DAVID Y. IGE GOVERNOR OF HAWAII





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621 HONOLULU, HAWAII 96809 CARTY S. CHANG
INTERIM CHARPERSON
BOARD OF LAND AND NATURAL RESOURCES

DANIEL S. QUINN INTERIM FIRST DEPUTY

W. ROY HARDY ACTING DEPUTY DERECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BURBAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE BANAGEMENT
CONSERVATION AND RESOURCES ENFORCEMENT
ENORMERING
FORSTRY AND WILD LIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
LAND
LAND
LAND

LAND STATE PARKS

March 3, 2015

City and County of Honolulu
Department of Planning and Permitting
Attention: Mr. George I. Atta
Mr. Raymond Young
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

via email: rcsyoung@honolulu.gov

Dear Mr. Atta and Mr. Young,

SUBJECT:

Application for a Special Use Permit, Solar Energy Facility, Kawailoa, North

Shore, Oahu

Thank you for the opportunity to review and comment on the subject matter. In addition to the comments sent to you dated February 13, 2015, enclosed are additional comments from the Historic Preservation Division on the subject matter. Should you have any questions, please feel free to call Supervising Land Agent Steve Molmen at (808) 587-0439. Thank you.

Sincerely,

Russell Y. Tsuji Land Administrator

Enclosure(s)

2015 MAR 4 AIT 11 13

DEPT OF PLANNING

and PERMITTING

DAVID Y. IGE GOVERNOR OF HAWAII





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION KAKUHIHEWA BUILDING 601 KAMOKILA BLVD, STE 555 KAPOLEI, HAWAII 96707

February 25, 2015

Russell Y. Tsujii, Land Administer Land Division Department of Land and Natural Resources P.O. Box 621 Honolulu, HI 96809

Mr. George I. Atta, Director City and County of Honolulu Department of Planning and Permitting 650 South King Street, 7th Floor Honolulu, HI 96813

Dear Mr. Sirs:

SUBJECT:

Chapter 6E-42 Historic Preservation Review

Application for a Special Use Permit-Solar Energy Facility (2014/SUP-6)

Kawailoa Ahupua'a, Waialua District, Island of O'ahu TMK: (1) 6-1-005:001 portion, (1) 6-1-006:001 portion

Thank you for the opportunity to review and comment on the subject application for a special use permit to develop a 50 MW solar farm on approximately 304 acres of 3,492 acres owned by Kamehameha Schools. The proposed solar farm will be co-located with the existing Kawailoa wind farm. We received this application on January 26, 2015, along with a link to the Department of Land and Natural Resources, Land Division website for the permit submittal documentation. The applicant, First Wind, indicates the proposed solar farm will include a series of ground-mounted single axis photovoltaic panels, various electrical distribution systems, two on-site Mauka and Makai substations, connectors to existing switchyards, and a series of interior service roads.

A review of our records indicate that an archaeological inventory survey (AIS) was conducted adjacent to and within portions of the proposed solar farm project area (Rechtman et al. 2012). The AIS report identifies seventeen archaeological sites dating to the historic period within the project area. The sites were likely associated with WWII military communication and fire control networks (Sites 50-80-14-7155 through 7158), and plantation-era activities (Sites 50-80-14-7157 and 7159 through 7171). The SHPD Architecture Branch determined that reasonable and adequate information was collected during the AIS to warrant a determination of no further work; however project proponents recommended and conducted archaeological monitoring (Log No. 2012.0600, Doc. No. 1203RS17, 1112NN05). An archaeological monitoring report was submitted and accepted by SHPD on June 24, 2013 (Log No. 2012.3352, Doc. No. 1305NN19). The archaeological monitoring work resulted in the identification and documentation of an historic refuse pit dating to the mid-twentieth century. No other historic properties were encountered, and no further work was recommended (Log No. 2012.3352, Doc. No. 1305NN19).

Further review of our records indicate that an AIS was conducted in support of the present project. The report was submitted and accepted by SHPD on February 2, 2015 (Log No. 2014.05215, Doc. No. 1502SL02). The AIS further documented previously-recorded Site 50-80-04-7171, and newly recorded Site 50-80-04-7716, both of which are within the *makai* Collector Line Corridor. These two sites were assessed as significant pursuant to Hawaii

CARTY S. CHANG
INTERIM CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMEN

DANIEL S. QUINN INTERIM FIRST DEPUTY

W. ROY HARDY ACTING DEPUTY DIRECTOR - WATER

LAND STATE PARKS

LOG NO: 2015.00284 DOC NO: 2002GC09

Archaeology and PERMITTING

Archaeology COUNTY OF HONOLULU

Mr. Tsujii and Mr. Atta February 25, 2015 Page 2

Administrative Rules (HAR) §13-284-6 under Criterion "d" (has yielded, or is likely to yield, information important for research on prehistory or history). The project effect recommendation was "no historic properties affected" as both historic properties were sufficiently documented. However, mitigation in the form of archaeological monitoring was recommended to address possible inadvertent finds.

