 20, 2017

Mr. Neal Dixon
Tetra Tech, Inc.
737 Bishop Street, Suite 2340
Honolulu, Hawaii 96813

Dear Mr. Dixon:

SUBJECT: Conditional Use Permit (Minor) Application No. 2016/CUP-69 and Zoning Waiver No. 2016/W-63
Na Pua Makani Wind Project - Subproject A
56-668 Kamehameha Highway - Kahuku
Tax Map Key 5-6-8: 6

The Director of the Department of Planning and Permitting (DPP) has **APPROVED** the above Conditional Use Permit (Minor) and Zoning Waiver application to allow a wind farm with four wind turbines on the AG-1 Restricted Agricultural District and AG-2 General Agricultural District and provide less than the required wind machine setbacks, subject to conditions contained in the enclosed Findings of Fact, Conclusions of Law, and Decision and Order.

Any party wishing to appeal the Director's action must submit a written petition to the Zoning Board of Appeals (ZBA) within 30 calendar days from the date of mailing or personal service of the Director's written decision (Zoning Board of Appeals Rules Relating to Procedure for Appeals, Rule 22-2, Mandatory Appeal Filing Deadline). Essentially, the Zoning Board of Appeals' rules require that a petitioner show that the Director based his action on an erroneous finding of a material fact, and/or that the Director acted in an arbitrary or capricious manner, or manifestly abused his discretion. Generally, the ZBA can only consider the evidence previously presented to the Director of the DPP. The filing fee for appeals to the ZBA is $400 (payable to the City and County of Honolulu).

Failure to comply with ZBA Rules Chapter 22, Procedure for Appeals, may result in the dismissal of the appeal. Copies of the ZBA rules are available at the DPP. Appeals should be addressed to:

Zoning Board of Appeals
c/o Department of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Should you have any further questions on this matter, please contact William Ammons of our Urban Design Branch, at 768-8025 or wammons@honolulu.gov.

Very truly yours,

Kathy K. Sokugawa
Acting Director

Enclosure

cc: Mr. Kerstan J. Wong (HECO)

May 1, 2019 TTCES-PTLD-2019-042

VIA E-MAIL

William Ammons
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Subject: Minor Modification Request of Conditional Use Permit Minor (CUPm) and Zoning Waiver Permit Approval File No. 2016/CUP-69 Tax Map Key (TMK) (1) 5-6-008:006, Kahuku, Oahu, Hawaii

Dear Mr. Ammons:

Na Pua Makani Power Partners (NPMPP) has made minor modifications to the final location of the proposed wind turbine generators that were approved under Conditional Use Permit Minor (CUPm) and Zoning Waiver Permit Approval File No. 2016/CUP-69. In addition, NPMPP proposes to construct shorter wind turbine generators than what was originally approved in the CUPm. Finally, NPMPP proposes to construct a taller meteorological (met) tower than what was originally approved in the CUPm. Due to these minor adjustments to the proposed use, NPMPP is requesting the approval of a minor modification to Permit No. 2016/CUP-69, as permitted under LUO Section 21-2.20(k)(1). The Department of Planning and Permitting (DPP) Master Application Form is included in Attachment 1. The required drawings/plans are included in Attachment 2. The required application fee has been provided with a hard copy of this letter.

Description of Minor Modification

Permit No. 2016/CUP-69 approved four turbines, each with a maximum height of 591 feet, on Tax Map Key (TMK) (1) 5-6-008:006. The proposed modification reduces the maximum height of each turbine to 567.6 feet. See Exhibits A-1 and A-2 in Attachment 2 for the dimensions of the originally approved turbines vs the modified turbine. This minor modification of turbine height would not change the generation capacity of each turbine. The proposed modification also includes minor adjustments to each turbine location to accommodate the final engineering design. See Exhibit B in Attachment 2 for a composite map overlaying the original turbine locations with the final/modified turbine locations.

Land Use Ordinance (LUO) Section 21-5.700 requires each wind turbine to be set back from all property lines a minimum distance equal to the height of the system. Therefore, the required setback distance for the modified turbines would be reduced from 591 feet to 567.6 feet from the nearest property line. See Exhibit B in Attachment 2 for the modified turbine setback dimensions. Under the Permit No. 2016/CUP-69 approval, Turbines 3 and 4 met the setback requirement. The modified location and heights of Turbines 3 and 4 will continue to meet the setback requirements as they will be set back a minimum of 567.6 feet from the nearest property line (see Exhibits B and C in Attachment 2).

For Turbines 1 and 2, Permit No. 2016/CUP-69 approved a Zoning Waiver from the strict adherence to the LUO setback standards. Per the original CUP authorization, Turbine 1 was to be located 284 feet from the nearest property line. The modified location of Turbine 1 will be set back approximately 275.1 feet from the nearest

property line (Exhibit B, Attachment 2). Although Turbine 1 is located slightly closer (approximately 8.9 feet) to the nearest property line than the original turbine location, the shorter turbine height reduces the required setback distance and therefore decreases the total amount of setback encroachment on surrounding properties. For example, the setback encroachment onto TMK parcel 5-6-006:049 (the closest property line to Turbine 1) is approximately 292.9 feet which is approximately 14.1 feet less than under the original approval (original approved encroachment was approximately 307 feet).

Turbine 2 was authorized under Permit No. 2016/CUP-69 to be located 372.3 feet from the nearest property line. The modified location of Turbine 2 will be set back approximately 354.5 feet from the nearest property line (Exhibit B, Attachment 2). Although Turbine 2 is located slightly closer (approximately 17.8 feet) to the nearest property line than the original turbine location, the shorter turbine height reduces the required setback distance and therefore decreases the total amount of setback encroachment on surrounding properties. For example, the setback encroachment onto TMK parcel 5-6-006:049 (the closest property line to Turbine 2) is approximately 213.5 feet which is approximately 5.2 feet less than under the original approval (original approved encroachment was 218.7 feet).

Permit No. 2016/CUP-69 approved one 185-foot met tower on TMK (1) 5-6-008:006 see Exhibit D-1, Appendix 2. The proposed modification increases the maximum height of the met tower to 344 feet and proposes to construct a self-supporting lattice tower with no guy wires, see Exhibit D-2, Appendix 2. The location of the met tower will not change from the original approved location (see Exhibit B, Attachment 2). The original 185-foot met tower was listed as exempt from the LUO height standards for the AG-1 Restricted Agricultural District. Therefore, the 344-foot lattice tower would also be exempt from the height standards. The met tower will be located over 500 feet from the closest property line and therefore would be set back from all property lines a distance greater than the maximum height of the met tower.

Conformance with Land Use Ordinance Criteria

Per LUO Section 21-2.20(k)(1), minor alterations or modifications to an approved permit may be administratively authorized provided it meets the standards under subparts (A), (B), and (C). The following provides an analysis of how the minor modifications described above meet the standards under Section 21-2.20(k)(1):

The minor modification request:

(A) is reasonable, and consistent with the intent of the respective permit;

Response: The minor adjustments to the turbine locations, decrease in turbine heights, and increase in the met tower height are reasonable adjustments that are typically made during the final design process, and which occur after Conditional Use Permit approval, but prior to issuance of grading and building permits. These minor modifications are also consistent with the intent of Permit No. 2016/CUP-69, as they do not change the Director's conclusion in the Decision and Order that the proposed use meets the criteria under LUO Section 21-2.90-2(a).

(B) does not significantly increase the intensity or scope of the use; and

Response: The proposed minor adjustments to the turbine locations, decrease in turbine heights, and increase in met tower height do not increase the intensity or scope of the use, as no additional wind turbines or met towers are proposed and no increase in generating capacity is proposed.

(C) does not create adverse land use impacts upon the surrounding neighborhood.

Response: Although Turbines 1 and 2 are located slightly closer to the nearest property line than the original turbine locations, the shorter turbine height reduces the required setback distance by 23.4 feet; therefore, decreasing the total amount of setback encroachment on surrounding properties. The revised locations of Turbines 3 and 4 meet the required setback standards and the taller met tower meets the required setback standard. Therefore, the proposed minor adjustments to the turbine locations, the

decrease in turbine heights and increase in the met tower height would not create adverse land use impacts upon the surrounding neighborhood.

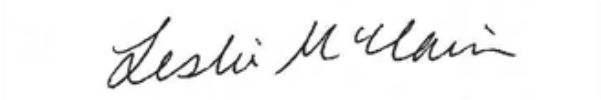
Environmental Assessment

An Environmental Impact Statement (EIS) was prepared under HRS Chapter 343 for the wind project and the Final EIS was accepted by the Board of Land and Natural Resources on July 22, 2016. The proposed minor modification would not substantially change the size, scope, intensity, use, location, or timing of the proposed action evaluated under the accepted Final EIS for the following reasons:

- The minor modification of turbine height would not change the generation capacity of each proposed turbine; therefore, this would not change the size, scope, intensity or use of the proposed action.
- The refinements to the turbine locations are minor and typical of final engineering design and would not be considered a substation change in location, use, size, scope, or intensity.
- Although the locations of Turbines 1 and 2 have moved slightly closer to the nearest TMK boundary, the overall setback encroachments originally approved under Permit No. 2016/CUP-69 have slightly decreased due to the use of a shorter turbine type. Therefore, the minor modification would not be considered a substation change in location, use, size, scope, or intensity.
- The proposed minor modifications of a decreased turbine height and slight modifications to turbine location would not affect the timing of the proposed action.

If you have any questions regarding this request, or need further clarification, please contact me at (503)-290-9580, or at leslie.mcclain@tetratech.com.

TETRA TECH, INCORPORATED



Leslie McClain
Senior Environmental Planner

Enclosures:
Attachment 1 – DPP Master Application Form
Attachment 2 – Drawings/Plans

cc: Michael Hughes, Na Pua Makani Power Partners, LLC.
Eric Pendergraft, Na Pua Makani Power Partners, LLC.
Barry Cheung, Department of Land and Natural Resources, Land Division
Chris Bokides, Site Constructors, Inc.

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 768-8000 • FAX: (808) 768-6041
DEPT. WEB SITE: www.honoluludpp.org • CITY WEB SITE: www.honolulu.gov

FILE

KIRK CALDWELL
MAYOR

KATHY K. SOKUGAWA
ACTING DIRECTOR

TIMOTHY F. T. HIU
DEPUTY DIRECTOR

EUGENE H. TAKAHASHI
DEPUTY DIRECTOR

June 7, 2019

2019/MOD-34WA)
2019/MOD-35
2016/CUP-69
2016/W-63

Ms. Leslie McClain
Tetra Tech, Incorporated
737 Bishop Street, Suite 2340
Honolulu, Hawaii 96813

Dear Ms. McClain:

SUBJECT: Request for Minor Modifications
Minor Modification No. 2019/MOD-34
Minor Modification No. 2019/MOD-35
Conditional Use Permit No. 2016/CUP-69
Zoning Waiver No. 2016/W-63
Na Pua Makani Wind Project - Subproject A
56-668 Kamehameha Highway - Kahuku
Tax Map Key 5-6-008: 006

The request for minor modification received, May 8 and 21, 2019, to the above-mentioned Conditional Use Permit (CUP) No. 2016/CUP-69 and Zoning Waiver (W) No. 2016/W-63, to modify the previously approved wind farm, is **APPROVED**, subject to the following conditions:

1. Operation and development of the wind farm, shall be in general conformance with the approved Project, as described herein and shown on plans and drawings labeled Exhibits B-1 through B-4 (received May 8, 2019), on file at the Department of Planning and Permitting (DPP). Any modification to the Project and/or approved plans shall be subject to the prior review and approval by the Director of the DPP. Minor modifications shall be processed in accordance with Land Use Ordinance (LUO) Section 21-2.20(k). Major modifications shall require a new Conditional Use Permit (CUP) and Zoning Waiver.

2. This application has only been reviewed and approved pursuant to the provisions of LUO Sections 21-2.90, (CUP), and 21-5.650(b) (Utility Installations, Type A); approval of this minor modification does not constitute compliance with other LUO or governmental requirements, including building and/or sign permit approval. These are subject to separate review and approval. The Applicant shall be responsible for insuring that the final plans for the Project approved under these permits comply with all applicable coded and other governmental provisions and requirements.

3. Except as modified herein, the approved plans and conditions of Conditional Use Permit No. 2016/CUP-69 and Zoning Waiver No. 2016/W-63, shall remain in force.

4. The Director may modify the conditions of this approval by imposing additional conditions, modifying existing conditions, or deleting conditions deemed satisfied upon a finding that circumstances related to the approved Project have significantly changed so as to warrant modification to the conditions of approval. In the event of the noncompliance with any of the conditions set forth herein, the Director may terminate all uses approved under this permit or halt their operation until all conditions are met or may disclose this permit null and void or seek civil enforcement.

The Applicant proposes to modify the location and height of four previously approved wind turbines. The original height of the four proposed wind turbines was 591 feet and they will be reduced to 567.6 feet or 23.4-foot reduction. The original setback for Turbine No. 1 was 284 feet and the proposed setback will be 275.1 feet or 8.9-foot reduction. The original setback for Turbine No. 2 was 372.3 feet from the property line and the proposed setback will be 354.5 feet or 17.8-foot reduction. The original setback for Turbine Nos. 3 and 4 was 591 feet from the property line and the proposed setback will be reduced to 567.6 feet (required setback equal to its proposed height) or 23.4-foot reduction. The original height for the Met Tower was 185 feet and it will be increased to 344 feet or 159-foot increase but it will be setback more than 500 feet from the nearest property line (see Exhibits B-1 through B-4).

On January 20, 2017, Conditional Use Permit No. 2016/CUP-69 and Zoning Waiver No. 2016/W-63 was approved to allow a wind farm with four wind turbines and provide less than the required wind machine setbacks.

Given the circumstances and conditions, the proposal is reasonable, consistent with the intent of the original Zoning Waiver, does not significantly increase the intensity of scope of the utility installation use, and does not create adverse land use impacts for the surrounding neighborhood.

Any party (to the case) wishing to appeal the Director's action must submit a written petition to the Zoning Board of Appeals (ZBA) within 30 calendar days from the date of mailing or personal service of the Director's written decision (ZBA Rules Relating to Procedure for Appeals, Rule 22-2, Mandatory Appeal Filing Deadline). Essentially, the ZBA rules require that a petitioner show that the Director based his/her action on an erroneous finding of a material fact, and/or that the Director acted in an arbitrary or capricious manner, or manifestly abused his/her discretion. Generally, the ZBA can only consider the evidence previously presented to the Director of the Department of Planning and Permitting (DPP). The filing fee for appeals to the ZBA is $400 (payable to the City and County of Honolulu).

Failure to comply with ZBA Rules Chapter 22, Procedure for Appeals, may result in the dismissal of the appeal. Copies of the ZBA rules are available at the DPP. Appeals should be addressed to:

Zoning Board of Appeals
c/o Department of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Should you have any questions or need additional information concerning this Minor Modification, please contact William Ammons, of our staff, at 768-8025 or via email at wammons@honolulu.gov.

Very truly yours,

Anthony X. Cinco

FOR Kathy K. Sokugawa
Acting Director

Enclosure: Receipt No. 122614 and 122615
Exhibits B-1 through B-4

TETRA TECH

August 26, 2016 TTCES-PTLD-2016-094

William Ammons
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Subject: Conditional Use Permit Minor for the Proposed Na Pua Makani Wind Project – Subproject B
Tax Map Key (TMK) (1)5-6-005:018, Kahuku, Oahu, Hawaii

Dear Mr. Ammons:

Na Pua Makani Power Partners (NPMPP) proposes to develop the Na Pua Makani Wind Project (Project) to be located mauka of Kahuku Town, within the Koolauloa District. The Project is located within two adjacent parcels, which are identified by Tax Map Key parcel number (TMK) (1) 5-6:008:006 and TMK (1) 5-6-006:018. The Project will consist of up to nine wind turbine generators (WTG) and associated infrastructure with a nameplate generating capacity of up to approximately 25 megawatts (MW). Land ownership and the ownership and operation of certain Project-related equipment has necessitated that component parts of the Project receive their own, discrete Conditional Use Permit minor (CUPm). In total, for the purposes of permitting, the Project will be comprised of three Subprojects. Subproject A is specific to the DLNR-owned TMK (1) 5-6-008:006, and would include up to five WTGs, a permanent meteorological (met) tower, and at or below grade supporting infrastructure. Subproject B consists of the NPMPP-owned Project components within the Malaekahana Hui West, LLC-owned TMK (1) 5-6-006:018, including four WTGs, a temporary met tower, an operations and maintenance (O&M) building, electrical infrastructure, and at or below grade supporting infrastructure. Subproject C, also situated on the Malaekahana Hui West, LLC-owned TMK (1) 5-6-006-018, will consist of the HECO-owned electrical switching and transmission infrastructure.

The proposed land use is identified as Wind Machine which includes devices and facilities, including appurtenances, associated with the production and transmission of wind generated energy per §21-10.1, Revised Ordinances of Honolulu (ROH), which is a conditional use in the underlying zoning district AG-1 (Restricted Agriculture). Therefore, a CUPm application is enclosed.

The site is suitable for the installation of wind machines and appurtenances as such improvements will not alter the character of the surrounding area in a manner substantially limiting, impairing, or precluding the existing and future uses of the subject parcels and surrounding properties for the uses permitted in the underlying zoning districts.

Tetra Tech, Inc.
737 Bishop Street, Suite 2340 Honolulu, Hawaii 96813
Tel 808.441.6600 Fax 808.836.1689 www.tetratech.com

The site is located within the State Agricultural District and the permanent footprint of the Subproject B is located on lands designated B, C, D and E by the Land Study Bureau (LSB). Subproject B would remove 13.9 acres of LSB B-rated land and an additional 8 acres of lands with lower ratings from potential agricultural productivity but would remove no LSB A-rated land from potential cultivation. On a district-wide scale, the proposed Subproject B will impact less than 0.4 percent of the A- and B-rated agricultural lands in the Koolau Loa District. Subproject B would have long-term (for the life of the Project) direct impacts on approximately 2.7 acres of lands actively farmed by lessees over the long term (for the life of the Project); however, active farm lands displaced by the Project would be relocated to existing unused farm land within each farmer's lease area on the Malaekahana Hui West, LLC property to ensure no net loss of agriculture would occur. Considering the limited nature of the Subproject B footprint and that there will be no net loss in active cultivation, the proposed development will have less than a minimal impact on agriculture.

The construction and operation of the Na Pua Makani Wind Project is expected to contribute to the general welfare of the community-at-large. This proposed wind facility exhibits a major effort to achieve the goals set forth by the renewable portfolio standard that requires HECO and its affiliates to generate renewable energy equivalent to 30 percent by 2020, 40 percent by 2030, 75 percent by 2040, and 100 percent by 2045. In addition, NPMPP has engaged in outreach efforts with affected stakeholders to define its Community Benefits Package. This may include up to $80,000 to $100,000 per year over a 20 to 25 - year project life or the equivalent of approximately $2,000,000 of direct economic benefits to the Kahuku Community. Throughout the development and environmental review of the Project, NPMPP conducted wide-reaching community outreach efforts aimed at communicating to the surrounding community and garnering input on the Project. Community input received has been taken into account in the planning and design of the proposed Project.

Enclosed is the CUPm permit application package for the proposed Subproject B, prepared on behalf of NPMPP. The application package includes two complete applications, each inclusive of the signed master application form, the CUPm written statement, and three digital copies of the Final Environmental Impact Statement on compact disc. The application processing fee is included, provided as two checks made payable to the City and County of Honolulu, one in the amount of $200.00 for application review and a second check for the remaining portion of the processing fee. If you have any questions regarding the Project or need further clarification, please contact Leslie McClain at 503.222.4536 or me at 808.441.6608.

Sincerely,

TETRA TECH, INCORPORATED

Neal Dixon
Environmental Planner

cc: Mike Cutbirth, Champlin Hawaii Wind Holdings, LLC.

City and County of Honolulu

Conditional Use Permit (Minor) Application

For a proposed

Renewable Wind Energy Project

Kahuku, Oahu, Hawaii: Subproject B

Tax Map Key No: (1) 5-6-006:018

Applicant:

Na Pua Makani Power Partners, LLC
2020 Alameda Padre Serra, Suite 105
Santa Barbara, CA 93103

Prepared by:

Tetra Tech Inc.
737 Bishop St. Suite 2340 Mauka Tower
Honolulu, Hawaii 96813-3201

August 2016

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PROJECT SUMMARY

Project Name:	**Na Pua Makani Wind Project: Subproject B**
Applicant:	Na Pua Makani Power Partners, LLC 2020 Alameda Padre Serra, Suite 105 Santa Barbara, CA 93103 Mike Cutbirth (805) 568-0300
Location of Proposed Action:	Kahuku; Koolau Loa District; Oahu, Hawaii
Land Ownership:	Malaekahana Hui West, LLC
Tax Map Key (TMK):	(1) 5-6-006:018
Parcel Area:	452 acres (183 hectares)
Project Size:	Permanent Disturbance Area - approximately 21.9 acres (8.7 hectares) Temporary Disturbance Area - approximately 8.4 acres (3.4 hectares)
State Land Use Designations:	"A" Agricultural and "U" Urban
Sustainable Community Plan Designations:	Agricultural and Rural Community
County Zoning:	AG-1 Restricted Agricultural
Special Management Area:	Outside Special Management Area
HRS 343 Accepting Agency:	Board of Land and Natural Resources 1151 Punchbowl Street (808) 587-0400
Existing Use:	Agriculture and Agribusiness
Proposed Action:	Na Pua Makani Power Partners, LLC (NPMPP) proposes to construct and operate the Na Pua Makani Wind Project (Project) which would consist of up to nine wind turbine generators and associated infrastructures, with a nameplate generating capacity of up to approximately 25 megawatts (MW). The proposed Project would be located on portions of two parcels (Tax Map Key [TMK] (1) 5-6-008:006 and (1) 5-6-006:018). Three Conditional Use Permits (minor) (CUPm) will be submitted for the proposed Project, based on land and equipment ownership. This CUPm covers the components of the Project on TMK (1) 5-6-006:018 designated as Subproject B, and includes in its scope 4 turbines, lay-down areas, access roads, underground collector lines, the operation and maintenance building, and the applicant-owned substation components. The components of the Project on TMK 5-6-008:006 (Subproject A) will be addressed in a separate CUPm. A third CUPm application will be submitted for the HECO owned switching station located on TMK (1) 5-6-006:018 (Subproject C).