Based on the above information, we concur with an archaeological monitoring program during the construction phases of this project to ensure proper documentation and treatment of any inadvertent finds, including possible additional features related to Sites 7171 and 7716. We request on-site archaeological monitoring of all ground disturbing activities associated with this project and request that an archaeological monitoring plan be submitted to our office for review and acceptance pursuant to HAR §13-279-4 prior to any ground disturbing activities.

Please contact me at (808) 692-8019 or at Susan.A.Lebo@hawaii.gov if you have any questions regarding this letter.

Aloha,

Susan A. Lebo, PhD

Oahu Lead Archaeologist

Acting Archaeological Branch Chief

cc: Steve Molmen, DLNR Land Division (<u>Steve.L.Molmen@hawaii.gov</u>)
Raymond Young, City and County of Honolulu, DPP (<u>resyoung@honolulu.gov</u>)

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULE D 630 SOUTH BERETANIA STREET HONOLULU, HI 96843

15 FEB 27 P1:10



KIRK CALDWELL, MAYOR

DUANE R. MIYASHIRO, Chair ADAM C. WONG, Vice Chair THERESIA C. McMURDO DAVID C. HULIHEE

ROSS S. SASAMURA, Ex-Officio FORD N. FUCHIGAMI, Ex-Officio

ERNEST Y. W. LAU, P.E. Manager and Chief Engineer

ELLEN E. KITAMURA, P.E. Deputy Manager and Chief Engineer

DEPT OF PLANIERS
AND PERMITTING
CITY & COUNTY OF HOROLULU

TO:

GEORGE I. ATTA, FAICP, DIRECTOR

DEPARTMENT OF PLANNING AND PERMITTING

FROM:

ERNEST Y. W. LAU, P.E. MANAGER AND CHIEF ENGINEER

SUBJECT:

YOUR MEMORANDUM DATED JANUARY 16, 2015 REQUESTING

COMMENTS ON THE APPLICATION FOR A SPECIAL USE PERMIT

FOR THE SOLAR ENERGY FACILITY, 2014/SUP-6 (RY)

TAX MAP KEY: 6-1-005: 001; 6-1-006: 001

Water service cannot be made available to the proposed solar energy facility. The development is located above the service limit of our North Shore 225' water system.

We understand that the proposed project will not require water service from the Board of Water Supply.

If you have any questions, please contact Robert Chun, Project Review Branch of our Water Resources Division at 748-5443.



STATE OF HAWAII DEPARTMENT OF TRANSPORTATION 869 PUNCHBOWL STREET HONOLULU, HAWAII 96813-5097

February 23, 2015

FORD N. FUCHIGAMI

Deputy Directors
JADE T. BUTAY
ROSS M. HIGASHI
EDWIN H. SNIFFEN
DARRELL T. YOUNG

IN REPLY REFER TO:

STP 8.1756

Mr. George I. Atta, FAICP Director City and County of Honolulu Department of Planning and Permitting 650 South King Street, 7th Floor Honolulu, Hawaii 96813

Dear Mr. Atta:

Subject: Kawailoa Solar Farm Project

State Special Use Permit Application (2014/SUP-6)

Kawailoa, North Shore, Oahu, Hawaii

TMK: (1) 6-1-005: Portion of 001 and 6-1-006: Portion of 001

Our Department of Transportation's (DOT) comments on the subject project are as follows:

Airports Division

Photovoltaic (PV) systems can create a hazardous condition for a pilot due to possible glint and glare reflected from the PV array. We acknowledge a glint and glare analysis was conducted for typical flight paths used by aircraft approaching and departing Wheeler Army Airfield and Dillingham Airfield and other aircraft flights within the vicinity of the project area. However, the possibility of glint and glare could still occur under certain conditions.

If glint or glare from the PV array creates a hazard condition for pilots, the applicant must be prepared to immediately mitigate the hazard, upon notification by the DOT Airports Division or the Federal Aviation Administration (FAA).

Highways Division

The DOT Highways Division is still conducting its review and has not yet provided comments. The Statewide Transportation Planning Office will inform you of any further DOT comments once received.

Mr. George I. Atta, FAICP February 23, 2015 Page 2

STP 8.1756

If there are any questions, please contact Mr. Norren Kato of the DOT Statewide Transportation Planning Office at telephone number (808) 831-7976.