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Tables

Figures

Appendices

Attachment

Acronyms and Abbreviations

ALISH	Agricultural Lands of Importance to the State of Hawaii
amsl	above mean sea level
APE	Area of Potential Effect
BLNR	Board of Land and Natural Resources
CO_2	Carbon dioxide
CUPm	Conditional Use Permit minor
dBA	A-weighted decibels
DLNR	Department of Land and Natural Resources
DOE	U.S. Department of Energy
DOH	State of Hawaii Department of Health
DPP	City & County Department of Permitting & Planning
EIS	Environmental Impact Statement
FAA	Federal Aviation Administration
FIRM	Flood Insurance Rate Map
FMP	Fire Management Plan
FTE	Full-time equivalent
GHG	Greenhouse gases
HCEI	Hawaii's Clean Energy Initiative
HCP	Habitat Conservation Plan
HECO	Hawaiian Electric Company
Hg	Mercury
HRHP	Hawaii Register of Historic Places
HRS	Hawaii Revised Statutes
JDA	joint development agreement
Koolau Loa SCP	*Koolau Loa Sustainable Communities Plan*
kV	Kilovolts
LSB	University of Hawaii Land Study Bureau
LUO	Land Use Ordinance
MW	Megawatts
MWh	Megawatt hours
NO_x	Nitrogen oxides
NPMPP	Na Pua Makani Power Partners
NRHP	National Register of Historic Places
O&M	Operation and maintenance
PPA	Power purchase agreement

Project	Na Pua Makani Wind Project
ROH	Revised Ordinances of Honolulu
RPS	Renewable Portfolio Standard
SCP	Sustainable communities plan
SMA	Special Management Area
SO_2	Sulfur dioxide
SWPPP	Storm Water Pollution Prevention Plan
TESC	Temporary Erosion and Sediment Control
TMK	Tax Map Key
WTG	Wind turbine generator

MASTER PERMIT APPLICATION

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CITY AND COUNTY OF HONOLULU
DEPARTMENT OF PLANNING & PERMITTING
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

LAND USE PERMITS DIVISION MASTER APPLICATION FORM

Additional data, drawings/plans, and fee requirements are listed on a separate sheet titled "Instructions for Filing." ***PLEASE ASK FOR THESE INSTRUCTIONS.***

All specified materials described in the "Instructions for Filing" and required fees must accompany this form; incomplete applications will delay processing. You are encouraged to consult with Zoning Division staff in completing the application. Please call the appropriate phone number given in the "Instructions for Filing."

Please print legibly or type the required information. **SUBMITTED FEE: $** 600.00

PERMIT/APPROVAL REQUESTED (Check one or more as appropriate):

Cluster:
- ☐ Agricultural
- ☐ Country
- ☐ Housing

Conditional Use Permit:
- ☒ Minor ☐ Major

☐ **Existing Use:** _____ (Indicate Type of Use)

Environmental Document:
- ☐ Environmental Impact Statement
- ☐ Environmental Assessment
- ☐ Supplemental

☐ **Minor Shoreline Structure**

☐ **Modify Approved Permit:** _____ (Indicate Reference File No.)

☐ **Plan Review Use**

Planned Development:
- ☐ Housing
- ☐ Commercial (WSD Only)
- ☐ Resort (WSD Only)
- ☐ Interim Transit (IPD-T)

☐ **Shoreline Setback Variance**

Special District Permit:
- ☐ Minor ☐ Major

_____ (Indicate District)

☐ **Downtown Height >350 Feet**

Special Management Area Use Permit:
- ☐ Minor ☐ Major

☐ **Temporary Use Approval**

☐ **Variance from LUO Section(s):** _____

☐ **Waiver from LUO Section(s):** _____

☐ **Zoning Adjustment, LUO Section(s):** _____

☐ **HRS Section 201H-38 Project**

TAX MAP KEY(S): (1) 5-6-006:018
LOT AREA:
ZONING DISTRICT(S): AG-1 **STATE LAND USE DISTRICT:** Agricultural
STREET ADDRESS/LOCATION OF PROPERTY: 56-452 Kamehameha Highway

RECORDED FEE OWNER:
Name (& title, if any) Malaekahana Hui West, Inc.
Mailing Address 4301 E McKellips Rd
Mesa, AZ 85215
Phone Number (480) 832-5002
Signature

PRESENT USE(S) OF PROPERTY/BUILDING:
Agriculture, recreation, and fallow lands

PROJECT NAME (If any): Na Pua Makani Wind Project - Project B

APPLICANT:
Name Mike Cutbirth, Na Pua Makani Power Part
Mailing Address P.O. Box 540
Santa Barbara, California 93102
Phone Number (805) 568-0300
Signature

AUTHORIZED AGENT/CONTACT PERSON:
Name Neal Dixon, Tetra Tech, Inc.
Mailing Address 737 Bishop Street, Suite 2340
Honolulu, Hawaii 96813
Phone Number (808) 441-6608
Signature

REQUEST/PROPOSAL (Briefly describe the nature of the request, proposed activity or project): Na Pua Makani Power Partners proposes to to construct and operate the Na Pua Makani Wind Project, a wind farm with a nameplate generating capacity of up to approximately 25 MW, located near the town of Kahuku, Oahu, Hawaii. The wind farm would include up to 9 wind turbine generators, access roads, assembly lay down areas, overhead and underground transmission and collector lines, an operations and maintenance building, and an electrical substation. The substation will be owned and operated in part by the applicant and in part by Hawaiian Electric Company. This CUPm application covers the portions of the project on TMK (1) 5-6-006: 018, designated as Project B, and includes 4 turbines, lay down areas, access roads, underground collector lines, the O&M building, and the applicant-owned substation components.

POSSE JOB NO. _____

REV. 2/17/2015

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WRITTEN STATEMENT

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1.0 INTRODUCTION

1.1 Introduction to the Overall Na Pua Makani Wind Project

This Conditional Use Permit minor (CUPm) application is one of three prepared for the Na Pua Makani Wind Project (Project), a renewable energy generation development to be constructed and operated by Na Pua Makani Power Partners (NPMPP), a wholly-owned subsidiary of Champlin Hawaii Wind Holdings, LLC. The purpose of a CUP, as described in Chapter 21, Land Use Ordinance (LUO), Revised Ordinances of Honolulu (ROH), is to permit compatible land uses that are deemed appropriate for specified zoning districts if minimum standards and conditions are met. This CUPm application has been prepared pursuant to LUO §§ 21-2.90, 21-90-1, and 21-90-2.

The proposed Project, to be located mauka (toward the mountains) of Kahuku Town, is located within the Koolau Loa District (Figure 1). The Project is located within two adjacent parcels, which are identified by Tax Map Key parcel number (TMK) (1) 5-6:008:006 and TMK (1) 5-6-006:018. The Project will consist of up to nine wind turbine generators (WTG) and associated infrastructure, with a nameplate generating capacity of up to approximately 25 megawatts (MW). The use—wind energy generation—is defined under LUO §21-10.1 as "wind machines." The lands underlying the Project are wholly designated as City & County of Honolulu agricultural zoned districts, specifically AG-1, Restricted Agriculture and AG-2, General Agriculture. Pursuant to Table 21-3, Article 3, LUO, wind machines are permitted in both zoning districts with an approved CUPm.

An Environmental Impact Statement (EIS) was prepared for the Project, which is included with this application as Attachment 1. The technical studies from the Final EIS are referenced within this CUPm application. The Board of Land and Natural Resources (BLNR) accepted the Final EIS on July 22, 2016. The Final EIS acceptance letter from BLNR is included in Appendix A of this application.

1.2 Conditional Use Permit Subprojects

Land ownership and the ownership and operation of certain Project-related equipment has necessitated that component parts of the Project receive their own, discrete CUPm. As stated above, the Project will occupy lands within two adjacent parcel. TMK (1) 5-6:008:006, is owned by the State of Hawaii and administered by the Department of Land and Natural Resources (DLNR) and TMK (1) 5-6-006:018 is owned by Malaekahana Hui West, LLC. Ordinarily, in the case of a single project extending over multiple legal parcels, a project developer would enter into a joint development agreement (JDA) with all landowners. The dual purpose of a JDA is to ensure that all subject lands are available for the proposed land use over its contractual life as well as to provide a mechanism by which multiple parcels may be viewed singularly in terms of land use standards (e.g., the waiving of setback requirements for project components that span adjacent JDA parcels). Because of the public and private ownership of the two subject parcels, securing a JDA is not a feasible option for the proposed Project. As such, NPMPP has secured leases and executed agreements with each landowner individually.

NPMPP met with the City & County Department of Permitting & Planning (DPP) July 15, 2015 to discuss the particular attributes of the Project. DPP determined at this meeting that granting of two separate CUPm permits (one for each parcel) for the construction and operation of the Project would provide adequate permissions and protections. Additionally, while NPMPP will own and operate the wind farm, the switching station located adjacent to the NPMPP owned substation will be owned and operated by Hawaiian Electric Company (HECO). The switching station equipment allows the electric utility to accept or not accept the electrical output of the Project based on grid demand, and conveys the electricity to the grid. Separate ownership and operation of the switching station necessitates that HECO hold a CUPm for the switching station.

In total, for the purposes of permitting, the Project will be comprised of three Subprojects. Subproject A is specific to the DLNR-owned TMK (1) 5-6-008:006, and would include up to five WTGs, a permanent meteorological (met) tower, and at or below grade supporting infrastructure. Subproject B consists of the NPMPP-owned Project components within the Malaekahana Hui West, LLC-owned TMK (1) 5-6-006:018, including four WTGs, a temporary met tower, an operations and maintenance (O&M) building, electrical infrastructure, and at or below grade supporting infrastructure. Subproject C, also situated on the Malaekahana Hui West, LLC-owned TMK (1) 5-6-006-018, will consist of the HECO-owned electrical switching and transmission infrastructure (Table 1-1, Figure 2).

Table 1-1. Na Pua Makani Wind Project Subproject Organization

TMK Landowner	**(1) 5-6-008:006 DLNR**	**(1) 5-6-006:018 Malaekahana Hui West, LLC**	
CUPm Subproject Applicant	Subproject A NPMPP	Subproject B NPMPP	Subproject C HECO
Project Components	• Up to five WTGs • Underground electrical collection line • New and improved access roads	• Up to four WTGs • Underground electrical collection line • New and improved access roads • O&M Building • Electrical substation enclosed in a 155 by 121.5-foot (47.3 by 37 meters) fenced in yard. • Construction laydown area	• Electrical switching station enclosed in a 155- by 121.5-foot (47.3 by 37 meters) fenced in yard. • 3,960 feet (1,207 meters) of electrical transmission line

It is important to note the Project was conceived, scoped, and developed as one singular project. Throughout environmental review, which included the preparation of an EIS, the Project and its associated impacts have been presented and evaluated as one indivisible entity. Furthermore, from an operational standpoint, NPMPP has determined that financial feasibility of the Project is dependent on its specified generation capacity, and for the Project to move forward, it must be permitted in full. As such, the overall development, its cumulative impacts and associated benefits should be considered as a whole.

Nevertheless, the CUPm application requires analysis of the components subject to the permit. In response to this requirement, subproject-specific attributes are provided in this application when it is feasible. Conversely, when attributes are not discreet (e.g., operational employment numbers, economic benefits, etc.), it will be noted that descriptions are general and reflective of the encompassing Project. Regardless, all technical information provided in the subproject CUPm applications is drawn from the Final EIS.

This CUPm application has been prepared for Subproject B, which would be located on the Malaekahana Hui West, LLC-owned parcel, TMK (1) 5-6-006:018. The applicant is NPMPP. Under separate cover, NPMPP will submit the CUPm for Subproject A and HECO will submit the separate CUPm application for Subproject C.

1.3 Subproject B Summary and Location

The Project is located in the Koolau Loa District, south of the town of Kahuku in the City & County of Honolulu. Subproject B includes portions of TMK (1) 5-6-006:018, which would be leased from the Malaekahana Hui West, LLC. Though the parcel has an area of approximately 452 acres (183 hectares), activities associated with Subproject B would occur within a smaller area, consisting of approximately 21.9 acres (8.7 hectares) permanently disturbed and an additional approximately 8.4 acres (3.4 hectares) temporarily disturbed during construction. As such, when the encompassing parcel or its characteristics are discussed, the parcel will be referred as "TMK (1) 5-6-006:018" whereas subproject-specific portions of the parcel will be referred to as the "Subproject B Site."

TMK (1) 5-6-006:018 is located southwest of Kamehameha Highway and southeast of the existing Kahuku Wind Farm (Figure 2). Subproject B is accessible via Malaekahana Valley Road, a private access road located within the boundaries of TMK (1) 5-6-006:018 that directly joins Kamehameha Highway at the northeastern most point of TMK (1) 5-6-006:018 (Figure 3).

The proposed Subproject B Site is located primarily within the State Land Use District "A" Agricultural District, while a minor portion of the Subproject B Site fronting Kamehameha Highway is within the "U" Urban District (Figure 4). The underlying City & County of Honolulu zoning is AG-1, Restricted Agricultural District (Figure 5).

The existing land cover and land uses within TMK (1) 5-6-006:018 are influenced by elevation and terrain. The lower elevation portions of TMK (1) 5-6-006:018 are cultivated for agriculture. Higher-elevation lands and portions of the lower-elevation lands are undeveloped and not used for active agriculture. These non-agricultural areas are dominated by a mixture of non-native weedy vegetation and common native vegetation. The Subproject B Site is surrounded by a mixture of cultivated land and undeveloped land dominated by non-native or common native vegetation. Malaekahana Hui West, LLC currently leases land to individual farmers. Approximately 247 acres (100 hectares) is suitable for agricultural use according to City & County of Honolulu real property tax record. Of that portion, approximately 161 acres (65 hectares) is actively cultivated or is used to directly support agricultural actives. The area of active cultivation to be disturbed by Subproject B is minimal and is discussed in more detail in Section 7.3.

The proposed Subproject B includes up to four Vestas V136 turbine generators, each with a generating capacity of up 3.45 MW each. The WTGs will be installed with hub heights of 367.5 feet (112 meters) and 433 feet (132 meters) in order to ensure maximum efficacy and compliance with land use standards. Subproject A and Subproject B together are expected to produce approximately 88,000 megawatt hours (MWh) of electricity generation per year (assuming an installed capacity of up to approximately 25 MW), and Subproject B should account for up to approximately half of the aggregate energy production.

In addition to the four wind turbines, Subproject B also includes access roads, turbine assembly and lay-down areas, underground collector lines, a temporary met tower, an O&M building, and an electrical substation. The energy generated by the wind turbines would be collected through a below grade electrical collector system and fed to the substation within the Subproject B Site where it will connect to HECO's grid.

1.4 Purpose and Need

NPMPP's purpose 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. Hawaii's Clean Energy Initiative (HCEI) has set a goal for the state to source 100 percent of its electricity from locally generated renewable sources by 2045 (HCEI 2014). The cost of electricity from renewable energy is currently about one-half the cost of electricity from burning oil and other non-renewable sources (Department of Business, Economic Development and Tourism 2013). The power generated by the Project would be sold to HECO pursuant to the power purchase agreement (PPA) under a long-term, fixed-price contract with fixed annual escalation providing long-term price stability for consumers.

NPMPP anticipates that operation of the proposed 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, contribute to the State's energy independence and security, and reduce the imports of foreign oil. 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 (GHG) emissions and other forms of pollution that are detrimental to the environment and human health. The aggregate energy potentially generated by the proposed Project would eliminate the use of approximately 13.44 barrels of oil for every hour of operation, which in turn would reduce emissions of carbon dioxide (CO_2) by approximately 5.78 tons as well as other air pollutants including sulfur dioxide (SO_2), nitrogen oxides (NO_x), and mercury (Hg).

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 30 percent by 2020, 40 percent by 2030, 75 percent by 2040, and 100 percent by 2045. In addition, the Global Warming Solutions Act of 2007 requires that Hawaii's GHG emissions be reduced to levels at or less than 1990 levels by January 2020. On January 28, 2008, Hawaii also signed a Memorandum of Understanding with the U.S. Department of

Energy (DOE) that established the HCEI, under which at least 70 percent of Hawaii's energy needs would be supplied by renewable resources by the year 2030.

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. As proposed, the Project in its entirety could provide 88,000 MWh per year (MWh/year) of electricity to HECO's power grid, enough to provide electricity to approximately 8,000 households based on the average statistics reported by the American Wind Energy Association (2014).

1.5 Hawaii Revised Statutes, Chapter 343 Environmental Impact Statements

An EIS was prepared for the Project pursuant to Hawaii Revised Statutes (HRS) Chapter 343 and the Final EIS was accepted by the BLNR on July 22, 2016 (see Appendix A). Due to portions of the Project being located on state lands, the construction and operation of the proposed Project constitutes an action requiring compliance with HRS Chapter 343. BLNR served as the accepting authority for the EIS. The majority of the information presented in this application has been adopted from the Final EIS. This written statement contains summaries of the EIS affected environment and environmental consequences for the infrastructure, public services, physical, natural, and socio-economical resources.

The EIS was prepared with the intent of assessing to the full extent the potential impacts of the Project. As such, parameters of the preferred alternative (Alternative 2a-Modified Proposed Action Option) were expanded to ensure comprehensive potential impacts were disclosed. As a result, the project description of the preferred alternative presented in the Final EIS includes some components not present in the final design of the Project, such as microwave communications equipment.

2.0 SITE DESCRIPTION

2.1 Topography

The Project is located at the base of the northern part of the Koolau Range, sloping to the coastal plain near the town of Kahuku. TMK (1) 5-6-006:018 ranges in elevation from approximately three feet (1 meter) above mean sea level (amsl) on the eastern edge to approximately 370 feet (113 meters) amsl on the western portions of the parcel and consists of steep, dissected ridges surrounding gently sloping valleys as well as flat, coastal plains (Hobdy 2013a).

2.2 History of Site

Traditional accounts of the natural resources and existing conditions of the Kahuku Ahupuaa indicate that during Hawaiian settlement prior to the arrival of Europeans, many parts of the landscape were used for traditional agriculture, habitation, and ceremony, varying from moderate

to intense. At the time of the initial contact period, a good portion of the land lay fallow due to severe population decline and was overgrown in some areas with exotic plant species. Thus, there are several conflicting accounts of what the landscape was like and how it was used prior to European contact. After European contact, it appears that there was a marked population decline with an associated decrease in agricultural activity.

Ranching in the Kahuku area began in the 1850s, when the Kahuku Ranch was established on land purchased from Kamehameha III (Korn 1958). The ranch grew and soon the once rich vegetation of Kahuku began to disappear, as the result of free-range overgrazing (Stride et al. 2003:16). This took a toll on the natural resources, the small unprotected family gardens, and the native population, "At the same time the hala forests began to disappear, the Hawaiian population also began to disappear" (Stride et al. 2003). Presumably the population continued to decline between the 1830s and the 1850s.

By the 1890s, James Campbell had control of a large portion of the Kahuku tract which laid the groundwork for the creation of the Kahuku Plantation (Stride et al. 2003). This was the start of large-scale commercial agriculture that altered the landscape of Kahuku with agriculture and a railroad segment that changed the landscape and redefined the region.

Much of the uplands above Kahuku Village were once planted in sugar cane and pineapple. These fields were established wherever possible except on steep hillsides and on the crests of ridges and knolls (Stride et al. 2003).

The plantation continued to expand into the 1930s when Japanese, Filipino, and Portuguese worked the fields (Stride et al. 2003). The plantation was responsible for shaping the town of Kahuku and the life of its workers by introducing "concrete stoves for laborer's cottages and sanitation drains that were used as models for other plantations…Kahuku…introduced the first plantation day nursery and high school…baseball diamond, the first golf course …" (Stride et al. 2003:22). The growth quickly slowed when in 1955 the last of locomotives hauling sugarcane stopped. In 1971, the Kahuku Plantation closed (Stride et al. 2003).

2.3 Existing Conditions

2.3.1 Land Ownership

The Subproject B Site is located on land owned by Malaekahana Hui West, LLC (TMK (1) 5-6-006:018). NPMPP has a lease agreement with Malaekahana Hui West for the use of portions of TMK (1) 5-6-006:018 covered by the Na Pua Makani Wind Farm Project components. See Appendix B for a copy of the Lease Agreement. The lease term includes the development and construction periods and includes a 20-year operating period starting from the commercial operation date. The lease also includes rights to extend the operating period for up to 20 more years. In addition to NPMPP, the landowner currently leases portions of TMK (1) 5-6-006:018 to other entities for active agricultural use on a month-to-month basis. These existing leases and active agricultural practices will not be negatively impacted by the NPMPP's lease. See Section 7.3 for more information on existing agricultural uses.

2.3.2 Land Use Districts and Zoning

The Subproject B Site is located entirely within the State Land Use District "A" Agricultural (Figure 4) and City & County of Honolulu land use district AG-1 Restricted Agricultural (Figure 5).

The Subproject B Site is located within the boundaries of the Koolau Loa planning region of Oahu. The comprehensive plan applicable to this area is a sustainable communities plan (SCP), the *Koolau Loa Sustainable Communities Plan* (Koolau Loa SCP), which designates the Subproject B Site for agricultural use (City & County of Honolulu, DPP 2012).

Within the vicinity of the project, the Special Management Area (SMA) extends mauka (away from the ocean, inland) from the shoreline to a boundary aligned along Kamehameha Highway. All components of the proposed Subproject B Are located mauka of Kamehameha Highway and, thus, outside of the SMA. As such, no SMA review or permits will apply to Subproject B or the subproject components.

2.3.3 Agricultural Land and Existing Uses

The University of Hawaii Land Study Bureau (LSB) Detailed Land Classification rates the agricultural productivity of soils throughout the state based on characteristics of soil properties, topography, and climate. The productivity ratings were established to classify soils as Category A, B, C, D, or E, with Category A representing the most productive soils and Category E the least productive soils. LSB A- and B-rated agricultural lands are considered to be of high value and have special protections set forth in state regulations. See Section 4.2.1 of this document for a discussion on the compatibility of Subproject B with applicable state regulations.

The majority of the soils within TMK (1) 5-6-006:018 are classified as LSB Category B (56 percent), followed by Category E (23 percent), Category C (10 percent), Category D (5 percent), and Category A (4 percent); approximately 2 percent of TMK (1) 5-6-006:018 is unclassified (Table 2-1; Figure 6).

The Agricultural Lands of Importance to the State of Hawaii (ALISH) is a classification system for identification of agriculturally important lands in the State of Hawaii. Three classes of agriculturally important lands have been established for the State of Hawaii:

- Prime Agricultural Land
- Unique Agricultural Land, and
- Other Important Agricultural Land.

Land considered for ALISH classification may or may not currently be in agricultural use. Approximately 71 percent of the land within TMK (1) 5-6-006:018 has been designated under the ALISH classification system (Table 2-1; Figure 7). This includes approximately 236.1 acres (95.5 hectares) of Prime Agricultural Land, 84.9 acres (34.4 hectares) of Other Agricultural Land, and 28.8 acres (11.7 hectares) of Unclassified Agricultural Land.

Table 2-1. Agricultural Land Classifications for the TMK (1) 5-6-006:018

Land Classification	Acres	Percent of Parcel
LSB Agricultural Productivity Rating		
No Data	8.2	2.00
A	19	4.00
B	253.9	56.00
C	46.8	10.00
D	22.3	5.00
E	101.7	23.00
Total[1]/	**451.9**	
ALISH Classification		
No Data	102.1	22.59
Other Agricultural Land	84.9	18.79
Unique Agricultural Land	0	0.00
Prime Agricultural Land	236.1	52.25
Unclassified Agricultural Land	28.8	6.37
Total[1]/	**451.9**	
[1] Column and row totals may not sum exactly due to rounding		

Malaekahana Hui West, LLC currently leases portions of TMK (1) 5-6-006:018 to individual farmers; the area of active cultivation is approximately 161 acres (65 hectares). See Section 7.3 for a discussion of possible impacts to active agricultural uses and mitigation measures.

2.3.4 Abutting Uses

The land uses immediately surrounding the Subproject B Site consists of vacant and agricultural lands, both active and fallow. Adjacent to the northwestern border of TMK (1) 5-6-006:018 is the DLNR-owned parcel on which Subproject A is proposed. West and toward the south of the TMK (1) 5-6-006:018 are active military training lands known as the Kahuku Training Area. Adjacent to the northeast corner of TMK (1) 5-6-006:018 is a City & County of Honolulu-owned parcel on which is located the Kahuku Police Substation and the Kahuku Fire Station. Active farming by various farming entities takes place within TMK (1) 5-6-006:018 and adjacent to the parcel. One of these farming entities, Keana Farms, additionally operates an agritourism attraction on TMK (1) 5-6-006:018 featuring a zip-line course which includes a guided agricultural educational tour of the property. Malaekahana Hui West, LLC holds CUP No. 2013/CUP-23 for the zip-line agribusiness. See Section 5.3 for a discussion of Subproject B's compliance with the conditions of CUP No. 2013/CUP-13.

3.0 PROJECT DESCRIPTION

The proposed Subproject B would include up to four turbines and associated foundations and transformers; an electrical collector system; an O&M building; a laydown area; an electrical substation; one temporary meteorological (met) tower; and access roads (Figure 3). Construction staging areas and temporary parking will be provided within the temporary impact footprint

associated with the turbine pads, access roads, and laydown area. Electricity generated by the wind turbines on both the Subproject A and Subproject B Sites will be transmitted through the underground collector system to the Project substation and HECO switching station (both located on TMK (1) 5-6-006:018). From the switching station, an overhead transmission line will be constructed on TMK (1) 5-6-006:018 to connect the proposed substation and switching station to the HECO grid. Details pertaining to the other subproject facilities are provided within their respective CUPm applications. Each of the major Subproject B components are described in detail below. The location and details of the proposed structures are shown in the site plans and drawings contained in Appendix C.

A total of approximately 30.3 acres (12.3 hectares) on the Subproject B Site will be disturbed during construction, of which 21.9 acres (8.9 hectares) will be permanently disturbed and 8.4 acres (3.4 hectares) will be temporarily disturbed. Temporary disturbance areas will be subject to temporary actions such as clearing, grubbing, and grading and these areas would be replanted with non-aggressive resident species that are compatible with Project operations in order to minimize erosion. Up to 2 acres around each turbine would be maintained with permanent low-growing vegetation or gravel pads to allow for O&M requirements. An additional area up to 4 acres (1.6 hectares) per pad would be maintained to facilitate post-construction mortality monitoring efforts, as practicable.

NPMPP anticipates employing four to five full-time employees upon commencing commercial operation of the Project. Operation and maintenance activities for each Subproject component would generally occur during normal work day hours from Monday to Friday. Power would be generated based on demand from the HECO Oahu grid.

The anticipated life of the Project is 21 years, which accounts for1 year of construction and 20 years of commercial operation. After that time, NPMPP will evaluate whether to continue operation of the project or to decommission it. Should the period of operations be extended, the facility may also be upgraded and repowered with renegotiated leases (and any necessary extensions of permits and approvals).

If, at the end of its anticipated life, the Project is decommissioned, the goal of decommissioning would be to remove the power generation equipment and return the site to a condition as close to its pre-construction state as possible within 1 year as contractually required in both the land lease with Malaekahana Hui West, LLC and the PPA with HECO. All decommissioning- and restoration-related waste would be properly handled and disposed of or recycled, as appropriate, in accordance with county, state, and Federal laws and permit requirements. Foundations would be removed to a depth below grade, and roads would be left for use. Decommissioning would restore, to the extent practical, the visual and ecological character of the landscape and also remove effects to other environmental and public resources that may have occurred as a result of Project operations. NPMPP would provide the land owners with security as may be required under the terms of the leases to ensure decommissioning obligations are met.

The following is a discussion of each component of Subproject B. Additional detail, including a discussion of siting and design adjustments to accommodate community concerns, is provided in the Final EIS for the project (Attachment 1).

3.1 Wind Turbine Generators

NPMPP has selected the Vestas V136 wind turbine generator, which will be mounted on a configuration of tower heights most suited for wind resources and site constraints. Table 3-1 describes the specific turbine configurations and assigns each type to the turbine location on Drawing C-1 of Appendix C. Also see Drawings C-2, C-3, and C-4 in Appendix C for dimensional drawings of the turbine tower, blades, and nacelle. A Federal Aviation Administration (FAA) approved lighting plan will be developed for the Project. This plan will specify the installation of flashing red lights on designated turbines and met towers to improve nighttime visibility for aviation.

Table 3-1. Key Dimensions and Specifications of the Turbine Configurations

Description	V136 Turbine Configuration Specifications	
	112m Hub Height	132m Hub Height
Turbine number[1]	6	7, 8, 9
Power generation	Up to 3.45 MW	
Tower height	Up to 368 feet (112 meters)	Up to 433 feet (132 meters)
Rotor type	3-bladed, horizontal axis	
Rotor diameter	Up to 447 feet (136 meters)	
Blade length	Up to 219 feet (66.7 meters)	
Number of blades	3	
Total height above ground (tower + ½ rotor)	Up to 591 feet (180 meters)	Up to 656 feet (200 meters)
Rotor swept area	Up to 156,368 feet^2 (14,527 meters^2)	
Rotor speed	5.6 – 15.3 rotations per minute	
Minimum operational wind speed	9.8 ft./s (3 m/s)	
Maximum operational wind speed	Up to 73.8 ft./s (22.5 m/s)	

ft./s = feet per second; m/s = meters per second
[1] See Drawing C-1 of Appendix C for Turbine layout and numbering.

Construction

Each turbine would be transported from Kalaeloa Harbor via highways (see Section 6.3 for a description of the construction access route) and assembled on a constructed foundation. Each turbine would require multiple deliveries, consisting of at least 12 separate loads, of which seven (7) will be superloads, of equipment and materials to its pad. Towers are generally delivered in three or four sections. Each of a turbine's three blades would be delivered separately, as would a turbine's nacelle, rotor, and down-tower components (e.g., controllers, ladders and platforms, pad-mount transformers, and pad-mounted transformer vaults). Deliveries would be made using transport vehicles that conform to road weight limits; any variances would be incorporated into

permits submitted to the Hawaii Department of Transportation (HDOT). Transportation of turbine components would primarily occur between the hours of 9 pm-5am, pursuant to permit restrictions, as to avoid impacts to daytime traffic. A Traffic Assessment Report is included as Appendix B of the Final EIS.

A work area would be cleared and graded at each turbine location to provide space for delivery and laydown of turbine components, crane access, and foundations, as well as turbine construction. An area of approximately 4 acres (1.6 hectares) would be required at each turbine for the crane pad and construction laydown area. See Drawing C-5 of Appendix C.

Foundations would be soil anchored and include an approximately five foot (1.5 meter) deep, 32 foot (18 meter) diameter reinforced concrete mat (cap) supported by up to 44, 40-foot (15.2 meter) long anchors aligned within a 32 foot diameter circle. See Drawing C-6 in Appendix C. Actual foundation depth would depend upon the results of geotechnical tests conducted at each final tower location and final structural engineering. Each turbine foundation will consist of up to approximately 150 to 200 cubic yards (115 to 153 cubic meters) of concrete, reinforcing bars, and anchor bolts. Up to approximately 20 to 25 trucks of concrete will be required per foundation. NPMPP anticipates that for each turbine pad, concrete deliveries and pouring would occur as a continuous operation over a 1-day period.

Concrete typically needs to be poured within 90 minutes of being mixed with water. Concrete will either be supplied from an existing plant on Oahu or may be batched onsite. Water for a concrete batching would be delivered to the site and stored in an onsite water tank, be drawn from existing irrigation lines, or come from a similar source. Aggregate would be sourced from an existing supply or quarry on Oahu.

General fill would be needed for grading of turbine pads (concrete foundations plus surrounding cleared areas), access roads, and the laydown area. Fill material would be utilized from onsite excavations and earthwork. Additional sources of fill, if needed, include nearby pits or excess material taken from within the property.

Construction would be completed during daylight hours, typically from 7am to 5pm. There may be instances where those hours need to be extended earlier or later and nighttime construction may occur to avoid traffic and to facilitate schedule. All proper communication channels would be followed and compliance with applicable permits will be maintained.

Once the foundations are constructed, the turbines would be assembled and erected using a combination of forklifts, medium-size cranes with a lift capacity of 99 to 143 tons (90 to 130 metric tons), and a main erection crane with a lift capacity of 660 tons (600 metric tons), located on a compacted earthen or gravel crane pad. Construction equipment requiring access to these areas would include both wheeled and tracked vehicles. Cranes used to assemble the turbine components would be delivered to the wind farm site in multiple legal-weight loads.

Operation and Maintenance

After construction, a portion of the turbine pad area would be revegetated through replanting with non-aggressive resident species that are compatible with Project operations in order to minimize erosion. Permanent low-growing vegetation or gravel pads up to 2 acres (1 hectare) around each turbine would be maintained to allow for O&M requirements. An additional area up to 4 acres (2 hectares) per pad would be maintained to facilitate post-construction mortality monitoring efforts, as practicable. See the attached Final EIS for more information on post-construction mortality monitoring.

During Project operation, technicians would perform routine maintenance on each turbine. Routine maintenance and repairs require service vehicle access. Should there be a need for major component replacement (e.g., blades, generator, supporting tower), heavy equipment similar to that used during construction would be required. In that case, the access road, crane pad, and staging area would be used in a manner similar to their use during the original tower assembly and construction process.

3.2 Electrical Collector System and Substation

Power generated by the turbines would be stepped up to 34.5 kilovolts (kV) at pad-mounted transformers and then collected through an underground electrical collection system (Figure 3). This system would feed into an onsite electrical substation, which would step up the voltage to 46 kV and transmit the power to the point of interconnect at the adjacent HECO-owned and operated switching station. HECO's switching station and the new 0.9-mile HECO-owned and operated transmission line that will connect the switching station with Oahu's general transmission system at Kamehameha Highway are addressed under Subproject C. Drawings of the Na Pua Makani substation are included in Drawings C-7 through C-11 in Appendix C.

Construction

The electrical collector system would consist of up to two separate 34.5-kV feeder circuits installed underground. Cables would be directly buried in trenches and would terminate at the onsite substation. Depending on the subsurface conditions, blasting is not expected but may be required to install the trenches. Each trench would contain three sets of power cables, plus a ground wire and a fiber optic communication cable for the supervisory control and data acquisition (SCADA) system (to transmit data from the turbine controllers to the onsite substation and O&M building). The cable trench would be backfilled with select fill material to protect the cables from damage or possible contact and to provide appropriate media for heat dissipation from the cables. It is estimated that approximately 1.08 miles (1.74 kilometers) of collector cable would be required. Trenches would be approximately 24 inches (61 centimeters) wide excavated by rubber tire or tracked equipment and, where the collector system parallels Subproject access roads, the cable would be buried directly alongside access roads. In these areas, no additional ground disturbance would occur in association with construction of the underground electrical collector system (i.e., disturbance is accounted for in association with the access roads). It may be necessary to install portions of the

collector system above ground to respond to construction challenges or to avoid impacts to streams and other resources in the wind farm site.

The onsite substation would be contained within a fenced in area of approximately 155 by 121.5 feet (47.3 by 37 meters) within a fenced area of approximately 0.43 acres (0.17 hectares). The substation would include the substation pad and above- and below-grade electrical infrastructure which, subject to the final design, may include:

- A main power transformer;
- Two 34.5 kV breakers;
- A 46-kV breaker;
- A 34.5-kV main bus structure;
- Two 34.5-kV electrical feeder termination structures;
- A 34.5-kV station power transformer;
- A 46-kV metering structure;
- A dead end structure;
- An electrical control enclosure for electrical relays and metering equipment; and
- An up to 85-foot (26-meter)-tall wood pole with yard light pole for shield wire attachment.

During construction, the onsite substation area would be cleared and graded, and the substation pad would be compacted with well-graded material. Foundations would be installed for the components as required.

Construction of the electrical collector system and transmission line would utilize standard industry procedures including surveying, corridor preparation, materials hauling, pull sites, staging areas, structure assembly and erection, ground wire, conductor stringing, cleanup, and replanting with non-aggressive resident species that are compatible with wind farm operations.

Operation and Maintenance

Qualified personnel would routinely monitor, inspect, and maintain the communication and electrical collector cables and transmission line facilities during operation. Typically, small trucks would be used to transport personnel to inspect the collector system. Heavy equipment would only be necessary if underground cables were determined to have failed or if overhead conductor or supporting structures need to be repaired or replaced.

Qualified personnel would operate and maintain the substation; maintenance activities would include routine inspections of each component and monitoring of equipment and electronics according to the manufacturer's recommendations and owner's and regulatory requirements. Routine maintenance of the substation would not typically require heavy construction equipment. However, if a major component (e.g., a main transformer) fails, then appropriate construction equipment would be required to replace the component.

3.3 Met Tower

Subproject B includes one temporary guyed tower. This tower supports weather instruments that measure and record weather data to measure performance and guide Project operation. The met is approximately 262 feet (80 meters) tall. See Drawing C-15 in Appendix C. The temporary met tower would be removed during Subproject B Construction.

3.4 Access Roads

On-site access for Subproject B will be provided via existing access roads to be modified and the grading of new roads (Figure 3). Access from the public right-of-way to the Subproject B site will be provided via Malaekahana Valley Road, a private access road located on TMK (1) 5-6-006:018. For the purpose of estimating maximum potential impacts, this discussion assumes the same level of disturbance (e.g., width) for all subproject access roads.

Construction

The existing road surfaces would be improved as needed and widened to meet construction and maintenance activity requirements. Within the Subproject B Site, existing roads would be widened and new access roads would be constructed to approximately 16 feet (5 meters). A portion of the existing roads will be realigned to allow for the transportation of long loads. In total, approximately 0.92 miles (1.48 kilometers) of existing roadway in Subproject B will be modified. Approximately 1.01 miles (1.62 kilometers) of new internal access roads would be required for Subproject B. Disturbance during construction would occur within a wider buffer to allow adequate passage for the crawler crane and transport trucks, as well as turn-around locations for equipment, bringing the width of the corridor to be disturbed temporarily to approximately 50 feet (15 meters) along the access roads. The total temporary disturbance required during construction of the roads will depend on the amount of cut-fill in any one area and could expand to 100 feet (30 meters) wide in certain defined areas. All access roads would have a gravel surface and will be constructed with storm water erosion and control features.

Operation and Maintenance

During operation, service vehicles and equipment would continue to use these roads for routine maintenance of the turbines and associated infrastructure. Permanent roadway surfaces would be maintained in good working order by NPMPP through periodic grading and compacting to minimize naturally occurring erosion.

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

The construction staging and equipment laydown area will serve a variety of storage and support functions over the life of the Project. During construction, the laydown area would be used as a temporary storage area for equipment and materials, a refueling location, and a waste collection area. It would also serve to provide temporary parking, construction office space, and temporary

(portable) sanitary facilities. Refueling of construction vehicles would be accomplished by a vendor supplied fuel truck making deliveries daily. Crew trucks and water trucks would be fueled at an off-site gas station.

The O&M building, storage, and parking area would be constructed close to the larger construction staging and equipment laydown area and onsite substation (see Drawing C-12 of Appendix C). The O&M building, storage, and parking area are permanent facilities that would be used throughout the life of the Project.

Construction

The construction staging and equipment laydown area would consist of an approximately 8.9-acre (3.6-hectare) compacted gravel pad on a cleared and graded footprint. During construction, large equipment such as cranes could be stored in the staging area. Following construction, portions of the construction staging and equipment laydown area would be restored to pre-construction conditions through the removal of gravel and replanted with non-aggressive resident species that are compatible with Project operations.

Operation and Maintenance

A permanent 8.3-acre (3.3-hectare) area would be maintained during Project operations which would include the permanent O&M building and vehicle parking for wind farm operations, as well as the onsite substation. Appendix C includes a floor plan (Drawing C-13) and elevation (Drawing C-14) for the O&M building. The O&M building and surrounding storage yard and parking areas would undergo routine maintenance and upkeep to minimize erosion, control stormwater runoff and drainage, and maintain the building and its permanent water, septic, electrical, and communications infrastructure. During operations, large equipment required for maintenance could be staged in the O&M storage yard.

4.0 JUSTIFICATION

4.1 Compliance with General Requirements for Conditional Uses

4.1.1 Permitted Use in Zoning District

The LUO, provided in ROH Chapter 21, regulates the use of land in the City & County of Honolulu. The proposed land use is identified in §21-10.1, ROH, falling under the definition of a Wind Machine which includes devices and facilities, including appurtenances, associated with the production and transmission of wind generated energy. Table 21-3, Master Use Table of the LUO, indicates Wind Machines are allowed within the AG-1 Restricted Agriculture zones as a special accessory use or with a CUPm, subject to standards in Article 5 of the LUO. The generating capacity of the proposed WTGs exceeds the threshold specified in the development standards for those allowed as a special

accessory use; therefore, the proposed use requires the issuance of a CUPm. Compliance with the development standards in Article 5 of the LUO is discussed in Section 4.2.

4.1.2 Suitability of the Site

To determine a suitable location for the proposed Project, action alternatives were developed and assessed for their ability to achieve the project's purpose and needs through a siting process. These alternatives are discussed in Chapter 2 of the attached Final EIS (Attachment 1). Through input received from the community and from Federal and State agencies, NPMPP developed screening criteria that were used to help refine the siting process. The project purpose was the basis for the development of the siting criteria, which are listed below.

Wind Resource. For a wind farm site to be viable and economically competitive, it must have a very good wind resource. It is well documented that the north shore of Oahu has the best wind resource on the island. Beginning in 2009, temporary met towers were installed within the Project site to obtain in-depth information about the onsite wind resources. The results of 4 years of data collection indicate that the wind regime (in terms of strength, direction, duration, turbulence, and temporal and spatial variations) throughout the wind farm site is strong due to its location and exposure to the trade winds, which accelerate as they ascend from ocean through the Wind farm site into the mountains. The data determined that there is sufficient wind resource within the wind farm site for a viable project.

Utility Interconnection and Transmission Capacity. Additionally, for a project site to be viable it must have access to adequate and available transmission capacity, and be located in proximity to existing transmission lines. These factors help determine the viability and economic feasibility of a project; projects located in areas where there is no transmission capacity are not viable. Projects in locations that are not adjacent to transmission lines incur greater construction costs, due to the need for longer connector lines, and thus may result in greater environmental impacts than projects located closer to an existing transmission line. The Project site is located within approximately 1 mile (1.6 kilometers) of HECO's existing transmission system, which was determined by HECO to have an adequate capacity to support a wind project of up to approximately a 25 MW without substantial transmission upgrades.

Land Availability. Wind projects require available contiguous land that is designated to allow wind energy development. The land underlying the Project Site is generally classified as "A" Agricultural District by the State Land Use District. Lands underlying the Project are zoned as AG-1, Restricted Agricultural and AG-2, General Agricultural by the City & County of Honolulu. Wind energy facilities are a permitted use on State "A" Agricultural District lands. Wind energy facilities of the subject size are permitted within City & County of Honolulu Agricultural zoned lands with a CUPm.

Site Conditions. Topography within the Project Site was assessed to identify areas that would be too steep for construction or that would be inaccessible by construction vehicles. The presence of several steep ridges and deep gullies trending in southwest-to-northeasterly directions eliminated some portions of the wind farm site from consideration because construction in these areas would

be logistically infeasible and/or terrain ruggedness would inflate construction costs. After portions of the wind farm site were eliminated due to topography, the remaining land area was determined to have a sufficient area for a viable project.

Potential Impacts. The initial design of the Project was further refined based on input from the surrounding communities regarding visual impacts and concerns about City & County of Honolulu setback distances which are the distance equal to the maximum turbine tip height above ground. The Project design eliminated locations that were the closest and most visible from the Kamehameha highway and from Kahuku Town. Proposed turbine sites in Subproject B meet the County-required setbacks and are located at a distance several times the required setback distance from key points in the community, including the Kahuku Medical Center, Kahuku High School, and Kahuku Elementary School. Turbine locations have been sited to avoid known biological, and cultural and archaeological resources. Additionally, turbines have been sited to minimize impacts to active agricultural cultivation. Where the development associated with Subproject B will impact active farmlands, NPMPP will provide resources to farmers to activate areas of equal size within their leased lands.

4.1.3 Impact on Character of Surrounding Area

The existing Kahuku Wind Farm is located immediately north of the Project site. Therefore, the introduction of wind turbines will not be a new element to the existing character of the community. The original site plan for the Project has gone through a number of revisions since the start of community outreach in the spring of 2013, including the relocation and/or elimination of five turbines to increase the distance between the wind farm site and the community and key points of community interest. See Section 7.2.2 for additional discussion on impacts to public views and see Section 7.6 for discussion regarding community concerns including public safety.

West and south of TMK (1) 5-6-006:018 are military lands. On January 20, 2016, NPMPP signed an Agreement with the Department of Defense under 32 CFR Section 211 that de-conflicts the construction and operation of the Project from the U.S. Army's operation of the Kahuku Training Area. This agreement confirms that the proposed Project is compatible with existing military uses in the surrounding area.

The majority of TMK (1) 5-6-006:018 will continue to be used for agricultural purposes and it will retain its open space characteristics. Subproject B's area of permanent disturbance is approximately 21.9 acres (8.9 hectares) (4.8 percent of the total parcel area), much of which will remain as open space. Within TMK (1) 5-6-006:018, the total area that will be covered by non-agricultural buildings and structures is limited to approximately 0.35 acre (0.14 hectares), or approximately 0.001 percent of the parcel.

4.1.4 Contribution to the Welfare of the Community

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 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. Toward that end, NPMPP will sell power to HECO 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 import of foreign oil. Production of wind-generated energy would replace a portion of the State's electricity that is currently generated by burning fossil fuels, thus reducing GHG emissions and other forms of pollution that are detrimental to the environment and human health. The energy potentially generated by the proposed Project would eliminate the use of approximately 13.44 barrels of oil, for every hour of operation, which in turn would reduce emissions of CO_2 and other air pollutants including SO_2, NO_x, and Hg.

NPMPP has engaged in outreach efforts with affected stakeholders to define its Community Benefits Package. This may include honoring the commitment of the prior developer to pay $10,000 per wind turbine per year over the life of the project to the Kahuku Community. This translates into $80,000 to $100,000 per year over a 20- to 25-year project life or the equivalent of approximately $2,000,000 of direct economic benefits to the Kahuku Community. It is anticipated that Project funds would be administered by a board of local community members who would make decisions as to the use of the proceeds and which activities, programs, groups, and events would be sponsored.

Throughout the development and environmental review of the Project, NPMPP conducted a wide-reaching community outreach effort aimed at communicating to the surrounding community and garnering input on the project. NPMPP has engaged in consultations with governmental agencies, public entities, community members, and stakeholders, providing information and opening communication channels through numerous public meetings and a project website. Input received has been taken into account in the planning and design of the proposed Project. Further detail regarding outreach is provided in Section 7.6

4.2 Compliance with Development Standards

4.2.1 Land Use Districts and District Regulations

City & County of Honolulu Zoning Districts (LUO Article 3)

The City & County of Honolulu LUO identified uses that are considered appropriate in specified zoning districts and sets forth minimum standards and conditions that should be met. The Subproject B Site is located completely within the AG-1, Restricted Agricultural district. Agricultural uses are addressed in LUO §21-3.50-4(a), which refers to the LUO Article 3, Table 21-3, Master Use Table for permitted uses. Statutory definitions applicable for the purposed of the LUO are provided in Article 10. LUO §21-10.1 states: *"Wind machines" means devices and facilities, including*

appurtenances, associated with the production and transmission of wind generated energy. The proposed Project fits within the LUO definition of wind machines.

Pursuant to Table 21-3, Article 3 of the LUO, wind machines are permitted with an approved CUPm contingent on specific use standards set forth in LUO Article 5. Compliance with Agricultural District, general, and specific use standards will be discussed in sections 4.2.2, 4.2.3, and 4.2.4 of this statement, respectively.

Hawaii State Land Use Law (HRS Chapter 205)

Compatibility of the proposed Subproject B based on State land use regulations has also been analyzed. The Subproject B Site is located primarily within the State "A" Agricultural District. Fronting Kamehameha Highway, a section of the existing access road approximately 230 feet (70 meters) in length passes within the "U" Urban District

Compatibility with the "A" Agricultural District

Pursuant to provisions laid out in HRS §205-4.5 and HAR §15-15, the proposed use is permitted within the "A" Agricultural District. HRS §205-4.5(a) and HAR §15-15-25, which take into consideration the LSB productivity ratings, set forth permissible uses on agricultural land with a rating of A or B, which include: (14) *Wind energy facilities, including the appurtenances associated with the production and transmission of wind generated energy; provided that the wind energy facilities and appurtenances are compatible with agriculture uses and cause minimal adverse impact on agricultural land.* HAR 15-15-25(b) states that uses identified as permissible on agricultural lands with A and B ratings are also permissible on lands with C, D, E or N (unrated) ratings.

Subproject B, being a component of the Project, falls under the definition of "wind energy facilities" laid out in the aforementioned statues and administrative rules. In addition to meeting the definition of wind energy facilities, a proposed development must also be compatible with agriculture uses and cause minimal adverse impacts on agricultural land.

With input from the landowner, NPMPP has modified the placement of turbines to avoid to the extent possible impacts to active cultivation. Much of the area surrounding the wind farm components is currently being used for active cultivation and the wind energy infrastructure will not interfere with agricultural use outside the area of permanent disturbance.

Areas actively cultivated that would be impacted by the Subproject B area of permanent disturbance would be relocated within existing unused farm land within each farmer's lease area on the Malaekahana Hui West, LLC property. NPMPP would work with farmers to prepare this suitable land for agricultural production (e.g., grubbing, grading, soil amendments, extend irrigation, etc.) to the extent requested by Malaekahana Hui West, LLC. As such, there would be no net loss in active agriculture. See Section 7.3 for more information on mitigation of displaced active farm land.

Subproject B would have a permanent footprint that occupies lands designated under LSB productivity ratings B, C, D and E. Table 4-1 lists the area falling under each LSB classification within TMK (1) 5-6-006:018 and the area of permanent disturbance for Subproject B.

Table 4-1. Area of Land within Parcel and Subproject B Footprint by LSB Classifications

LSB Land Productivity Ratings	Area of Each LSB Classification within TMK (1) 5-6-006:018 (acres)	Area of Each LSB Classification within Permanent Footprint (acres)	Percent of Area by LSB Classification within TMK (1) 5-6-006:018 Occupied by Permanent Footprint
No Data	8.2	0.1	1.2
A	19	0	0
B	253.9	13.9	5.5
C	46.8	0.6	1.3
D	22.3	0.3	1.2
E	101.7	7.0	6.9
Total[1]/	**451.9**	**21.9**	**–**
[1] Column and row totals may not sum exactly due to rounding			

Within TMK (1) 5-6-006:018, Subproject B would remove 13.9 acres (5.6 hectares) or 5.1 percent of LSB A- and B-rated land and an additional 8 acres (3.2 hectares) or 4.6 percent of lower rated lands from potential agricultural productivity. On a district-wide scale, the proposed Subproject B will impact less than 0.4 percent of the A- and B-rated agricultural lands in the Koolau Loa District.

Considering the limited nature of the subproject footprint and that there will be no net loss in active cultivation, the proposed development will have less than a minimal impact on agriculture.

Compatibility with the "U" Urban District

A small portion of the Subproject B Site is located in the "U" Urban District. The proposed action within this portion of the Subproject B Site is limited to minimal improvements to an approximately 230-linear foot (70 meters) segment of the existing private access corridor. The use of land within the State "U" Urban District is discussed in HAR §15-15-24 Permissible uses within the "U" urban district, which states: *Any and all uses permitted by the counties, either by ordinances or rules may be allowed within this district, subject to any conditions imposed by the commission pursuant to section 205-4(g), HRS*.

The underlying City & County of Honolulu zoning district is AG-1 Restricted Agricultural. Access roads are not specifically discussed in LUO Article 3, Table 21-3, Master Use Table but they are an allowed use within the AG-1 zone and do not require a CUP. As such, the modification to and use of the existing private access is compatible with the State "U" Urban District.

4.2.2 District Development Standards

TMK (1) 5-6-006:018 is located completely within the City & County of Honolulu AG-1 Restricted Agricultural zoning district. The development standards for the underlying zoning district are discussed in Article 3 of the LUO. Specifically, ROH §21-3.50-4, Agricultural uses and development standards, and Table 21-3.1 of the LUO address the development standards for the City & County of

Honolulu agricultural district. These standards are presented in Table 4-2, below, and includes a description of how the Subproject complies with those standards.

Table 4-2. LUO General Agricultural District Development Article 3

LUO Standards	AG-1 District Provisions	TMK (1) 5-6-006:018 Compliance
Minimum Lot Area	5 acres	(1) 5-6-006:018 covers approximately 452 acres
Minimum Lot Width / Depth	150 feet	(1) 5-6-006:018 is an irregular-shaped lot and has a minimum lot width of approximately 160 feet. Mauka of the highway, the lot width is a maximum of approximately 0.85 miles. The depth is approximately 1.4 miles.
Front Yard Setback Side and Rear Yard Setback	15 feet 10 feet	The wind turbines, O&M building, and electric substation will be located no closer than 15 feet from all boundary lot lines of TMK (1)5-6-006:018. Setbacks will be determined according to LUO §21-5.700 pertaining to wind machines. See Sections 4.2.3 and 4.2.4, following.
Maximum Building Area	10 percent of zoning lot area for non-agricultural structures (45.2 acres)	No non-agricultural structures currently exist. Area to be occupied by wind turbines: 3,217 SF Area to be occupied by the O&M building: 2,000 SF Area to be occupied by electrical equipment and buildings: 10,000 SF Total area of non-agricultural structures: 15,217 SF (0.35 acres), less than 0.001% lot coverage.
Maximum Building Height LUO §21-3.50-4(c)(1), (2)	15 feet or up to 25 feet (if any portion of a structure exceeding 15 feet is set back from every side and rear buildable area boundary line one foot for each 2 feet of additional height above 15 feet)	The O&M building will be no taller than 25 feet. Per LUO 21-4.60(c)(7) wind machines, which includes appurtenances associated with the production and transmission of wind generated energy, are exempt from zoning district height limits.

As noted in Table 4-2 above, TMK (1) 5-6-006:018 meets the geographic standards and the Subproject B proposed structures will meet height requirements and be situated as to comply with setback standards. With non-agricultural structures occupying less than 1 acre (0.4 hectares), TMK (1) 5-6-006:018 will be well below the maximum 10 percent lot coverage. TMK (1) 5-6-006:018 and all Subproject B components conform to the development standards of the AG-1 Restricted Agricultural District.

4.2.3 General Development Standards

LUO Article 4, General Development Standards, identifies development standards for any use, regardless of the zoning district. The applicable standards are presented in Table 4-3, below, which includes a description of how Subproject B complies with those standards.

Table 4-3. LUO General Development Standards

LUO Standards	LUO Provisions	Subproject B Compliance
Heights - LUO §21-4.60(a)	All structures shall fall within a building height envelope at a height specified by this chapter or as specified on the zoning maps. Exceptions are specified under subsection (c), and others may be specified under special districts.	Height for structures in AG-1 District are defined in Article 3. See Section 4.2.2 of this document for requirements and compliance.
Heights (exceptions) – LUO §21-4.60(c)(7)	Where permitted, wind machines are exempt from zoning district height limits provided that each machine shall be set back from all property lines one foot for each foot of height, measured from the highest vertical extension of the system.	Turbine 6 height and minimum setback distance: 591 feet (180 meters) Turbines 7, 8, 9 height and minimum setback distance: 656 feet (200 meters) Electrical substation equipment will be less than approximately 30 feet (9.1 meters) while lighting masts will be no taller than 85 feet (25.9 meters). Minimum setback of substation is established according to highest vertical extension of the system and will be met as the substation is located more than 85 feet from the property line.
Landscaping and screening (parking lots) – LUO §21-4.70(a)	Parking lots of five or more spaces and automobile service stations shall provide a minimum five-foot landscape strip adjacent to any adjoining street right-of-way.	The parking lot associated with the O&M building will not be adjacent to any street right-of-way. No standards are specified for landscaping or screening parking lots not adjacent to street rights-of-way.
Landscaping and screening (substations) – LUO §21-4.70(f)	Within country, residential, apartment, apartment mixed use and resort districts, utility substations, other than individual transformers, shall be enclosed by a solid wall or a fence with a screening hedge a minimum of 5 feet in height, except for necessary openings for access.	The substation will not be located in a country, residential, apartment mixed use, or resort district. No standards are specified for landscaping or screening utility substations located outside the listed districts.

The LUO defines height envelopes within parameters structures may be built. Section 21-4.60(c) identifies a variety of structures exempt from zoning district height limits including wind machines and utility poles. Wind machines are exempt from specific height restrictions, provided the wind machine is no taller than its setback from the nearest property line. The wind turbines proposed in Subproject B, with heights ranging from 591 feet (180 meters) to 656 feet (200 meters) will all be set back from the nearest property line a distance equal to or greater than their height. As the definition of wind machines includes appurtenances associated with the production and transmission of wind generated energy, it is understood that all of Subproject B would qualify under the definition. The electrical substation will include lighting masts up to approximately 85

feet (25.9 meters) in height, though the electrical equipment will be less than 30 feet (9.1 meters) above grade. The substation will located inward from property lines no less than the required setback. The O&M building could be considered a non-agricultural building. As discussed in the previous section of this document, LUO §21-3.50-4 specifies the maximum height of buildings in the agricultural districts. The O&M building will be no taller than the maximum height set therein.

While general development standards are identified for the landscaping and screening of parking lots and utility substations, Subproject B does not trigger requirements per LUO §21-4.70. Requirements for the screening of parking lots with hedges apply when the parking lot is adjacent to any adjoining street right-of-way. The parking lot associated with the project, to be sited adjacent to the O&M building, will be located within the central portions of TMK (1) 5-6-006:018, approximately one-half mile (0.80 km) from the nearest public right-of-way. Landscaping and screening standards related to substations are only specified for country, residential, apartment, apartment mixed-use, and resort districts. Subproject B is within the agricultural district. Nevertheless, the O&M building and electrical components have been sited behind a stand of trees and dense, tall vegetation so that views to and from public areas would be shielded. See the Landscape Plan (Drawing C-16 from Appendix C) for more detail regarding the existing vegetation to be retained on TMK (1) 5-6-006:018. Temporarily-disturbed areas would be revegetated with non-invasive groundcover species to stabilize soil and prevent erosion as well as to match the site characteristics with those of the existing agricultural areas.

4.2.4 Specific Development Standards

LUO Article 5 addresses the development standard associated with specific uses which may supersede the district and general development or be tailored to specific land use districts. In the case of the proposed development, the specific land use is “wind machines” and the relevant specific use development standards are presented below in Table 4-4.

Table 4-4. LUO Specific Use Development Standards

LUO Standards	LUO Provisions	Subproject B Compliance
Wind machine setbacks - LUO §21-5.700(a)	All wind machines shall be set back from all property lines a minimum distance equal to the height of the system. Height shall include the height of the tower and the farthest vertical extension of the wind machine.	Turbine 6 height and minimum setback distance: 591 feet (180 meters) Turbines 7, 8, 9 height and minimum setback distance: 656 feet (200 meters) Electrical substation equipment will be less than approximately 30 feet (9.1 meters) while lighting masts will be no taller than 85 feet (25.9 meters). Minimum setback of substation established according to highest vertical extension and will be met as the substation is located more than 85 feet from the property line.
Wind machines in agricultural districts - LUO §21-5.700(c)	Accessory wind machines shall have a rated capacity of no more than 100 kilowatts. Wind machines with a rated capacity of more than 100 kilowatts (kW) shall require a conditional use permit (minor).	The subject wind machines have rated capacity of 3.45 MW. As such, the project would require a CUPm.

Regardless of zoning districts, the setback from property lines is equal to the highest vertical point of the equipment. All project components will be set back from the nearest property line by at least the minimum distance. Within agricultural districts, wind machines with rated capacities greater than 100 kilowatts require a CUPm. This CUPm application is being submitted in compliance with this specific use standard.

4.2.5 Off-street Parking and Loading

LUO Article 6 Off-street Parking and Loading Standards sets minimum off-street parking requirements for various uses. LUO Article 6, Table 21-6.1 lists wind machines under "Utilities and communications" and notes that off-street parking will be determined by the Director of City & County of Honolulu, Department of Planning and Permitting.

During construction, parking will be provided on site primarily at the temporary laydown area and within the graded areas within and surrounding the O&M building.

During operations, there will be approximately three to six full-time employees on site to perform operations and maintenance duties. Parking for operations technicians will be provided at the O&M building. See Appendix C, Drawing C-12for the location of parking at the O&M building.

5.0 Consistency with County Plans, Policies, and Existing Permits

5.1 City & County of Honolulu General Plan

The General Plan (Department of General Planning, City & County of Honolulu 1992, amended in 2002) includes a list of county-wide goals, objectives, policies, and implementing actions. Specific General Plan goals and policies applicable to the Subproject B are discussed in detail below.

<u>*Natural Environment*</u>

- *Objective A – To protect and preserve the natural environment*
  - *Policy 1 – Protect Oahu's natural environment, especially the shoreline, valleys, and ridges from incompatible development.*
  - *Policy 7 – Protect the natural environment from damaging levels of air, water, and noise pollution.*
  - *Policy 8 – Protect plants, birds, and other animals that are unique to the State of Hawaii and the Island of Oahu.*
- *Objective B – To preserve and enhance the natural monuments and scenic views of Oahu for the benefit of both residents and visitors.*
  - *Policy 1 – Protect the Island's well-known resources: its mountains and craters; forests and watershed areas; marshes, rivers, and streams; shoreline, fishponds, and bays; and reefs and offshore islands.*
  - *Policy 2 – Protect Oahu's scenic views, especially those seen from highly developed and heavily traveled areas.*
  - *Policy 3 – Locate roads, highways, and other public facilities and utilities in areas where they will least obstruct important views of the mountains and the sea.*

Environmental due diligence conducted to date includes comprehensive biological surveys of the wind farm site to identify native habitats, wetlands and streams, and threatened and endangered species. Subproject B does not coincide with any natural reserves or other sensitive areas. Natural gulches, streams, and drainages were identified and have been excluded from the Project footprint to the maximum extent possible. The Project will be in compliance with Federal, State, and local regulations pertaining to water quality, air quality, and noise.

Measures to avoid and minimize impacts to vegetation, wildlife, and threatened and endangered species are identified in Sections 4.9, 4.10, and 4.11 of the Final EIS (Attachment 1), respectively. However, because incidental take of listed wildlife species is not completely avoidable, NPMPP has prepared a Habitat Conservation Plan (HCP) that outlines mitigation measures for these impacts. Mitigation measures proposed for the Hamakua marsh and Poamoho mitigation areas would benefit the natural environment on Oahu.

A visual analysis was conducted to assess the potential effect of the Project on the North Shore's scenic resources (see Section 4.16 of the Final EIS). Consideration was taken with regard to maximizing the distance of associated project components from Kamehameha Highway and sensitive viewpoints (see Section 4.16 of the Final EIS for additional detail). To the extent possible, visual impacts will be minimized by undergrounding the electrical collector system and installing down-shielded and motion sensor activated lighting. Although the Project is expected to have a visual impact, alternative energy sources such as wind are an integral part of meeting the State's and City & County of Honolulu's renewable energy goals.

Energy

- *Objective A – To maintain an adequate, dependable, and economical supply of energy for Oahu residents.*
  - *Policy 3 – Support programs and projects which contribute to the attainment of energy self-efficiency on Oahu.*
- *Objective D – To develop and apply new, locally available energy resources.*
  - *Policy 1 – Support and participate in research, development, demonstration, and commercialization aimed at producing new, economical, and environmentally sound energy supplies from :*
    - *Solar insolation;*
    - *Biomass energy conversion;*
    - *Wind energy conversion;*
    - *Geothermal energy; and*
    - *Ocean thermal* energy conversion.

The nature of the Project meets the County General Plan's energy objectives and policies as stated above.

Public Safety

- *Objective B – To protect the people of Oahu and their property against natural disasters and other emergencies, traffic and fire hazards, and unsafe conditions.*
  - *Policy 7 – adequate fire protection and effective fire prevention programs.*

A Fire Management Plan (FMP) (Appendix C of the Final EIS) has been prepared for the Project. Engineering design measures, O&M activities, and fuels management practices outlined in the plan would minimize the fire risk posed by the Project to acceptable levels (also see Sections 4.7 – Hazardous and Regulated Materials and Wastes of Final EIS and 4.18 – Public Health and Safety of Final EIS for additional information). See Section 7.6 for more information about addressing the community's concerns regarding public safety.

5.2 Koolau Loa Sustainable Community Plan

The proposed Project is located within the boundaries of the Koolau Loa SCP (City & County of Honolulu, DPP 2012), which includes the communities of Kahuku, Laie, Hauula, Punaluu, Kahana, and Kaaawa. TMK (1) 5-6-006:018 is underlain by land within Agricultural and Rural Community designations (City & County of Honolulu, DPP 2012). With the exception of the portion of access road that approaches Kamehameha Highway, which is designated Rural Community, the Subproject B components are within lands designated for Agricultural use.

Koolau Loa SCP Guidelines and Policies relating to the Project are as follows:

- *Mountain Areas and Trails: Avoid the establishment of utility corridors and other uses that would disturb areas with high concentration of native and endangered species.*

Discussion: The Na Pua Makani Project requires compliance with the Federal Endangered Species Act and Migratory Bird Treaty Act, and the State HRS 196-D which prohibits the "take" of any endangered or threatened species (see Section 4.1, 4.9, 4.10, 4.11, 5.1, and 5.2 of the Final EIS). The proposed wind farm site meets siting criteria including, but not limited to, minimizing adverse impacts to native and endangered species. The proposed Project is not located within any natural reserves or other sensitive biological areas.

Measures to avoid and minimize impacts to vegetation, wildlife, and threatened and endangered species are identified in Sections 4.9, 4.10, and 4.11, respectively, of the Final EIS. However, because incidental take of listed wildlife species is unavoidable, NPMPP has prepared an HCP that outlines mitigation measures of these. Section 2.5.1 of the Final EIS outlines onsite mitigation measures including but not limited to:

- The temporary met tower was fitted with bird flight diverters and/or white poly tape (1 inch [2.5 centimeters]) to increase visibility and, as a result, the likelihood of avoidance by Covered Species.
- The temporary met tower will be removed during construction.
- The majority of the wind farm site is sited in disturbed agricultural habitat, which minimizes impacts to most native species.
- The wind farm site does not have suitable listed waterbird breeding or foraging habitat thereby minimizing Hawaiian stilt, Hawaiian coot, and Hawaiian moorhen use of the wind farm site and minimizing potential impacts to these species.
- To minimize potential impacts to wildlife, onsite lighting at the O&M building and substation will be shielded and/or directed downward, triggered by a motion detector, and fitted with non-white light bulbs. Lighting is only expected to be used when workers are at the site at night. Most O&M activities are expected to occur during daylight hours.
- Flashing red lights on the nacelle have been shown not to be attractive to birds and will be used in accordance with FAA requirements.
- The collector line will be placed below ground to the maximum extent practicable, thereby reducing the risk of collision of the Covered Species.

The HCP offsite mitigation measures propose research funding, and improvements to Hamakua marsh and Poamoho mitigation areas. These measures would benefit the natural environment on Oahu, providing a net benefit to Covered Species. HCP measures to avoid and minimize as well as provide a net benefit to endangered species would do the same for other native species.

- *Agriculture: Protect and preserve the agricultural lands from conversion to uses that are primarily residential, industrial, or commercial in purpose.*

Discussion: Construction and operation of Subproject B would impact less than 5.1 percent of lands within TMK (1) 5-6-006:018 rated A or B by the LSB over the long-term and less that 0.4 percent of the approximately 3,771 acres of LSB A- or B-rated lands within the Koolau Loa District. Subproject B would directly impact up to approximately 6.0 acres (2.4 hectares) of actively farmed land during construction, of which 2.7 acres (1.1 hectares) would be disturbed over the long term during operations. The displaced active farm land would be relocated to existing unused farm land within each farmer's lease area on the Malaekahana Hui West, LLC property. To the extent requested by Malaekahana Hui West, LLC, NPMPP would work with farmers to prepare this suitable land for agricultural production (e.g., grubbing, grading, soil amendments, extend irrigation, etc.) so that there would be no net loss in active agriculture. See Section 7.3 for more information on mitigation of displaced active farm land. NPMPP would also work with Malaekahana Hui West, LLC to provide and maintain the irrigation system to the existing and potential future farm areas.

- *Agriculture: Allow recreational or educational programs or other activities which provide supplemental income necessary to sustain the primary agricultural activity, as long as they are compatible with the character of the rural agricultural area and are accessory to the primary agricultural use of the site.*

Discussion: The Subproject B Site is zoned AG-1 Restricted Agricultural by the City & County of Honolulu. Wind energy facilities are a permitted use within these zoning districts with an approved CUPm. As such, it is understood that a wind energy facilities can be considered consistent with the surrounding agricultural activity. Subproject B will directly provide supplemental income to the landowner, Malaekahana Hui West, LLC, and will help to sustain agricultural activity on the property. Subproject B has been designed in a way to be compatible with the surrounding agricultural land uses. See Section 7.3 for more information on mitigation of displaced active farm land.

- *Electrical Systems: Locate and design system elements such as renewable energy facilities (e.g. wind and solar), electrical sub-stations, communication sites, and transmission lines, including consideration of underground transmission lines, to avoid or mitigate visual impacts on scenic and natural resources, as well as public safety considerations.*

Discussion: Five criteria that were used to select the Project site so that the site selected would allow the project to meet its purpose and need. The five criteria are 1) good wind resource, 2) access to adequate and available transmission capacity, 3) land availability where wind energy development is a permitted use, 4) site conditions such as topography, and 5) potential impacts including visual impacts and meeting setback requirements for safety reasons. At least some visual

impact from a utility-scale wind farm is unavoidable no matter where a project is located on Oahu. Although the Project is expected to have a visual impact, alternative energy sources such as wind are an integral part of meeting the State's renewable energy goals.

- *Electrical Systems: Encourage the development and use of renewable energy sources and energy conservation measures.*

Discussion: The purpose of the Project is to provide clean, renewable wind energy for the island of Oahu. The implementation of the Project would be consistent with this SCP policy.

5.3 Compliance with Condition B of CUP No. 2013/CUP-23

Malaekahana Hui West, LLC holds CUP No. 2013/CUP-23 for the existing zip-line agribusiness. In DPP's letter responding to the Project Environmental Impact Statement Preparation Notice, dated January 21, 2013, DPP requested that the Project demonstrate compliance with Condition B of CUP No. 2013/CUP-23. Condition B requires dedication of 226 acres, or 50 percent of the lot area of the parcel TMK (1) 5-6-006:018, for agricultural use for 10 years or the duration of the agribusiness activities, whichever is longer. See Figure 8 for a map of the agriculture dedication area per CUP No. 2013/CUP-23. Up to approximately 4.69 acres of permanent impacts from the Subproject B Site would occur within the CUP-23 Agriculture Dedication area; however, only 2.46 acres (1.0 hectare) of the 4.69 acres (1.9 hectares) are currently being actively farmed. See Figure 9. No change will be made to the existing individual farmers' leases with Malaekahana Hui West, LLC and any active agricultural areas within the CUP-23 Agricultural Dedication area that are impacted by project facilities will have a "1-for-1" acreage replacement of suitable but unfarmed land within the individual farmers' lease areas within the Agriculture Dedication area such that there is no net loss of active agriculture within the CUP-23 Agricultural Dedication Area as a result of Subproject B impacts.

6.0 INFRASTRUCTURE REQUIREMENTS

The following describes the infrastructure requirements for listed resources. Additional information is provided in the Final EIS.

6.1 Wastewater

Construction of the project would generate a minor amount of wastewater from portable toilets, which will be provided and serviced on a contracted basis. The contractor will dispose of sanitary wastewater pursuant to applicable regulations. The existing wastewater infrastructure in Kahuku and its treatment plant (Kahuku Wastewater Treatment Plant, located north of the town and east of the Kamehameha Highway) have adequate capacity to accommodate the temporary increase in sanitary wastewater during construction.

During commercial operation of the Project, minimal amounts of wastewater will be produced by the O&M building. Wastewater from the O&M building will be processed using an on-site septic system. As such, the Project will not have impacts on wastewater infrastructure.

6.2 Water Facilities

Construction of the entire Project would require up to approximately 10,000 to 15,000 gallons (37,854 to 56,781 liters) per day for dust control, equipment washdown, and emergency fire suppression (see Section 4.4 – Hydrology and Water Resources of the Final EIS for more information). Water requirements specific to Subproject B would be proportional to the amount of active construction on Subproject B components. If concrete is batched on site, water would be delivered to the site and stored in an onsite water tank, be drawn from existing irrigation lines, or come from a similar source. Construction of the Project would require excavation and may require blasting, which could result in physical disturbance of existing agriculture water wells in the immediate vicinity; however, both excavation and blasting (if necessary) would be relatively shallow and would not impact the deeper aquifers typically used for potable water supplies. NPMPP will coordinate with landowners and tenants to identify the location of private wells within the wind farm site, if any, and will adjust the final layout to avoid impacting existing wells. Should an impact to an existing well prove unavoidable, NPMPP will work with the landowner to provide appropriate mitigation.

No public water system infrastructure is situated within the wind farm site.

6.3 Traffic, and Off-Street Parking and Loading

Construction related traffic to build the Project would include transporting the major turbine components, hauling in cement and aggregate, miscellaneous deliveries, and construction worker traffic. As outlined in Section 4.17.3 of the Final EIS and in the Traffic Assessment Report (Appendix B of the Final EIS), the major turbine components, including the blade, tower, and nacelles, will be off-loaded at Kalaeloa Harbor and transported to the Subproject B Site using three proposed routes: route 1 for the longer nacelle components, route 2 for the taller tower sections and nacelle components, and route 3 for the turbine blades. See Figure 10.

Due to the size and weight of these components, permits to transport these oversized and overweight loads would need to be obtained from HDOT and the City & County of Honolulu. The following are anticipated requirements of these permits:

- The roundtrips must be performed Monday through Saturday between the hours of 9:00 p.m. and 5:00 a.m.
- No oversized loads are allowed to be transported on Sundays or holidays.
- A minimum of four police escorts per load are required to help the oversized load navigate turns.
- Police escorts and/or flag persons must provide traffic direction at the entrance to the Project Site on Kamehameha Highway during construction.

It is anticipated that up to 50 nighttime roundtrips of oversized loads would be needed extending over approximately 20 days during the construction of Subproject B.

Other construction-related trips include cement, aggregate, and miscellaneous deliveries as well as construction worker trips. Deliveries are anticipated to occur outside of the morning and afternoon peak hour traffic times, and construction workers are expected to work between the hours of 7:00 a.m. and 3:30 p.m.

Based on an analysis of anticipated number of vehicle trips during construction and the existing traffic levels on Kamehameha Highway, it is expected the potential construction –related traffic could result in less than 2 percent increase in the highest peak-hour traffic levels. The Traffic Assessment Report (Appendix B of the Final EIS) provides more details on this analysis.

During construction, parking will be provided on site primarily at the temporary laydown area. During operations, there will be approximately three to six full-time employees on site to perform operations and maintenance duties. Parking for operations technicians will be provided at the O&M building. During both construction and operation, ample parking to meet parking needs will be provided off-street.

7.0 OTHER IMPACTS

7.1 Public Services

7.1.1 Refuse Collection

Solid wastes generated during construction of the Project would be taken to the City & County of Honolulu's Waimanalo Gulch landfill or the H-power facility in Kapolei; both facilities are operated by Waste Management. The City & County of Honolulu estimates that the physical capacity of the landfill would enable it to continue to receive solid wastes for at least the next 15 years (City & County of Honolulu, Department of Environmental Services 2014), and diversion of waste for incineration at H-power would potentially extend this lifespan. Alternatively, construction waste could be taken to the privately-owned PVT landfill, which is authorized specifically to receive construction and demolition waste. Waste generated during construction of the Project may include scrap metal, wood, plastic and cardboard from shipping of turbine components, and incidental waste from construction workers (e.g. food and beverage containers). The amount of waste generated is not expected to adversely impact existing waste management services or facility capacity.

7.1.2 Fire Protection

Subproject B could increase the potential for wildfires associated with the use of vehicles and electrical equipment and increased human presence during construction of the project. Sparks from vehicles and construction equipment, spark producing construction activities such as welding, and improper disposal of matches or cigarettes, for example, could start a fire. There would also be

increased presence and use of petroleum products, including oils and lubricants on-site, thereby increasing the potential for fires. Climatic conditions in the vicinity of the wind farm site, including high relative humidity and high precipitation; however, tends to prohibit the production of fires.

An FMP has been prepared for the proposed project (see Appendix C of the Final EIS). The FMP analyzed the available pertinent information including fuel conditions, weather and climate conditions, fire history in the vicinity of the project, firefighter access, and other factors. The FMP concluded that the likelihood of a wildfire ignition during construction of the Project is very low and that no mitigation measures beyond normal construction best management practices (BMP) would be required to mitigate the threat.

Similar to construction of the project, O&M activities would increase the potential for wildfires associated with the use of vehicles and electrical equipment and increased human presence during O&M. Implementation of the FMP would be required during O&M activities. The risk of fire will also be minimized by the design features of the wind turbines, such as over-temperature sensors that will shut down the turbine if normal temperature limits are exceeded. In addition, undergrounding of the electrical collection system would reduce the risk of fire. The Project does not include a battery storage facility. The fire risk associated with Project operations and maintenance is similar to risks associated with other industrial and storage facilities.

Water tanks will be maintained onsite for emergency fire suppression during construction. Additional fire suppression measures to be implemented during construction and operation will be developed in coordination with the City & County of Honolulu Fire Department and will be incorporated into a Site Safety Handbook. These measures may include, but are not limited to requiring vehicles to carry fire suppression equipment when onsite such as fire extinguishers, flappers, and shovels, and storing fire suppression tools at designated locations within the wind farm.

7.1.3 Police Services and Emergency Services

Construction of the Project would have no direct impact to existing health care facilities and emergency services and is not expected to place substantial additional demands on health care or emergency services in the area. The wind farm site and vicinity are well served by a community hospital, fire and emergency medical services, and police service. Should an incident occur during construction of the Project, response times will be short. The implementation of a Site Safety Plan and observance of safe working practices during construction are expected to substantially reduce the potential for serious accidents that could place an undue burden on the local health care facilities and emergency services. Measures to limit traffic impacts during construction, such as movement of most large loads at night and the implementation of a traffic management plan, would also serve to prevent disruptions to the provision of emergency services.

7.1.4 Schools

Subproject B construction would not directly impact any school or educational facility in the area; however, it could indirectly impact people at the two nearest schools, the Kahuku Elementary School and the Kahuku High and Intermediate School located approximately 0.31 miles (0.50 kilometers), and 0.5 miles (0.80 kilometers), respectively, from the closest turbine on the Subproject B Site. Impacts would be limited to temporary increases in traffic and/or noise during construction.

Project-related construction traffic is unlikely to adversely impact the schools or buses bringing students to school. Scheduling the movement of large and oversized loads at night would largely eliminate potential traffic conflicts. The implementation of a traffic management plan and traffic control as needed during construction would limit potential disruptions to traffic in the area, and keep delays to a minimum. The relatively small workforce needed to construct the Project would cause only a minor, temporary increase in morning traffic that may coincide with school buses, while worker commuting in the evenings would not overlap with school bus route timing.

Construction of the project would create noise that may affect nearby schools. Both schools are considered noise-sensitive receptors. Construction noise is temporary, and periods of particularly loud noise would be intermittent. Sounds generated by construction activities would likely require a permit, to be obtained from the State of Hawaii Department of Health (DOH), to allow the operation of construction equipment that result in exceedance of the maximum permissible at property line locations. While the permits do not limit the sound level generated at the construction site, time restrictions may be placed on when the loudest construction activities are likely to occur, i.e. 7:00 a.m. and 7:00 p.m., Monday through Friday and between 9:00 a.m. and 6:00 p.m. on Saturday. The DOH would require reasonable and standard practices be employed to minimize the impact of noise resulting from construction activities (See Section 4.20 of the Attached Final EIS).

7.2 Physical Environment

7.2.1 Natural Landforms

Grading and Drainage

Ground-disturbing activities including clearing and grubbing, topsoil stripping, grading, compaction, utility trenching, and placement of aggregate surfacing would occur during the construction of wind turbines and associated foundations and transformers, the electrical collector system and transmission line, access roads, construction staging areas, O&M building and associated storage yard, and the on-site substation. Grading activities would consist of the removal, storage, and/or disposal of earth, gravel, vegetation, organic matter, loose rock, and debris. Fill material would be utilized from onsite excavations and earthwork. Additional sources of this fill, if needed, include nearby pits or excess material taken from within the property.

Grading and other construction activities have the potential to alter drainage patterns within the wind farm site. During the EIS scoping period, concern was raised over potential impacts associated with flooding, particularly at the Kahuku football field. Prior to obtaining a grading permit for the project, the construction contractor will confirm stormwater runoff requirements and, if necessary, incorporate stormwater control measures such as seepage pits, drywells, and/or detention basins. New Subproject B Access roads would be located to follow natural contours and minimize side hill cuts to the extent possible and would include other BMP such as ditches and culverts to capture and convey storm water runoff. Additionally, with the exception of areas where permanent surface recontouring is required, disturbed areas would be restored to pre-existing grades and all disturbed areas where permanent gravel or aggregate is not required would be revegetated. These measures would reduce the potential for erosion and adverse effects on drainage patterns. A Preliminary Drainage Study is included in Appendix H of the Final EIS.

Ground disturbance during construction of the project would also increase the potential for sediment and other pollutants present on-site to be conveyed in stormwater runoff into streams within the wind farm site, and potentially into downstream receiving waters. A site-specific Storm Water Pollution Prevention Plan (SWPPP) would be prepared for the Project. The SWPPP would identify BMPs that would be used to minimize or eliminate the potential for sediments and pollutants to reach surface waters through stormwater runoff. To minimize impacts associated with soil erosion, NPMPP would prepare a Temporary Erosion and Sediment Control (TESC) Plan that would be implemented by the construction contractor. The TESC Plan would include standard stormwater BMPs to reduce the risk of erosion including constructing during the summer months when rainfall potential is low, using silt fences or hay bales to prevent eroded soil from being transported off-site, and contouring to stop drainage from entering the site and to prevent runoff. Temporary ditches and culverts used to capture and convey stormwater would be installed in areas of temporary disturbance. Permanent stormwater control structures would be installed to prevent erosion where access roads, buildings, storage areas, and parking areas are constructed. Upon completion of construction, disturbed areas would be revegetated. Erosion control measures included in the TESC Plan would also prevent water quality degradation from stormwater runoff during the construction phase of the Project.

Jurisdictional Waters

Two streams—Keaaulu and Malaekahana—run through the Subproject B Site. Keaaulu Stream runs along the western border of Subproject B parcel (TMK (1) 5-6-006:018) and Malaekahana Stream runs along the southern border of Subproject B parcel. Field surveys conducted in 2013, 2014, and 2015 identified Malaekahana Stream as a perennial stream throughout the wind farm site (Hobdy 2013b, SWCA 2015). Keaaulu Stream is considered intermittent non-Relatively Permanent Waters as it only flow for 1 to 5 days, one to three times a year, following larger rains storms (Hobdy 2013b). A preliminary jurisdictional determination was issued by the U.S. Army Corps of Engineers on April 6, 2015 (USACE 2015) concluding that Keaaulu and Malaekahana streams may be waters of the U.S. requiring a Department of Army permit for any activity resulting in the discharge and/or

placement of dredged or fill materials into these waters. The Subproject B footprint has been designed to avoid potentially jurisdictional features.

7.2.2 Public Views

The Subproject B Site is located in the northeastern portion of Oahu in a relatively rural area that exhibits the typical landscape character of Oahu, with a mixture of dense forests, urbanized use, and agricultural lands. Higher–elevation portions of the Subproject B Site occur on vegetated ridges not actively used for agriculture and appear more natural, while cultivated lands occupy most of the lower–elevation areas. The agricultural areas support a wide array of crops being cultivated by lessees and landowners, and include some areas of fallow agricultural land. The colors and textures of agricultural lands appear more natural when compared to the developed communities.

The operational Kahuku Wind Power Project is located to the northwest. The James Campbell National Wildlife Refuge is approximately 0.75 miles (1.22 kilometers) to the north of the Subproject B Site and Malaekahana State Recreation Area is approximately 0.85 miles (1.37 kilometers) to the east. A number of primarily residential communities are located along the Kamehameha Highway, including Kahuku, Laie, Hauula, Punaluu, Kahana and Kaaawa. The Kamehameha Highway is the only arterial roadway linking these areas with the North Shore.

A viewshed analysis was conducted to identify locations within the analysis area from which the Project would potentially be visible. Using the results from the viewshed analysis and a desktop visual resource analysis, 21 specific viewpoints were identified and further investigated through a field review to photo-document existing conditions. Locations of those viewpoints are indicated in Figure 4.16-4 of the attached Final EIS. Four of those 21 viewpoints were selected for the development of visual simulations of Subproject B wind turbines (see Figure 11). The four viewpoints are the Kahuku Community Center, James Campbell National Wildlife Refuge, Kahuku Golf Course and Malaekahana Bike and Pedestrian Path (see Figures 12a, 12b, 12c, 12d, and 12e).

Subproject B would be most visible at viewpoints close to the wind farm site (within about 1 mile), including the Kahuku Community Center, Kahuku High and Intermediate School, Kahuku Elementary School, Kahuku Golf Course, Kahuku Hospital and Medical Center, Malaekahana Bike and Pedestrian Path near the Malaekahana State Recreation Area, along Kamehameha Highway near the entrance of the Malaekahana State Recreation Area, and James Campbell National Wildlife Refuge. Individuals most likely to experience visual impacts include recreation users, residents, and travelers on the highway. The turbines would be significantly taller than most existing structures in or immediately adjacent to the wind farm site, with the exception being the existing turbines at the Kahuku Wind Farm. Visibility of the wind turbines would be blocked or partially obscured by topography in some locations and could be diminished in other locations because of factors such as distance from viewers, the angle of observation, atmospheric conditions, and the presence of vegetation and/or structures. However, given the height of the wind turbines, their placement on ridgelines, and the rural nature of the site, the turbines would be highly visible from certain viewpoints and visual impacts of the wind turbines cannot be completely avoided because of their size and exposed location. Subproject B would not dominate the landscape character because there

is already a substantial degree of landscape modification in most views, including residential and commercial development and the existing Kahuku windfarm adjacent to the proposed project.

Other features of Subproject B that would have relatively limited visual impact would be access roads, the electrical collector system, and the substation. These features would be much smaller and would generally create much less visual contrast than the turbines. The O&M building and electrical substation would be located mauka of an existing area of dense, tall vegetation, thereby blocking the view of these facilities from Kamehameha Highway (see Landscape Plan, Drawing C-16 in Appendix C).

At nighttime, the substation and some of the turbines would be minimally lit pursuant to FAA guidelines. This would create a new light source in the wind farm site. Much like the motion of the blades during daytime operations, flashing safety lights can draw the attention of a casual observer (see Figure 12e for a night time visual simulation of Subproject B turbines).

The results of the visual impact analyses, and a detailed discussion of those results, are provided in the attached Final EIS.

7.2.3 Natural Habitats

The Subproject B Site is surrounded by agricultural farm lands to the north and east and by undeveloped forested lands to the west and south (Hobdy 2013a). Non-cultivated vegetation within the Subproject B Site is characterized as predominantly non-native shrubland and forest dominated by a mixture of aggressive non-native weedy species that took over following the abandonment of agricultural production of sugar cane. Only a few persistent native plants have been able to compete and survive (Hobdy 2013a). Common ironwood (*Casuarina equisetifolia*), a non-native tree, was the most abundant species observed during field surveys in 2013. No Federal or State threatened, endangered, or candidate plant species were detected. Additionally, no plant species proposed for listing or special status plant species were detected. No portion of the Project Site has been designated as critical habitat for any listed plant species.

Wildlife habitat in the Project Site consists of agricultural lands, grassland, shrub-scrub, and dryland forest. The Na Pua Makani Power Project Site 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 Subproject B Site and there are no areas where congregations of birds occur.

Most of the wildlife species likely to breed or forage within the Subproject B Site are common, non-native, and widespread, and the habitats affected are abundant in the surrounding area. Therefore, vegetation removal would not result in a substantial local loss of wildlife habitat.

There is no breeding or foraging habitat within the Project Site for any seabird, shorebirds, waterfowl, or wading bird species protected by the Migratory Bird Treaty Act. Therefore, construction would not result in terrestrial or aquatic habitat removal or modification for these species, with the exception of the Pacific golden-plover which could use the newly cleared turbine pads and roads for foraging.

Eight State and/or Federally threatened and endangered species are known to occur, or have the potential to occur, in the vicinity of the Project including:

- Hawaiian hoary bat (*Lasiurus cinereus semotus*),
- Newell's shearwater (*Puffinus newelli*),
- Hawaiian goose (*Branta sandvicensis*),
- Hawaiian stilt (*Himantopus mexicanus knudseni*),
- Hawaiian coot (*Fulica alai*),
- Hawaiian moorhen (*Gallinula chloropus sandvicensis*),
- Hawaiian duck (*Anas wyvilliana*), and
- Hawaiian short-eared owl (*Asio flammeus sandwichensis*).

No portion of the Project Site has been designated as critical habitat for any listed wildlife species. Each of these species are covered under the Project HCP which discusses anticipated direct and indirect impacts from the Project, mitigation for impacts, and avoidance and minimization measures.

7.2.4 Historic Sites

Archaeological and cultural assessment work was conducted for the Project and is described in detail in Pacific Legacy's *Archaeological Inventory Survey for the Na Pua Makani Wind Project, Kahuku, Keana, and Malaekahana Ahupuaa, Koolau Loa District, Island of Oahu, Hawaii* (Archaeological Impact Assessment; See Final EIS Appendix F) and *Cultural Impact Assessment for the Na Pua Makani Wind Project, Kahuku, Keana, and Malaekahana Ahupuaa, Koolau Loa District, Island of Oahu* (Cultural Impact Assessment; See Final EIS Appendix G).

In 2014, Pacific Legacy conducted a pedestrian survey of close to 100 percent of the area of potential effect (APE), excluding only areas that were too steep to traverse, to identify archaeological sites. The APE includes an area that represented the maximum footprint of the Project within which all ground disturbing activities would occur and which would be occupied by permanent Project facilities. However, further refinements to the wind project's design has decreased the maximum footprint to an area smaller than the APE. In the portion of the APE within the Subproject B Site, the Archaeological Inventory Survey identified a total of 22 new (not identified during previous archaeological investigations) archaeological sites, consisting of 93 distinct features. A majority of these features (59) were associated with a single archaeological site (SIHP No. 50-80-12-7844) that is a large discontinuous district of structural remnants of the former Kahuku Sugar Plantation. Of the remaining 21 sites located within the Subproject B Site, 19 were traditional Hawaiian pre-Contact activities and two were historic.

Survey data were used by project engineers to refine the location of proposed facilities to avoid archaeological features. This resulted in a revision of the APE. Three features of the Kahuku Sugar

Plantation site and 14 of the other 21 documented sites within Subproject B are now located outside of the APE and would not be affected by the project footprint. This leaves 56 features of the Kahuku Sugar Plantation site and seven other sites (consisting of 12 distinct features) within the revised APE. Each of these eight sites (Kahuku Sugar Plantation plus seven other sites) has either yielded or has the potential to yield information important to state and national history. A summary of each of the eight sites follows:

- No Further Work is required: these sites have already yielded information they contain during the current AIS investigations and no further archaeological work is recommended. None of these sites are recommended to be eligible for listing on the National Register of Historic Places (NRHP) and Site 7848 is recommended to be eligible for listing on the Hawaii Register of Historic Places (HRHP).
    - SIHP No. 50-80-02-7848. This site consists of three series of terraced soil furrows and a soil terrace (four distinct features total). These features are outside of the area of disturbance.
    - SIHP No. 50-80-02-7863. This one-featured site consists of a single modified outcrop of basalt with an unclear historic function. It is outside of the area of disturbance.
    - SIHP No. 50-80-02-7864. This one-featured site consists of a stone terrace with an unclear historic function. It is outside of the area of disturbance.
- Recommended for preservation: These sites appear to be eligible for listing on the HRHP. All of these sites are outside of the area of disturbance, except Component C39 of Site 50-80-02-7844.
    - SIHP No. 50-80-02-7846. This site is composed of two features, a stone terrace and a soil terrace, and appears to have functioned as a traditional agricultural complex. It is outside of the area of disturbance.
    - SIHP No. 50-80-02-7865. This site is composed of two terrace features. Feature A appears to have functioned as a habitation terrace and Feature B as an agricultural terrace. Both are outside of the area of disturbance.
    - SIHP No. 50-80-02-7844, Component C39, Features A & B. These two features are assessed as significant based on their association with the Kahuku Plantation, one of the early sugar plantations in Hawaii and a dominant economic and social force on the north shore of Oahu. Feature A is an aqueduct and Feature B is an adjoining concrete ditch. Both are located within the area where Subproject construction will occur and are recommended for preservation. Feature A is to be preserved in its entirety, while only the portion of Feature B that is adjacent to Feature A is recommended for preservation.
- Recommended for data recovery: these sites are potentially eligible to be listed on the HRHP for their information potential, and data recovery is recommended. If not mitigated with data recovery this would be considered an adverse effect to historic properties by DLNR State Historic Preservation Division. Therefore, treatments have been proposed for these three sites, in the form of archaeological data recovery investigations (additional

documentation, analysis, collection and excavations) to mitigate the potential adverse effects caused by development of the Project through retrieval of the significant information. Once retrieved, the demolition of the sites has been mitigated, there is no longer an adverse effect.

- SIHP No. 50-80-02-7844. The historic sugar complex (Site 7844) appears to be eligible for listing in the HRHP because of its association with the Kahuku Plantation (1890-1971), one of the early sugar plantations in Hawaiʻi and a dominant economic and social force on the North Shore of Oahu. Most of the components of this site complex that were recorded were associated with water control and water transport. Most of the features are ditches and a wide variety of ditch types were documented. While this site is assessed as eligible for listing in the HRHP, it does not appear to be eligible for listing in the NRHP. It is not unique among Hawaiʻi plantation sites, nor is it an excellent example the full range of plantation related structures or activities. Data recovery in the form of historical documentation and analysis of the irrigation network is recommended for 54 features within this site. Two features (7844-C39 Features A and portion of Feature B) are recommended for preservation (see above). The site is eligible for listing on the HRHP but not on the NRHP.
- SIHP No. 50-80-02-7866. This site consists of historic artifact scatter (one distinct feature) and is located outside the area of disturbance but data recovery excavations prior to Subproject B construction are recommended. Once data recovery excavations and data has been collected, no additional work will be necessary; however, this site is eligible for listing on the HRHP.
- SIHP No. 50-80-02-7867. This site consists of a small limestone cave (one distinct feature) that may have functioned as a traditional habitation cave. It is located near the proposed laydown area and may not be avoided by construction activities. Data recovery excavations prior to Subproject B construction are recommended. Once data recovery excavations and data has been collected, no additional work will be necessary; however, this site is eligible for listing on the HRHP.

See the Final AIS in Appendix G of the Final EIS for more information.

7.2.5 Flood Hazards

Potential flood hazards are identified by the Federal Emergency Management Agency National Flood Insurance Program and are mapped on the Flood Insurance Rate Maps (FIRM). The maps classify land into zones depending on the potential for flood inundation.

The Subproject B Site lies within several flood zones. Designations for these flood zones include (FEMA 2013a; 2013b):

- Zone A – areas mapped as being within the 100-year (1-percent-annual-chance) floodplain; however, hydraulic analysis has not been conducted in these areas and base flood elevations are not listed.

- Zone AE – area mapped as being within the 100-year (1-percent-annual-chance) floodplain and base flood elevations have been derived from detailed hydraulic analyses for these areas.
- Zone AEF – areas that lie within the floodway of a stream. The floodway is the channel of the stream plus any adjacent areas that must be kept free of encroachment so that the 1-percent-annual chance flood can be carried without substantial increases in flood heights.
- Zone D – areas where analysis of flood hazards has not been conducted and flood hazards are undetermined.
- Zone X – areas determined to be outside the 0.2-percent-annual-chance (or 500-year) floodplain.
- Zone XS – areas between the limits of the 100-year (1-percent-annual-chance) and 500-year (0.2-percent-annual-chance) floodplains, including areas inundated by 100-year flooding with average depths of less than 1 foot (0.3 meters).

According to the FIRM, the Subproject B Site is located predominantly within Flood Zone X. See Figure 13. A small portion of the Subproject B Site is located in Flood Zone AE in the Makai-most portion of Keaaulu stream. Improvements within the floodway are limited to surface pavements and underground power transmission lines which are not expected to change the conveyance capacity of the floodway (Belt Collins Hawaii LLC 2014). All the proposed wind turbines would be located within areas classified as Zone X.

7.3 Agricultural Uses and Activities

Malaekahana Hui West, LLC currently leases approximately 452.7 acres (183 hectares) of land within TMK (1) 5-6-006:018 to five active farming operations. See Figure 14. All but one of these five leases is a month-to-month lease. Based on Real Property Tax Assessment Reports, approximately 247 acres (100 hectares) of leased land is considered “agricultural use area” and approximately 205 acres (83 hectares) consists of “nonagricultural use area” (e.g., roads, streams, or other areas not currently being used for active agricultural; Table 7-1).

Based on aerial photo interpretation, approximately 161 acres (65 hectares) of the lands within TMK (1) 5-6-006:018 leased to farmers is actively cultivated (i.e., cultivated crops; Table 7-1). Existing crops include papaya, bananas, taro, ginger, tomatoes, eggplant, cucumbers, and other herbs and vegetables. Farming activities typically occur 7 days a week during daylight hours. Each of the farmers have a variety of agricultural structures on the site including greenhouses, storage sheds, and an agricultural warehouse used for cleaning and packaging of produce. During Project construction, it is anticipated that there may be temporary access restrictions along existing roads to ensure the safety of farmers within the wind farm site. A Site Safety Handbook would be developed and implemented during construction which would include measures for notifying farmers of upcoming construction activities, access restrictions, and other measures to ensure safety is maintained during construction. There would be no permanent reduction in access along wind farm site roads; however, during Project operation there may be temporary, localized reductions in access in association with routine maintenance activities to ensure farmer safety. NPMPP would work with Malaekahana Hui West, LLC, to ensure that a notification system is in

place to inform farmers of the timing and location of maintenance activities, restrictions in access and alternative access routes, and other important information. Over the long term, expansion of the road system would result in a beneficial impact to farmers through expanded and improved access along the existing road system.

Table 7-1. Impacts to Leased Agricultural Land and Actively Farmed Land

Lease Area	Total Leased Area (Acres)[1/] 26.4	Existing Leased Land Actively Farmed (Acres)[2/]	Impacts to Lease Area[1/] (Acres)		Impacts to Leased Actively Farmed Land (Acres)[2/]	
			Construction	Operation[4/]	Construction	Operation[4/]
Lessee A	26.4	3.8	0.3	0.2	–	–
Lessee B	13.4	4.2	0.3	0.2	–	–
Lessee C	14.0	4.9	–	–	–	–
Lessee D	20.5	13.7	1.4	0.7	0.6	0.3
Lessee E	378.4	134.4	35.3	21.5	5.4	2.4
Total[5/]	**452.7**	**161.0**	**37.3**	**22.5**	**6.0**	**2.7**

1/ From Real Property Assessment Tax Forms
2/ Based on GIS delineation of aerial imagery
3/ Acreages represent potential for replacement acres within leased agricultural lands to compensate for permanently lost actively farmed areas
4/ Operational impacts are a subset of construction impacts
5/ Column totals may not sum exactly due to rounding

Up to approximately 37.3 acres (15.1 hectares) of leased land would be impacted during construction of Subproject B, of which approximately 22.5 acres (9.1 hectares) would be impacted over the long term. Subproject B would directly impact approximately 6.0 acres (2.4 hectares) of actively farmed lands, spread across two of the five lease areas, during construction and approximately 2.7 acres (1.1 hectares) would be impacted over the long term (for the life of the Project). Table 7-1 provides a summary of impacts by farmer. In total, long-term impacts represent up to approximately 2 percent of leased actively farmed land within the wind farm site. This displaced active farm land would be relocated to existing unused farm land within each farmer's lease area on the Malaekahana Hui West, LLC property; therefore, no net loss of agriculture would occur. To the extent requested by Malaekahana Hui West, LLC, NPMPP would work with farmers to prepare this suitable land for agricultural production (e.g., grubbing, grading, soil amendments, extend irrigation, etc.) so that there would be no net loss in active agriculture.

Subproject B would permanently occupy agricultural lands which have been classified by the University of Hawaii LSB and ALISH. See Section 2.3.3 for a description of agricultural lands within TMK (1) 5-6-006:018 and Section 4.2.1 for the discussion of the compatibility of Subproject B with State of Hawaii rules and statues pertaining to LSB-classified agricultural lands. Table 7-2 provides a detailed breakdown of the temporary and permanent impacts to each land use classification.

Table 7-2. Impacts to Classified Agricultural Lands

Land Classification	Area of Classification within TMK (1) 5-6-006:018 (Acres)	Area of Classification within Temporary Subproject B Footprint (Acres)	Area of Classification within Permanent Subproject B Footprint (Acres)	Percent of Classified Area within TMK (1) 5-6-006:018 Occupied by Permanent Footprint
LSB Agricultural Productivity Rating				
No Data	8.2	0.1	0.1	1.2
A	19	0	0	–
B	253.9	6.0	13.9	5.5
C	46.8	0.7	0.6	1.3
D	22.3	0.3	0.3	1.2
E	101.7	1.3	7.0	6.9
Total[1]/	**451.9**	**8.4**	**21.9**	**–**
ALISH Classification				
No Data	102.1	0.1	0.1	0
Other Agricultural Land	84.9	1.5	6.5	7.6
Unique Agricultural Land	0	0	0	–
Prime Agricultural Land	236.1	6.0	9.4	4.0
Unclassified Agricultural Land	28.8	0.8	5.9	20.5
Total[1]/	**451.9**	**8.4**	**21.9**	**–**
[1] Column and row totals may not sum exactly due to rounding				

The permanent footprint of Subproject B would consist of approximately 21.9 acres (8.9 hectares). The amount of ALISH Prime agricultural land permanently occupied by the Subproject B footprint, approximately 9.4 acres (3.6 hectares), would be less than approximately 0.3 percent of the 2,883 acres (1,167 hectares) of Prime agricultural land in the Koolau Loa District. The amount of University of Hawaii LSB A- and B-rated lands to be permanently occupied by the Subproject B footprint, 13.9 acres (5.6 hectares), would be less than 0.4 percent of the total 3,771 acres (1,526 hectares) of A- and B-rated lands in the Koolau Loa District. Although these lands would no longer be available for agricultural production, Subproject B would be compatible with existing agricultural land uses as described in Section 4.2.1 o and the development of Subproject B will directly provide supplemental income to the landowner, Malaekahana Hui West, LLC, and will help to sustain agricultural activity on the property.

7.4 Employment, Housing and Population

Construction of the Na Pua Makani Power Project is expected to result in total direct employment of 43 full-time equivalent (FTE) jobs, to which Subproject B will contribute proportionally. FTE calculations are based on 12 month, full-time employment, where 2,080 hours worked is considered one FTE job. These numbers do not translate into individual workers who may be employed for shorter periods but, instead, aggregate hours worked. Local workers would be employed where possible, including workers from nearby communities and the greater Honolulu urbanized area, approximately one hour's drive from the wind farm site. Other workers would

likely temporarily relocate to the analysis area for the duration of their employment. Very few, if any, of the non-local workers employed during the construction phase of the Project would be expected to be accompanied by family members or permanently relocate to the analysis area. In a worst case scenario, assuming 90 percent of the peak workforce were to temporarily relocate from elsewhere, the Na Pua Makani Power Project would result in a temporary population gain of approximately 38 people and the commensurate proportion thereof for Subproject B. This is a small share of the total number annual visitors to the region.

Review of the housing resources in the vicinity of the project suggests that limited housing options exist for construction workers, with the majority of temporary accommodation oriented towards tourism. More temporary housing options are available further from the site, especially in the urbanized Honolulu area, and will become available with the development of a new hotel near the Polynesian Cultural Center located south of the project in the Laie community. The temporary relocation of construction workers is not expected to reduce the available supply of temporary housing for other tourists and other visitors.

During operations and maintenance of the project, there will be approximately three to six full-time employees on site. This estimated change in population would not be expected to affect demand for housing near the wind farm site.

7.5 Parks and Recreation

Public recreation resources within five miles of the Subproject B Site include one State recreation area, one district park, one community park, one neighborhood park, nine beach parks, a State wayside, a public golf course, and one undeveloped park property. Designated trails are found in three of the forest reserves and along the western edge of the Kahuku Training Area.

Important privately-owned recreation and tourism resources near the wind farm site include the Kaena Farms zip-line course, the Turtle Bay Resort and its two associated golf courses, the Kahuku Motocross Course, and the Hukilau Beach Park. The Polynesian Cultural Center (PCC) is also located nearby in Laie town.

The open space map in the Koolau Loa SCP indicates a “mountain access” route that begins in Kahuku and extends to the southwest, passing through the wind farm site. No other information regarding this route is included in the plan; it does not appear to be a formal trail or recognized public access, and is therefore not considered further in this analysis. The public facilities map in the Koolau Loa SCP (City & County of Honolulu, DPP 2012) identifies a future bike route along the Kamehameha Highway. Similarly, the Hawaii Bike Master Plan (HIDOT 2002) calls for shared bike usage on the Kamehameha Highway in the future. This signage project is a Class III priority recommendation, to occur more than 20 years in the future. However, the Koolau Loa SCP notes that recreational use of the highway, and in particular the number of organized bicycling events that use it, has been increasing and sometimes causes delays.

Construction of the Project would not cause a direct loss of opportunity to any recreation or tourism resource in the area. No Project infrastructure would be placed within any existing recreation resource area.

7.6 Community Concerns

Since 2013 NPMPP has conducted numerous meetings that were open to the community, with small focus groups, and with individual community leaders and elected officials. This includes presentations made at numerous Koolau Loa Neighborhood Board and Laie and Kahuku community association meetings. These meetings were a means of keeping community members informed about the status of the proposed Project, design changes, and the environmental review process and topics addressed therein; they also provided an opportunity to solicit community input and have focused discussions about topics of particular interest. For example, in January 2014 NPMPP hosted a talk story meeting in Kahuku on wind energy health and safety issues and potential effect of the proposed Project on rooftop photovoltaic system installations, two topics the community voiced concern about. Invited guests included Representative Richard Fale, Mark Glick and Noreen Kam of the State Energy Office, and Dr. Robert McCunney, an internationally recognized expert in wind energy health issues from the Massachusetts Institute of Technology. A summary of key public meetings is included in Table 7-3 and a copy of the Koolau Loa Neighborhood Board meeting agendas and minutes for the January 9, 2014 and February 13, 2014 presentations are included in Appendix D.

Table 7-3. Summary of Project Public Meetings

Meeting	Date
Kahuku Community Association presentation	May 30, 2013
Kahuku Community Association update	August 15, 2013
Scoping Meeting (NEPA)	Nov 13, 2013
Scoping Meeting (HEPA)	Jan 10, 2014
Koolau Loa Neighborhood Board presentation	Jan 9, 2014
Talk story meeting: Health Impacts and HECO/rooftop photovoltaic system installation	Jan 15, 2014
Laie Community Association presentation	Feb 6, 2014
Koolau Loa Neighborhood Board presentation	Feb 13, 2014
Laie Community Association presentation	Mar 6, 2014
Hauula Community Association presentation	2014
Scoping Meeting #2 (HEPA)	Nov 19, 2014
Kahuku Community Association update	Feb 19, 2105
Kahuku Community Association update	May 20, 2015
Office of Environmental Quality Control site visit	June 17, 2015
Draft EIS Public Meeting (HEPA and NEPA)	June 24, 2015
Laie Community Association site visit	July 27, 2015
Kahuku Community Association update	Aug 20, 2015
Kahuku Community Association update	Nov 19, 2015

Meeting	Date
Endangered Species Recovery Committee meeting (Habitat Conservation Plan)	Dec 17, 2015
Endangered Species Recovery Committee meeting #2 (Habitat Conservation Plan)	Feb 23, 2016
Second Draft EIS Public Meeting (HEPA)	May 25, 2016

A website for the project, napuamakaniwind.com, was launched in 2014. The site includes links to current news and the latest information from NPMPP and provides an overview of the Project as well as information on public health and safety and other issues of interest to the community, such as setback requirements, agriculture, traffic, weather, visual impacts, property values, and effects to rooftop photovoltaic system installation. The website also provided a contact email address and an electronic contact box for the public to ask questions about the Project or to express concerns.

Five public meetings were held specifically for the HRS 343 environmental review process. During the public comment periods on the original Draft EIS and the Second Draft EIS, many letters were received from residents that live in Kahuku that support renewable energy in general, and support the proposed Project. Some letters expressing opposition to the Project, or concern over specific issues, were also received. The topics most commonly brought up included traffic, visual impacts, project siting, socioeconomics, public health and safety, and community benefits. All comment letters received from members of the Kahuku Community and associated responses are included in Appendix M of the Final EIS. The Final EIS, which was approved by the BLNR on July 22, 2016, recognizes there will be impacts associated with the proposed Project. However, the process of undergoing environmental review has allowed NPMPP to receive public input, develop the project in a way as to reduce and mitigate environmental impacts to the extent possible, and to respond to public concerns using the best available science.

NPMPP has engaged in outreach efforts with affected stakeholders to define its Community Benefits Package. See Section 4.1.4 for a discussion of the Project's contribution to the welfare of the community including the Community Benefits Package.

7.7 Potential Nuisances

7.7.1 Noise

A noise analysis was conducted for the Project and is included in Appendix D of the attached Final EIS. The acoustic analysis area includes parcels located within 1.2 miles of the Project. Subproject B components, such as wind turbines and the substation, would be located on agriculturally zoned parcels or HAR 11-46 Class C districts. The remaining parcels within the noise analysis area are mostly agriculturally zoned; however, north and west of Subproject A there are Class A (mostly residential) and Class B (mostly commercial) parcels. The nearest parcels which are zoned as more restrictive in terms of noise are Class A residential parcels located approximately 1,600 feet (488 meters) from the nearest proposed wind turbine within Subproject A. Temporary construction

noise and permanent operational noise from the project would result in changes in noise levels in the acoustical analysis area.

The construction of the Project may cause short-term but unavoidable noise impacts depending on the construction activity being performed and the distance to receiver. Sounds generated by construction activities would likely require a permit, obtained from the DOH, to allow the operation of construction equipment that result in exceedances of the maximum permissible noise level at property line locations. While the permit and permitting procedures do not limit the sound level generated at the construction site, time restrictions may be placed on time periods when the loudest construction activities are likely to occur, i.e., 7:00 a.m. and 7:00 p.m., Monday through Friday, and between 9:00 a.m. and 6:00 p.m. on Saturday.

During operations, the wind turbines are expected to generate sound on a regular basis. Based on the results from the acoustic monitoring and comparison of those results to the measured existing ambient sound levels, the predicted wind turbine sounds are expected to increase the ambient sound levels by no more than 4 decibels at the nearest sensitive Zone A receptor. For the purposes of the Project acoustic analysis, sound levels are expressed in A-weighted decibels (dBA), which compensates for the frequency response of the human auditory system. A 3 dBA increase is generally not discernable to the average person, but a 5 dBA increase is; therefore, a 4 dBA increase may be discernable to some people but only considered a minor impact. Class B parcels are predicted to experience increases in noise over baseline conditions of 1-2 dBA, which is not discernable to the average human and therefore considered a negligible impact. Class C parcels located adjacent to the Subproject B would experience the highest increases in sound levels. Most of these Class C parcels have no residences; however, there are some Class C TMKs that have residences and that are predicted to experience increases over baseline conditions in excess of 5 dBA. A 5 dBA increase is considered perceptible to the average human and a 10 dBA increase is perceived as a doubling of sound. While these increases would be perceptible Class C parcels intentionally allow for higher sound levels to accommodate sound from sources such as tractors for agricultural activities.

7.7.2 Lights

Additionally, nighttime lighting has been shown to attract and disorient seabirds. To minimize these risks, NPMPP will maximize the amount of construction activity that can occur in daylight during the seabird breeding season to minimize the use of nighttime lighting that could be an attraction to seabirds. To the extent practicable, NPMPP will avoid nighttime construction during the peak fledging period. Should nighttime construction be required, to minimize the attractiveness of construction lights to wildlife, NPMPP will use shielded lights and non-white lights to the extent practicable and allowable, taking into account safety considerations. Necessary lighting would be controlled with motion sensors, timers or similar features such that the lights are on only when needed. Lighting is only expected to be used when workers are at the site at night. These measures will reduce the potential for seabird attraction to project lights.

The turbines would not be lighted, with the exception of synchronized red flashing lights on select turbines as required to satisfy FAA marking and lighting requirements. The implementation of these measures would minimize the potential impacts to recreation and tourism resources associated with Project visibility.

7.7.3 Dust and Air Quality

Soil disrupting activities associated with construction would result in the generation of fugitive dust. As the increased fugitive dust levels would be temporary (with elevated fugitive dust levels occurring only in a localized area) and would occur at relatively low levels compared to the State and Federal ambient air quality standards, construction of the project is expected to have a minor effect to air quality.

The Project should have a long-term beneficial indirect effect to air quality and climate conditions. Currently, approximately 75 percent of the electricity generated on Oahu is a result of burning oil; this proposed Project has the potential to off-set some of the adverse effects associated with power generating facilities that burn fossil fuels, assuming that the power that would be generated by this wind-facility would have been generated by facilities that burn fossil fuels if this Project is not implemented.

7.7.4 Odors

No odors will be produced from the proposed Project.

8.0 References

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DEPARTMENT OF PLANNING AND PERMITTING
OF THE CITY AND COUNTY OF HONOLULU

STATE OF HAWAII

IN THE MATTER OF THE APPLICATION OF NA PUA MAKANI WIND PROJECT SUBPROJECT B FOR A CONDITIONAL USE PERMIT (MINOR)	)	FILE NO. 2016/CUP-49(WA)

FINDINGS OF FACT, CONCLUSIONS
OF LAW, AND DECISION AND ORDER

I. APPLICATION

A. Basic Information:

PROJECT:	Na Pua Makani Wind Project - Subproject B
LANDOWNER:	Malaekahana Hui West, LLC
APPLICANT:	Na Pua Makani Power Partners, LLC (Mike Cutbirth)
AGENT:	Tetra Tech, Inc. (Neal Dixon)
LOCATION:	56-452 Kamehameha Highway - Kahuku (Exhibit A)
TAX MAP KEY:	5-6-6: 18
LAND AREA:	452.7 Acres
STATE LAND USE:	Agricultural District (Exhibit B)
ZONING:	AG-1 Restricted Agricultural District (Exhibit C)
EXISTING USE:	Agriculture and Agribusiness
SURROUNDING LAND USE:	Kahuku Military Training Area; Kahuku Police Substation and Fire Station; and Keana Farms

This application was processed in accordance with Sections 21-2.40-1 and 21-2.90 et seq. of the Land Use Ordinance (LUO).

B. Proposal: The Applicant proposes to construct and operate a 25 megawatt (MW) wind farm consisting of nine wind turbines and accessory infrastructure on an approximately 452.7 acre parcel. This application is one of three proposed Conditional Use Permits (Minor) (CUPm) for the Project designated as Subproject B, and includes four turbines, lay-down areas, access roads, underground collector lines, operation and maintenance building, and the Applicant-owned substation components.

The clean, renewable power from the approximately 25 MW wind farm would be generated in response to demand from the Hawaiian Electric Company (HECO) grid.

The Applicant has proposed this Project in three CUPm's rather than opt for joint development of the two adjacent parcels because the two parcels are under different ownership. The wind farm will be owned and operated by the Applicant and the switching station located adjacent to the wind farm will be owned and operated by HECO (see Exhibits A-1 through A-12). The wind farm will consist of the following items.

1. Wind Turbine Generators

   Subproject B consists of four turbines. Three of the turbines will be 656 feet in height and one turbine will be 590.5 feet (measured from grade to rotor tip). Each turbine will be setback from the nearest property line a minimum of 590.7 feet, the total height of the shortest turbine. All the turbines are white, which is the industry standard.

2. Electric Collector System and Substation

   Power generated by the turbines will be stepped up to 34.5 kilovolts (kV) at pad-mounted transformers and then collected through an underground electrical collection system. This system will feed into an onsite electrical substation, which will step up the voltage to 46kV and transmit the power to the point of interconnect at the adjacent HECO-owned and operated switching station. The substation will be enclosed within an 18,832-square-foot fenced area.

3. Met Tower

   One 262-foot temporary guyed tower will be installed at the site. This tower supports weather instruments that measure and record weather data to measure performance and guide project operation. The met tower will be removed during construction of the turbines.

4. Operation and Maintenance Building

   The Operation and Maintenance building will be located on an 8.3 acre portion of the site along with vehicle parking for the site.

5. Access Roads

   On-site access will be provided via existing access roads which will be modified and via the grading of new roads. Access from the public right-of-way to the site will be via Malaekahana Valley Road.

6. Construction Staging and Equipment Laydown

   The construction staging and equipment laydown area will be used as a temporary storage area for equipment and materials. It will also be used as a refueling location, waste collection area, construction office, and portable sanitary facilities.

Once construction is completed, the Project will employ five full-time employees. Operation and maintenance of the wind farm will occur Monday through Friday during normal work day hours. Power will be generated based on demand from the HECO grid.

The Applicant states that the anticipated life of the wind farm Project is 21 years. After that time the Project will be evaluated and a determination will be made to continue operation or decommission it. Should a decision be made to continue operations, the facility may be upgraded and repowered with renegotiated leases and necessary permit approvals. If the Project is decommissioned the Applicant will remove all equipment and return the site as close to preconstruction condition as possible within 12 months as required by the land lease.

II. FINDINGS OF FACT

On the basis of the evidence presented, the Director has found:

A. Description of Site and Surrounding Uses: The Project is located on Oahu's north shore, at the base of the northern part of the Koolau Range, sloping to the coastal plain near the town of Kahuku (see Exhibit D). The elevation ranges from approximately three feet (1 meter) Above-Mean Sea Level (AMSL) on the eastern edge to approximately 370 feet (113 meters) AMSL on the western portions of the parcel and consists of steep, dissected ridges surrounding gently sloping valleys as well as flat, coastal plains. The site is accessible via Malaekahana Valley Road, a private access road that directly joins Kamehameha Highway at the northeastern most point.

The 452.7-acre Project site is zoned AG-1 Restricted Agricultural District. Higher elevations of the site are fallow ridges not actively used for agriculture. Other portions of the site are used for agriculture with a wide variety of crops being cultivated by lessees and private landowners. Between the patches of crops is fallow agricultural land. The site was assessed to identify areas that would be too steep for construction or that would be inaccessible by construction vehicles. The presence of several steep ridges and deep gullies trending in southwest-to-northeasterly directions eliminated some portions of the wind farm site from consideration because construction in these areas would be logistically infeasible and/or terrain ruggedness would inflate construction costs. After portions of the site were eliminated due to topography, the remaining land area was determined to have a sufficient area for a viable project.

The site consists of four different Land Study Bureau (LSB) ratings of Category A, B, C, and E with Category A (most productive) which includes the majority of the site to Category E (least productive) soil which covers a small western portion of the site. The Project area is in Category A and B.

Surrounding land uses include the existing Kahuku Wind Farm north of the Project site, military training area to the west and south, and agricultural farm land to the east. The nearest residences to the proposed wind turbine generators are in the northeast corner of the site along with the Kahuku Fire Station and Police Substations, Kahuku Medical Center, and Kahuku Elementary and High Schools. Keana Farms operates an agri-tourism business which includes agricultural educational tours and a zipline.

B. Special Management Area (SMA): The parcel is not located in the SMA, and is not subject to the requirements of Chapter 25, Revised Ordinances of Honolulu (ROH).

C. Koolauloa Sustainable Communities Plan (KSCP): The KSCP contains guidelines and policies relating to the Project. The degree to which this project follows the guidelines and policies is discussed in the Analysis section of this report.

D. Other Permits and/or Approvals: The following permits and approvals were approved for the subject properties:

1. Special Use Permit (SUP)

The site is in the State Land Use Agricultural District (see Exhibit B). The DPP has determined that the proposal does not require an SUP since the proposed use is compatible with existing diversified agricultural activities. The use should have minimal adverse impact on the land for future agricultural uses.

2. CUP

Wind machines are permitted in the AG-1 Restricted Agricultural District, subject to the approval of a CUPm, and as a special accessory use subject to standards enumerated in Article 5 of the LUO.

3. Grading Permits

The proposed wind turbines, buildings, and structures associated with the Applicant's request will require grading and grubbing permits.

4. Building Permits

The proposed buildings and structures associated with the Applicant's request will require building permits.

5. State Department of Transportation (SDOT) Approval

Transportation of turbine components via transport vehicles will require approval from the SDOT and implementation of an approved traffic control plan.

E. Environmental Review Requirements: The Project is partially located on State of Hawaii lands, triggering environmental review under the Hawaii Environmental Policy Act (HEPA) Chapter 343, Hawaii Revised Statutes (HRS). The Hawaii DLNR served as the accepting Agency for the Environmental Impact Statement (EIS). A portion of the proposed project's transmission line is located within the SDOT right-of-way, which also triggers environmental review under HEPA.

The Draft EIS, published on June 8, 2015, in The Environmental Notice, was prepared as a joint Federal and State document in accordance with HRS Chapter 343 and HAR§11-200-25 and with National Environmental Policy Act (NEPA) implementing regulations, specifying that federal agencies shall cooperate with State and local agencies to the fullest extent possible to avoid duplication between NEPA and State

requirements. The U. S. Fish and Wildlife Service, as the Federal lead agency. Due to differences in procedural requirements, the HEPA and NEPA processes have diverged and will continue along separate paths. The Final EIS was accepted by DLNR on July 22, 2016.

F. Flood District: For this parcel, the Federal Emergency Management Agency Flood Insurance Rate Map Community Panel Number 0045H, revised November 5, 2014, indicates that the Project site is within Flood Zone X areas determined to be outside the 0.2 percent annual chance floodplain (see Exhibit E). Other portions of the site are in Flood Zones XS, AE, and AEF.

G. Compliance with Chapter 205: In accordance with HRS Section 205-4.5(a), wind energy facilities are permissible uses on agricultural district lands with an overall LSB productivity rating of Category A or B, provided that such facilities and appurtenances are compatible with agriculture uses and cause minimal adverse impact on agricultural land. The Project site has an LSB mixed rating of Category A, B, C, D, and E. The Project is mainly in the Category B rated portion of the site and would remove 13.9-acres or 5.1 percent of LSB Category A- and B-rated land and an additional 8-acres or 4.6 percent of lower rated lands from potential agricultural productivity. The proposed Project will impact less than 0.4-percent of the Category A- and B-rated agricultural lands in the the Koolauloa District.

H. Public Notification and Comments: The Applicant has held numerous public meetings with small focus groups, individual community leaders, and elected officials. The following table lists key public meetings.

Meeting/Presentation/Update/Site Visit	Date
Kahuku Community Association	May 30, 2013
Kahuku Community Association	August 15, 2013
Scoping Meeting (NEPA)	November 13, 2013
Scoping Meeting (HEPA)	January 10, 2014
Koolauloa Neighborhood Board No. 28	January 9, 2014
Talk Story Meeting: Health Impacts and HECO/Rooftop Photovoltaic System Installation	January 15, 2014
Laie Community Association	February 6, 2014
Koolauloa Neighborhood Board No. 28	February 13, 2014
Laie Community Association	March 6, 2014
Hauula Community Association	2014 date not specified
Scoping Meeting No. 2 (HEPA)	November 19, 2014
Kahuku Community Association	February 19, 2014
Kahuku Community Association	May 20, 2015
Office of Environmental Quality Control	June 17, 2015
Draft EIS Public Meeting (HEPA and NEPA)	June 24, 2015
Laie Community Association	July 27, 2015
Kahuku Community Association	August 20, 2015
Kahuku Community Association	November 19, 2015
Endangered Species Recovery Committee Meeting (Habitat Conservation Plan)	December 17, 2015
Endangered Species Recovery Committee Meeting (Habitat Conservation Plan)	February 23, 2016
Second Draft EIS Public Meeting (HEPA)	May 15, 2016

Five public meetings were held for the HRS 343 environmental review process. During the public comment periods on the original Draft EIS and the Second Draft EIS, many letters were received from residents in the Kahuku community. Some letters of opposition to the Project and concern over specific issues were received. The topics most commonly brought up included traffic, visual impacts, Project siting, socioeconomics, public health and safety, and community benefits. The Applicant responded to all the questions and concerns.

I. Community Benefits: The Applicant has proposed to honor the commitment of the prior developer to pay $10,000 per wind turbine per year over the life of the Project to benefit the Kahuku Community. This translates into $90,000 per year over a 20-to 25-year Project life or the equivalent of approximately $2,000,000 of direct economic benefits to the Kahuku Community. It is anticipated that the Project funds would be administered by a board of local community members who would make decisions as to the use of the proceeds and which activities, programs, groups, and events will be sponsored.

J. Compliance With Condition B of CUP No. 2013/CUP-23:
Condition B requires dedication of 226-acres, or 50 percent of the lot area of the site for agricultural use for 10 years or the duration of the agribusiness activities, whichever is longer. Up to approximately 4.69-acres of permanent impacts from the site would occur within the agriculture dedication area. However, only 2.46-acres of the 4.69-acres are currently being farmed. No change will be made to the existing farmer's leases or any agricultural areas. There is no net loss of active agriculture as a result of the wind farm Project. Given the relatively small amount of land that will be removed from agricultural productivity, the use is compatible and will cause minimal loss of agricultural lands.

K. Department of Planning and Permitting Public Hearing: No Public Hearing was held by the DPP. CUPm does not require a Public Hearing.

L. Applicant's Justification: The Applicant provided justification statements which are part of the file.

III. ANALYSIS

The Director of DPP may allow a conditional use upon finding that the proposed use satisfies the following criteria:

A. The proposed use is permitted as a conditional use in the underlying zoning district and conforms to the requirements of the LUO. Pursuant to LUO Section 21-3.50-4(a) [Table 21-3], A wind farm is permitted in the AG-1 Restricted Agricultural District with an approved CUPm.

1. AG-1 Restricted Agricultural District Standards:

LUO Standards	LUO Provisions	Project Site
Minimum Lot Area (acres)	5 acres	452.7 acres (19,719,612 square feet) - Complies
Minimum Lot Width/Depth	150 feet	160 feet minimum - Complies
Yards: Front Side/Rear	 15 feet 10 feet	 Complies Complies
Maximum Building Area	10 percent zoning lot area (for non-agricultural structures) (45.2 acres)	Less than 0.001 percent (15,217 square feet) - Complies
Maximum Height	25-30 feet	Complies Wind turbines: 656 feet O&M building: 25 feet Met tower: 262 feet

In accordance with LUO Section 21-4.60(c)(7), the maximum permitted wind machine height is based on a setback from all property lines of one foot for every foot of wind machine height. The proposed structures meet all development standards for the AG-1 District

2. LUO Section 21-5.700, Specific Use Standards for Wind Machines:

LUO Standard	LUO Provisions	Project Site
Setback of Structures	All wind machines shall be setback from all property lines a minimum distance equal to the height of the system. Height shall include the height of the tower and the farthest vertical extension of the wind machine.	Complies Turbine 6 height and minimum setback: 591 feet. Turbines 7, 8, 9 height and minimum setback: 656 feet. Electrical substation equipment will be less than 30 feet, lighting mast less than 85 feet. Minimum setback of substation established according to highest vertical extension and will be met as the substation is located more than 85 feet from the property line.
Wind Machine Rated Capacity	In the agricultural and country zoning districts, accessory wind machines shall	Complies The wind machines have a

LUO Standard	LUO Provisions	Project Site
	have a rated capacity of no more than 100 kilowatts (kW). Wind machines with a rated capacity of more than 100 kW shall require a CUP(minor).	rated capacity of 3.45 MW. Thus, the Project requires a CUP (Minor).

This project will meet the specific use standards for wind machines.

3. LUO Sections 21-4.70 and 21-4.70-1, Landscaping, Screening, and Buffering:

Standard	LUO Provisions	Project Site
Parking Lots of Five or More Spaces	Minimum 5-foot wide landscape strip adjacent to any adjoining street right-of-way.	Not Applicable.
	The 5-foot landscape strip shall contain a continuous screening hedge not less than 36 inches in height at 18 inches on center. A minimum 36-inch-height wall/fence may be placed behind the setback line in lieu of a hedge with a vine or shrub along the front side of the wall.	Not Applicable.
	One canopy-form tree a minimum of 2-inch caliper shall be planted in the landscape strip for each 50 feet of street frontage.	Not Applicable.
Open Parking Lots With More Than Ten Parking Stalls	One canopy-form tree a minimum of 2-inch caliper for every 6 parking stalls, or one canopy-form tree of 6-inch caliper for every 12 parking stalls	Not Applicable; only six parking stalls proposed.
Outdoor Trash Storage Area	Screened on a minimum of three sides by a wall or hedge at least six feet in height.	Not Applicable; no trash storage area proposed.

The Applicant states that solid wastes generated during construction of the Project will be taken to the Waimanalo Gulch landfill or the H-Power facility in Kapolei.

4. LUO Article 6, Off-Street Parking and Loading Requirements: The Applicant proposes to provide a minimum of six off-street parking spaces to be located adjacent to the O&M Building. [Note: Parking lots with more than ten parking spaces will require parking lot trees as enumerated in the table above]. Pursuant to LUO Section 21-6.20 [Table 21-6.1], the off-street parking requirement for wind machines shall be "as determined by the Director". During normal operating hours, as many as six regular employees are expected to be on the site at any given time. Six off-street parking spaces is acceptable given the Applicants proposal and the fact that the LUO provides no parking standard for this use.

5. Signs: No signs are proposed for the site.

6. Access: The site is accessible via Malaekahana Valley Road, a private access road that directly joins Kamehameha Highway at the northeastern most point. Access to the site is adequate for the proposed Project.

B. The site must be suitable for the proposed use considering size, location, topography, infrastructure and natural features. The size, location, topography, and terrain of the site and the infrastructure available are suitable for the proposed installation. There are notable natural features on the property.

1. Size, Location, Topography, and Natural Features: The 452.7-acre site within the Koolauloa District, west of the town of Kahuku where the best wind resource on the island is located. The site has several steep ridges and deep gullies trending in southwest-to-northeasterly directions which eliminated some portions of the wind farm site from consideration because constructions in these areas are unsuitable. After those portions of the site were eliminated, due to the topography, the remaining land area was determined to have a sufficient area for a viable Project.

   The Project also made adjustments based on input from the surrounding communities regarding visual impacts and concerns about City and County of Honolulu setback distances. The Project eliminated locations that were the closest and most visible from Kamehameha Highway and Kahuku Town. The wind turbines have been sited to minimize impacts to existing agricultural cultivation on the site.

   The proposed wind farm can benefit the North Shore community and Oahu by providing clean, renewable wind energy. The Kahuku Community will also receive a Community Benefits package that equates to approximately $2 million dollars over the 20- to 25-year life of the Project.

2. Infrastructure:

   a. Water: During construction of the Project approximately 10,000 to 15,000 gallons of water per day will be needed for dust control, equipment wash down, and emergency fire suppression. If concrete is batched on site, water would be delivered to the site and stored in an onsite water tank. The water would be drawn from existing irrigation lines or come from a similar source. Excavation for the Project may require blasting which could result in physical disturbance of existing agricultural water wells in the immediate vicinity. Both excavation and blasting, if necessary, would be relatively shallow and would not impact the deeper aquifers typically used for potable water supplies. The Applicant will coordinate with landowners and tenants to identify the location of private wells within the wind farm site and will adjust the final layout to avoid impacting any existing wells. Should an impact to an existing well be unavoidable, the Applicant will work with the landowner to provide appropriate mitigation. No public water system infrastructure is located on the wind farm site.

   b. Wastewater: The Project will generate a minor amount of wastewater from portable toilets which will be provided and serviced on a contracted basis during construction. The contractor will dispose of sanitary

wastewater in accordance with all applicable regulations. The existing wastewater infrastructure in Kahuku and its wastewater treatment plant will have adequate capacity to accommodate the temporary increase in sanitary wastewater during construction. During operation of the wind farm minimal amounts of wastewater will be produced from the O&M Building which will be processed using an on-site septic system. There is no wastewater infrastructure located on site. The Project will not have any impacts on wastewater infrastructure.

c. Fire: A Fire Management Plan (FMP) has been prepared for the proposed Project. The FMP analyzed the information regarding fuel conditions, weather and climate conditions, fire history in the vicinity of the Project, firefighter access, and other factors. The FMP concluded that the likelihood of a wildfire during construction of the Project is very low. Water tanks will be maintained onsite for emergency fire suppression during construction. The Honolulu Fire Department is located near the site and additional fire suppression measures will be included into the Site Safety Handbook.

d. Police: There is a Honolulu Police Substation near the Project site. Should an incident occur during construction of the Project or during the operation the response times will be short. With the implementation of the Site Safety Plan and observance of safe working practices during construction potential for serious accidents will be greatly reduced.

e. Solid Waste: The Applicant will dispose of solid waste generated during construction of the Project at the Waimanalo Gulch landfill or the H-Power facility in Kapolei. The amount of waste generated is not expected to adversely impact existing waste management services or facility capacity.

f. Drainage: The Applicant will confirm storm water runoff requirements and if necessary incorporate storm water control measures such as seepage pit, drywells, and/or detention basins prior to grading and other construction activities. This will ensure there is no potential to alter drainage patterns within the wind farm site. As a condition of approval the Applicant shall provide verification of drainage.

g. Access and Circulation: Access to the site will be from Kamehameha Highway and via Malaekahana Valley Road, a private access road. The existing road surfaces will be improved as needed and widened to meet construction and maintenance activity requirements. Approximately 1.01 miles of new internal access roads will be required.

Disturbance during construction would occur within a wider buffer to allow adequate passage for the crawler crane and transport trucks, as well as turn-around locations for equipment. The road width of the corridor to be temporarily disturbed would be approximately 50 feet along the access roads. All access roads would have a gravel surface and will be constructed with storm water erosion and control features.

C. The proposed use will not alter the character of the surrounding area in a manner substantially limiting, impairing or precluding the use of surrounding properties for the principal uses permitted in the underlying zoning district. The Project site is in the AG-1 Restricted Agricultural District. Uses which support wind farm development are permitted, subject to an approved CUPm.

1. Koolauloa Sustainable Communities Plan (SCP)

The following are guidelines and policies relating to the Project within the Koolauloa SCP:

- *Mountain Areas and Trails: Avoid the establishment of utility corridors and other uses that would disturb areas with high concentration of native and endangered species.*

  The Project requires compliance with the Federal Endangered Species Act (ESA) and Migratory Bird Treaty Act (MBTA), and the State Hawaii Revised Statutes 196-D which prohibits the take of any endangered or threatened species. The Applicant has taken measures to avoid and minimize impacts to vegetation, wildlife, and threatened and endangered species. Incidental take of wildlife species is unavoidable and the Applicant has prepared a Habitat Conservation Plan (HCP) that outlines mitigation measures of these impacts.

- *Agriculture: Protect and preserve the agricultural lands from conversion to uses that are primarily residential, industrial, or commercial in purpose.*

  The Applicant states that agriculture, construction, and operation of the Project would impact less than seven percent of LSB rated A and B lands within the wind farm site over the long term, and less than one percent within the Koolauloa District.

- *Agriculture: Allow recreational or educational programs or other activities which provide supplemental income necessary to sustain the primary agricultural activity, as long as they are compatible with the character of the rural agricultural area and are accessory to the primary agricultural use of the site.*

  In 2008, the Board of Agriculture withdrew the portion of the wind farm site that is owned by the State Department of Land and Natural Resources (DLNR) from the Kahuku Agricultural Park as the lands were not used for the intended farming purposes because the area acted as a buffer between the Kahuku Agricultural Park, the military training area, and the existing Kahuku Wind Farm. The land is steep with no road access and no water infrastructure; therefore, it is not conducive to farming in the area. Therefore, the Board of Agriculture returned the lands to the DLNR Land Division for other economic uses.

- *Electrical Systems: Locate and design system elements such as renewable energy facilities (e.g., wind and solar), electrical sub-stations,*

communication sites, and transmission lines, including consideration of underground transmission lines, to avoid or mitigate visual impacts on scenic and natural resources, as well as public safety considerations.

Some of the visual impacts from a utility-scale wind farm site are unavoidable no matter where the Project is located. Although the Project is expected to have a visual impact, alternative energy sources (such as wind) are an integral part of meeting the State's renewable energy goals.

- *Electrical Systems: Encourage the development and use of renewable energy sources and energy conservation measures.*

  The purpose of the Project is to provide clean, renewable wind energy for the island of Oahu.

- *Prohibit encroachment or intensification of residential or other urban uses near wildlife sanctuaries and nature parks.*

  Installation of fencing at the Hamakua Marsh for waterbird mitigation under the HCP is intended to minimize the presence of waterbirds in the adjacent parking lot, limit the access of dogs to the area, and control illegal trash dumping. The fencing will provide an improvement to the waterbird species.

- *Wildlife preserve management plans should emphasize conservation and restoration of native plants, birds, fish and invertebrates. Private landowners should be encouraged to investigate the various State and Federal programs that provide incentives for landowners to manage their lands for the benefit of the wildlife.*

  See analysis above.

- *Identifying and protecting endangered species habitats and other important ecological zones from threats such as fire, weeds, feral animals, and human activity.*

  This mitigation area has been identified as an area to protect the Hawaiian hoary bat; therefore, these areas and the mitigation activities associated with them are consistent with the Central Oahu SCP.

2. Short-Term Impacts: Fugitive dust and noise may be generated during grading and construction activities. The Applicant will comply with all applicable State Department of Health's (DOH's) rules and regulations pertaining to dust and noise control during grading and construction activities.

3. Long-Term Impacts:

   a. Visual: A viewshed analysis was conducted to identify locations within the analysis area from which the proposed Project would potentially be visible. It was determined that the wind turbines would be most visible at

viewpoints within approximately one mile of the wind farm site. The turbines would be significantly taller than most existing structures in the area with the exception of the existing wind turbines from a previously approved wind farm Project. Visibility of the wind turbines would be blocked or partially obscured by topography in some locations and could be diminished in other locations because of factors such as distance from viewers, the angle of observation, atmospheric conditions, and the presence of vegetation and/or structures. The height of the wind turbines makes them highly visible which is an unavoidable consequence.

b. Natural Habitats: The Project site is predominantly non-native shrub land and forest primarily a mixture of aggressive non-native weedy species that took over following abandonment of agricultural production of sugar cane. Only a few native plants have been able to survive. No federal or State threatened, endangered, or candidate plant series were found. No plant species proposed for listing or special status plant species were found. No portion of the site has been designated as critical habitat for any listed plant species.

The Project site provides a wildlife habitat for a variety of birds, most of which are non-native, as well as several non-native mammal species and numerous invertebrates. There are no wetlands or water bodies within the Project site. There is no breeding or foraging habitat for seabirds, shorebirds, waterfowl, or wading bird species protected by the Migratory Bird Treaty Act. However, there are eight State and/or Federally threatened and endangered species known to occupy the Project site and surrounding areas. These include the Hawaiian hoary bat, Newell's shearwater, Hawaiian goose, Hawaiian stilt, Hawaiian coot, Hawaiian moorhen, Hawaiian duck, and Hawaiian short-eared owl. Each of these species are covered under the Project Habitat Conservation Plan which discusses anticipated direct and indirect impacts from the Project, mitigation for impacts, and avoidance and minimization measures.

c. Historic Sites/Cultural Resources: The Applicant conducted an archaeological and cultural assessment. In 2014, Pacific Legacy conducted a pedestrian survey of close to 100 percent of the Area of Potential Effect (APE), excluding only areas that were too steep to traverse, to identify archaeological sites. The APE includes an area that represented the maximum footprint of the Project within which all ground disturbing activities would occur and which would be occupied by the wind farm. In the portion of the APE within the Project, the Archaeological Inventory Survey identified a total of 22 new (not identified during previous archaeological investigations) archaeological sites, consisting of 93 distinct features. A majority of these features (59) were associated with a single archaeological site (SIHP No. 50-80-12-7844) that is a large discontinuous district of structural remnants of the former Kahuku Sugar Plantation. Of the remaining 21 sites located within the Project site, 19 were traditional Hawaiian pre-contact activities and two were historic.

Survey data were used by project engineers to refine the location of proposed facilities to avoid archaeological features. This resulted in a revision of the APE. Three features of the Kahuku Sugar Plantation site and 14 of the other 21 documented sites within the Project area are now located outside of the APE and would not be affected by the Project footprint. This leaves 56 features of the Kahuku Sugar Plantation site and 7 other sites (consisting of 12 distinct features) within the revised APE. Each of these 8 sites (Kahuku Sugar Plantation plus 7 other sites) has either yielded or has the potential to yield information important to state and national history. The Project will be developed and operate in a way that is respectful to Hawaii's culture and natural resources.

d. Noise Impacts: The Applicant indicates a noise analysis was conducted for the Project. The acoustic analysis area includes parcels located within 1.2 miles of the Project. Construction of the Project may cause short-term but unavoidable noise impacts. Sounds generated by construction activities would likely require a permit from the DOH, to allow the operation of construction equipment that exceed the maximum permissible noise level at property line locations. Time restrictions may be placed on time periods when the loudest construction activities are likely to occur between 7:00 a.m. and 7:00 p.m., Monday through Friday, and between 9:00 a.m. and 6:00 p.m. on Saturday.

During operation, the wind turbines are expected to generate sound on a regular basis. Based on the results from the acoustic monitoring and comparison of those results to the measured existing ambient sound levels, the predicted wind turbine sounds are expected to increase the ambient sound levels by no more than four decibels at the nearest sensitive receptor. The nearest residential area to the Project site is a distance of approximately one mile away and is a sufficient distance so that the wind turbine sounds are predicted to be at or below acceptable ambient noise levels of no more than four decibels.

The Applicant has adequately considered noise nuisance issues as part of its planning, design, and operations. Since the Applicant is required to comply with applicable State laws relating to noise generated during the construction phase, a condition of approval does not appear to be necessary.

The proposed wind farm will comply with the development standards of the AG-1 Restricted Agricultural District, and should not alter the character of the surrounding area in a manner substantially limiting, impairing, or precluding the use of the surrounding properties. Some of the visual impacts from a utility-scale wind farm site are unavoidable. Although the Project is expected to have a visual impact, alternative energy sources, such as wind, are an integral part of meeting the State's renewable energy goals. To ensure that the proposed wind farm does not significantly impact surrounding land uses, the Applicant shall be made aware that the CUPm will be re-evaluated if it is determined that the impacts of the wind farm are greater than anticipated. This requirement should be imposed as a condition of approval.

D. The use at its proposed location will provide a service or facility which will contribute to the general welfare of the community-at-large or surrounding neighborhood. The proposed wind farm will provide clean, renewable energy that will contribute to the general welfare of the community at large. A generous community benefits package to the community by the Applicant will provide funding directly to the Kahuku community. The wind farm will comply with all LUO requirements. The proposed wind farm should not adversely limit, impair, or preclude use of the surrounding neighborhood.

IV. CONCLUSIONS OF LAW

The Director hereby makes the following Conclusions of Law:

A. The proposed wind machines are a permitted as a conditional use in the underlying AG-1 Restricted Agricultural District with an approved CUPm.

B. The site is suitable for the proposed wind farm use considering its size, shape, location, topography, infrastructure, and there are no natural features.

C. The proposed wind machines will not alter the character of the surrounding area in a manner substantially limiting, impairing, or precluding the use of the surrounding properties for the principal uses permitted in the underlying zoning district, provided appropriate conditions of approval are imposed.

D. The use at its proposed location will provide a service or facility which will contribute to the general welfare of the community-at-large.

V. DECISION AND ORDER

Pursuant to the Findings of Fact and Conclusions of Law, the Director of the Department of Planning and Permitting (DPP) hereby **APPROVES** the application for a Conditional Use Permit, Minor (CUPm) to allow wind machines in the AG-1 Restricted Agricultural District, subject to the following conditions:

A. Development and operation of the wind farm, on the site shall be in general conformance with the approved Project, as described herein and shown on Exhibits A-1 through A-12, attached hereto, which shall be deemed the approved plans for the Project. Any modification of the approved Project and/or plans shall be subject to the prior review of and approval by the Director of the DPP. Minor modifications shall be processed in accordance with Section 21-2.20(k) of the Land Use Ordinance (LUO). Major modifications shall require a new CUPm.

B. Upon termination of the Project, the Applicant shall be required to decommission and remove all equipment, and restore and re-vegetate the Project site within 12 months after the end of operations.

C. Prior to application for building permits, the Applicant shall submit to the DPP a parking plan which shall show a minimum of six off-street parking spaces, the dimensions of the spaces and maneuvering areas, and the parking surface material to be used. The parking area shall consist of crushed rock, limestone or gravel, or an acceptable all-weather surface.

D. The Applicant shall submit a Final Drainage Report upon completion of the drainage study.

E. The Applicant shall implement quiet hours between the hours of 7:00 p.m. and 6:00 a.m., daily, during construction. Activities which may generate noise impacts to the surrounding communities shall not be permitted during the stipulated quiet hours.

F. This application has only been reviewed and approved pursuant to the provisions of LUO Section 21-5.40 (Wind Machines) and development shall comply with all other applicable LUO provisions.

G. Approval of this CUPm shall not constitute compliance with other LUO or governmental agencies' requirements, including building and/or sign permit approval. These are subject to separate review and approval. The Applicant shall be responsible for insuring that the final plans for the Project approved under this permit comply with all applicable government agencies' provisions and requirements.

H. The Applicant and/or landowners shall notify the Director of the DPP within 30 days concerning:

1. Any proposed change in use, including termination of any use on the property; and/or

2. Transfer in ownership of the property or of any use on the property.

In the case of a change in use, the Director of the DPP will determine if the proposed change requires a minor or major modification of the CUP. In the event of a change of ownership, the Director of the DPP shall notify the new owner (by copy of the CUP report) that the site and/or facility is permitted and/or governed by the CUP, and that compliance with all the conditions of approval is required.

I. The Applicant shall obtain the first development or building permit for the approved wind farm within two years from the date of this approval, or the CUPm shall lapse.

J. If, during construction, any previously unidentified archaeological sites or remains, (such as artifacts, shell, bone, or charcoal deposits, human burials, rock or coral alignments, pavings, or wall) are encountered, the Applicant shall stop work and contact the State Historic Preservation Division (SHPD) immediately. Work in the immediate area shall be stopped until SHPD is able to assess the impact and make further recommendations for mitigative activity.

K. The Applicant shall submit written notification to the Director within 30 days from the date the wind farm is discontinued and/or terminated.

L. The Director may modify the conditions of this permit by imposing additional conditions, modifying existing conditions, or deleting conditions deemed satisfied upon a finding that circumstances related to the approved Project have significantly changed so as to warrant a modification to the conditions of approval.

M. The Director may re-evaluate the CUPm after construction of the facility to determine if visual, noise, or other impacts are significantly greater than anticipated (i.e. as represented by the Applicant). The Director may impose additional conditions to mitigate greater adverse impacts, or revoke the CUPm if adverse impacts cannot be mitigated.

N. In the event of the noncompliance with any of the conditions set forth herein, the Director may terminate all uses approved under this permit or halt their operation until all conditions are met or may declare this CUPm null and void or seek civil enforcement.

Dated at Honolulu, Hawaii, this 27th day of October, 2016.

Department of Planning and Permitting
City and County of Honolulu
State of Hawaii

By _____
Arthur D. Challacombe
Acting Director

Attachments

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 768-8000 • FAX: (808) 768-6041
DEPT. WEB SITE: www.honoluludpp.org • CITY WEB SITE: www.honolulu.gov

FILE

KIRK CALDWELL
MAYOR

ARTHUR D. CHALLACOMBE
ACTING DIRECTOR

KATHY K. SOKUGAWA
ACTING DEPUTY DIRECTOR

2016/CUP-49(WA)

October 27, 2016

Mr. Neal Dixon
Tetra Tech, Inc.
737 Bishop Street, Suite 2340
Honolulu, Hawaii 96813

Dear Mr. Dixon:

SUBJECT: Conditional Use Permit (Minor) Application No. 2016/CUP-49
Na Pua Makani Wind Project - Subproject B
56-452 Kamehameha Highway - Kahuku
Tax Map Key 5-6-6: 18

The Director of the Department of Planning and Permitting (DPP) has **APPROVED** the above Conditional Use Permit (Minor) application to allow a wind farm with four wind turbines on AG-1 Restricted Agricultural District, subject to conditions contained in the enclosed Findings of Fact, Conclusions of Law, and Decision and Order.

Any party wishing to appeal the Director's action must submit a written petition to the Zoning Board of Appeals (ZBA) within 30 calendar days from the date of mailing or personal service of the Director's written decision (Zoning Board of Appeals Rules Relating to Procedure for Appeals, Rule 22-2, Mandatory Appeal Filing Deadline). Essentially, the Zoning Board of Appeals' rules require that a petitioner show that the Director based his action on an erroneous finding of a material fact, and/or that the Director acted in an arbitrary or capricious manner, or manifestly abused his discretion. Generally, the ZBA can only consider the evidence previously presented to the Director of DPP. The filing fee for appeals to the ZBA is $400 (payable to the City and County of Honolulu).

Failure to comply with ZBA Rules Chapter 22, Procedure for Appeals, may result in the dismissal of the appeal. Copies of the ZBA rules are available at the DPP. Appeals should be addressed to:

Zoning Board of Appeals
c/o Department of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Should you have any further questions on this matter, please contact William Ammons of our Urban Design Branch at 768-8025 or wammons@honolulu.gov.

Very truly yours,

Arthur D. Challacombe
Acting Director

Enclosure

/cc: Mr. Kerstan J. Wong (HECO)

TETRA TECH

May 8, 2019 TTCES-PTLD-2019-043

William Ammons
Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Subject: Minor Modification Request of Conditional Use Permit Minor (CUPm) Approval File No. 2016/CUP-49
Tax Map Key (TMK) (1) 5-6-006:018, Kahuku, Oahu, Hawaii

Dear Mr. Ammons:

Na Pua Makani Power Partners (NPMPP) has made minor modifications to the final location of the proposed wind turbine generators that were approved under Conditional Use Permit Minor (CUPm) Approval File No. 2016/CUP-49. In addition, NPMPP proposes to construct shorter wind turbine generators than what was originally approved in the CUPm. Due to these minor adjustments to the proposed use, NPMPP is requesting the approval of a minor modification to Permit No. 2016/CUP-49, as permitted under LUO Section 21-2.20(k)(1). The Department of Planning and Permitting (DPP) Master Application Form is included in Attachment 1. The required application fee is included in Attachment 2. The required drawings/plans are included in Attachment 3.

Description of Minor Modification

Permit No. 2016/CUP-49 approved four turbines on Tax Map Key (TMK) (1) 5-6-006:018, three at a height of 656 feet and one at a height of 590.5 feet. The proposed modification reduces the maximum height of each turbine to 567.6 feet. See Exhibits A-1 and A-2 in Attachment 3 for the dimensions of the originally approved turbines vs the modified turbine. This minor modification of turbine height would not change the generation capacity of each turbine. The proposed modification also includes minor adjustments to each turbine location to accommodate the final engineering design. See Exhibit B in Attachment 3 for a composite map overlaying the original turbine locations with the final/modified turbine locations.

Land Use Ordinance (LUO) Section 21-5.700 requires each wind turbine to be set back from all property lines a minimum distance equal to the height of the system. Therefore, the required setback distance from the nearest property line for all four modified turbines would be reduced to 567.6 feet. The modified location and heights of Turbines 6, 7, 8 and 9 will continue to meet the setback requirements as they will be set back a minimum of 567.6 feet from the nearest property line (see Exhibit C in Attachment 3).

Conformance with Land Use Ordinance Criteria

Per LUO Section 21-2.20(k)(1), minor alterations or modifications to an approved permit may be administratively authorized provided it meets the standards under subparts (A), (B), and (C). The following provides an analysis of how the minor modifications described above meet the standards under Section 21-2.20(k)(1):

The minor modification request:

(A) is reasonable, and consistent with the intent of the respective permit;

Tetra Tech, Inc.
737 Bishop Street, Suite 2340, Honolulu, Hawaii 96813
Tel (808) 441-6608 Fax (808) 836-1679 tetratech.com

Response: The minor adjustments to the turbine locations and decrease in turbine heights are reasonable adjustments that are typically made during the final design process, and which occur after Conditional Use Permit approval, but prior to issuance of grading and building permits. These minor modifications are also consistent with the intent of Permit No. 2016/CUP-49, as they do not change the Director's conclusion in the Decision and Order that the proposed use meets the criteria under LUO Section 21-2.90-2(a).

(B) does not significantly increase the intensity or scope of the use; and

Response: The proposed minor adjustments to the turbine locations and decrease in turbine heights do not increase the intensity or scope of the use as no additional turbines are proposed and no increase in generating capacity is proposed.

(C) does not create adverse land use impacts upon the surrounding neighborhood.
Response: The modified location and heights of Turbines 6, 7, 8 and 9 will meet the setback requirements as they will be set back a minimum of 567.6 feet from the nearest property line (see Exhibit B in Attachment 3). Therefore, the proposed minor adjustments to the turbine locations and the decrease in turbine heights would not create adverse land use impacts upon the surrounding neighborhood.

Environmental Assessment

An Environmental Impact Statement (EIS) was prepared under HRS Chapter 343 for the wind project and the Final EIS was accepted by the Board of Land and Natural Resources on July 22, 2016. The proposed minor modification would not substantially change the size, scope, intensity, use, location, or timing of the proposed action evaluated under the accepted Final EIS for the following reasons:

- The minor modification of turbine height would not change the generation capacity of each proposed turbine; therefore, this would not change the size, scope, intensity or use of the proposed action.
- The refinements to the turbine locations are minor and typical of final engineering refinements and would not be considered a substation change in location, use, size, scope, or intensity.
- The proposed minor modifications of a decreased turbine height and slight modifications to turbine location would not affect the timing of the proposed action.

If you have any questions regarding this request, or need further clarification, please contact me at (503)-290-9580, or at leslie.mcclain@tetratech.com.

TETRA TECH, INCORPORATED

Leslie McClain
Senior Environmental Planner

Enclosures
cc: Michael Hughes, Na Pua Makani Power Partners, LLC.
Eric Pendergraft, Na Pua Makani Power Partners, LLC.
Aaron Campbell, Malaekahana Hui West, LLC.
Chris Bokides, Site Constructors, Inc.

Tetra Tech, Inc.
737 Bishop Street, Suite 2340, Honolulu, Hawaii 96813
Tel (808) 441-6600 Fax (808) 836-1679 tetratech.com

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 768-8000 • FAX: (808) 768-6041
DEPT. WEB SITE: www.honoluludpp.org • CITY WEB SITE: www.honolulu.gov

FILE

KIRK CALDWELL
MAYOR

KATHY K. SOKUGAWA
ACTING DIRECTOR

TIMOTHY F. T. HIU
DEPUTY DIRECTOR

EUGENE H. TAKAHASHI
DEPUTY DIRECTOR

June 7, 2019

2019/MOD-36(WA)
2016/CUP-49

Ms. Leslie McClain
Tetra Tech, Incorporated
737 Bishop Street, Suite 2340
Honolulu, Hawaii 96813

Dear Ms. McClain:

SUBJECT: Request for Minor Modifications
Minor Modification No. 2019/MOD-36
Conditional Use Permit No. 2016/CUP-49
Na Pua Makani Wind Project - Subproject B
56-452 Kamehameha Highway - Kahuku
Tax Map Key 5-6-006: 018

The request for minor modification received May 8, 2019, to the above-mentioned Conditional Use Permit (CUP) No. 2016/CUP-49, to modify the previously approved wind farm, is **APPROVED**, subject to the following conditions:

1. Operation and development of the wind farm, shall be in general conformance with the approved Project, as described herein and shown on plans and drawings labeled Exhibits B-1 through B-3 (received May 8, 2019), on file at the Department of Planning and Permitting (DPP). Any modification to the Project and/or approved plans shall be subject to the prior review and approval by the Director of the DPP. Minor modifications shall be processed in accordance with Land Use Ordinance (LUO) Section 21-2.20(k). Major modifications shall require a new Conditional Use Permit (CUP) and Zoning Waiver.

2. This application has only been reviewed and approved pursuant to the provisions of LUO Sections 21-2.90, (CUP), and 21-5.650(b) (Utility Installations, Type A); approval of this minor modification does not constitute compliance with other LUO or governmental requirements, including building and/or sign permit approval. These are subject to separate review and approval. The Applicant

shall be responsible for insuring that the final plans for the Project approved under these permits comply with all applicable coded and other governmental provisions and requirements.

3. Except as modified herein, the approved plans and conditions of Conditional Use Permit No. 2016/CUP-49, shall remain in force.

4. The Director may modify the conditions of this approval by imposing additional conditions, modifying existing conditions, or deleting conditions deemed satisfied upon a finding that circumstances related to the approved Project have significantly changed so as to warrant modification to the conditions of approval. In the event of the noncompliance with any of the conditions set forth herein, the Director may terminate all uses approved under this permit or halt their operation until all conditions are met or may disclose this permit null and void or seek civil enforcement.

The Applicant proposes to modify the height of four previously approved wind turbines. The original height for Turbine No. 6 was 590.5 feet and the original height for Turbine Nos. 7, 8, and 9 was 656.2 feet. The proposed height for all turbines will be lowered to 567.6 feet or 22.9- and 88.6-foot reductions. All of the turbines will still meet the setback requirements (see Exhibits B-1 through B-3).

On October 27, 2016, Conditional Use Permit No. 2016/CUP-49 was approved to allow a wind farm with four wind turbines.

Given the circumstances and conditions, the proposal is reasonable, consistent with the intent of the original Zoning Waiver, does not significantly increase the intensity of scope of the utility installation use, and does not create adverse land use impacts for the surrounding neighborhood.

Any party (to the case) wishing to appeal the Director's action must submit a written petition to the Zoning Board of Appeals (ZBA) within 30 calendar days from the date of mailing or personal service of the Director's written decision (ZBA Rules Relating to Procedure for Appeals, Rule 22-2, Mandatory Appeal Filing Deadline). Essentially, the ZBA rules require that a petitioner show that the Director based his/her action on an erroneous finding of a material fact, and/or that the Director acted in an arbitrary or capricious manner, or manifestly abused his/her discretion. Generally, the ZBA can only consider the evidence previously presented to the Director of the Department of Planning and Permitting (DPP). The filing fee for appeals to the ZBA is $400 (payable to the City and County of Honolulu).

Failure to comply with ZBA Rules Chapter 22, Procedure for Appeals, may result in the dismissal of the appeal. Copies of the ZBA rules are available at the DPP. Appeals should be addressed to:

Zoning Board of Appeals
c/o Department of Planning and Permitting
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

Should you have any questions or need additional information concerning this Minor Modification, please contact William Ammons, of our staff, at 768-8025 or via email at wammons@honolulu.gov.

Very truly yours,

FOR Kathy K. Sokugawa
Acting Director

Enclosure: Receipt No. 122625
Exhibits B-1 through B-3

ZONING BOARD OF APPEALS

CITY AND COUNTY OF HONOLULU

THE STATE OF HAWAII

In the Matter of the Petitions of KEEP THE NORTH SHORE COUNTRY, a nonprofit corporation, and THE KAHUKU COMMUNITY ASSOCIATION, a nonprofit corporation, concerning the Na Pua Makani Wind Project – Subprojects A & B, 56-668 Kamehameha Highway, Kahuku, O'ahu, Tax Map Key (1) 5-6-008:006 & 5-6-006:018 From the Actions of the Director of Planning and Permitting, dated October 24, 2016 (2016/CUP-49); January 20, 2017 (2016/CUP-69 & 2016/W-63), & June 7, 2019 (2019/MOD-34, -35 & -36)	))))))))))))))	Case No. 2019/ZBA-7 (Consolidated) CERTIFICATE OF SERVICE

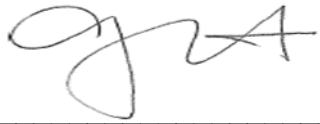
CERTIFICATE OF SERVICE

I hereby certify that on this date copies of the foregoing document, together with this Certificate of Service, were duly served on the following parties as set forth below:

Recipients	**E-Mail**
Kathy Sokugawa Department of Planning and Permitting City and County of Honolulu 650 South King Street, 7th Floor Honolulu, Hawaii 96813 ksokugawa@honolulu.gov *Director of the Department of Planning and Permitting, City and County of Honolulu*	☒

Brad T. Saito 530 S. King Street Honolulu, HI 96813 bsaito@honolulu.gov *Deputy Corporation Counsel for Director of the Department of Planning and Permitting, City and County of Honolulu*	☒
Lance D. Collins P.O. Box 179336 Honolulu, Hawaii 96817 lawyer@maui.net and Bianca K. Isaki 1720 Huna Street, 401B Honolulu, Hawaii 96837 bianca.isaki@gmail.com *Counsel for Keep the North Shore Country and Kahuku Community Association*	☒ 1 copy to each
Dawn Spurlin 530 S. King Street Honolulu, HI 96813 dspurlin@honolulu.gov *Deputy Corporation Counsel for the Zoning Board of Appeals*	☒ Carbon copy

DATED: Honolulu, Hawaii, March 27, 2020.



JODI S. YAMAMOTO
WIL K. YAMAMOTO
BRADLEY S. DIXON

YAMAMOTO CALIBOSO
A Limited Liability Law Company

Counsel for NA PUA MAKANI POWER PARTNERS, LLC