Sincerely,

FORD N. FUCHIGAMI

Director of Transportation

c: Gordon Wong, Federal Aviation Administration

Schnool 12,479

SCOTT E. ENRIGHT

Chairperson, Board of Agriculture

PHYLLIS SHIMABUKURO-GEISER

Deputy to the Chairperson

DAVID Y. IGE Governor

SHAN S. TSUTSUI Lt. Governor



State of Hawaii DEPARTMENT OF AGRICULTURE 1428 South King Street Honolulu, Hawaii 96814-2512

Honolulu, Hawaii 96814-2512 Phone: (808) 973-9600 FAX: (808) 973-9613

February 19, 2015

"15 FEB 23 A9 37

Mr. George I. Atta, FAICP Director Department of Planning and Permitting City and County of Honolulu 650 South King Street 7th Floor Honolulu, Hawaii 96813

Dear Mr. Atta:

Subject:

Application for Special Use Permit (2014/SUP-6)

First Wind (d.b.a. Kawailoa Solar, LLC)

Solar Energy Facility, Kawailoa, North Shore, Oahu Tax Map Key: 6-1-005:001(por.) and 6-1-006:001(por.)

Total Area: 384.1 acres

The Department of Agriculture (DOA) has reviewed the subject application and offers the following comments and a recommendation.

Background

A solar energy facility is proposed for a 384.1-acre site that is entirely within the State Agricultural District and outside the City's Urban Community Boundary (North Shore Sustainable Communities Plan, May 2011, Land Use Map). The project site has Land Study Bureau (LSB) Overall Productivity Ratings of "B" (332.3 acres), "C" (37.9 acres), and "E" (12 acres) (Detailed Land Classification – Island of Oahu, Land Study Bureau, December 1972). Department staff did a cursory review of the project site using the original LSB maps (22, 23). They determined that the Overall Productivity Ratings of B21 and B121 both would have improved to "A" with very good productivity potential for most agricultural uses if irrigation was available at the time of the study. The potential productivity of the "C" and "D" rated lands further mauka do not improve with irrigation.

For the "B" and "C" rated lands, the proposed facility in combination with a compatible agricultural activity may be permitted by special permit, pursuant to Act 55, Session Laws of Hawaii (SLH) 2014, now codified as Section 205-4.5(a)(21), HRS. The compatible agricultural activity contemplated is raising of sheep. The project will also include 550 linear feet of underground electrical lines on 1.9 acres of "A" rated soils of



Mr. George I. Atta February 19, 2015 Page -2-

which is entirely comprised of an existing roadway. At the end of the solar energy facility's operational life, the facility may be re-powered with new equipment, subject to permitting, or decommissioned and the land area returned to its pre-solar energy facility state (Application, page 5).

Recommendation

The DOA strongly supports existing farming operations and those seeking to start new farming enterprises. The DOA also supports solar energy operations in combination with compatible local food production on "B" and "C" rated agricultural land as provided for in Act 55, SLH 2014. "B" rated agricultural lands are a scarce and valuable resource with good capacity to contribute substantially to food self-sufficiency. Notwithstanding the law, the Department encourages proponents of utility-scale solar energy facilities to consider sites on "D" and "E" rated agricultural land that does not have acreage limitations or special use permit requirements.

The DOA notes that the landowner of the project site, Kamehameha Schools (KS), has just received approval by the Land Use Commission (LUC) to have the entire project site and surrounding agricultural land designated as Important Agricultural Lands (IAL) (Docket No. DR14-52). Representatives of KS indicated that they will use the revenue generated from the proposed solar farm facility to make improvements in support of agriculture development at Kawailoa, which is in accordance with their agricultural plan for the area. We also understand that the photovoltaic modules will be installed four to seven feet off the ground and be spaced apart to allow sunlight through.

This is the first Special Use Permit (SUP) application on the 100,000+ acres of IAL designated agricultural lands in the State. State law provides for a SUP to allow solar energy facilities in excess of what is allowed in Section 205-4.5(a)(20) (10 percent of the acreage of the parcel or 20 acres whichever is less). The permissible uses on IAL in State law are the same as those currently allowed on non-IAL agricultural land. Nevertheless, utility-scale solar energy facilities on agricultural land designated as IAL appears inconsistent with the IAL objective of maintaining "...a strategic agricultural land resource base that can support a diversity of agricultural activities and opportunities that expand agricultural income and job opportunities and increase agricultural self-sufficiency for current and future generations." (Section 205-42(b), HRS) Additionally, IAL designation indicates that the project site is well suited for intensive agricultural production, which appears to be contrary to one of the LUC's guidelines in determining an "unusual and reasonable use" – that the land upon which the proposed use is sought is unsuited for the uses permitted within the (Agricultural) district.

Therefore, the DOA believes this large-scale project with lands that have been designated as IAL should comply fully with the purpose and intent of Act 55, SLH 2014, Section 1 which is to "...enable the complementary uses of utility scale solar energy generation and <u>local food production</u>..." (emphasis added) on "B" and "C" rated agricultural land. We recommend the City impose a condition to the effect that the

Mr. George I. Atta February 19, 2015 Page -3-

applicant and its successors and/or assigns shall have established a sheep pasture operation or other agricultural enterprise on the property in compliance with Act 55, 2014 Session Laws of Hawaii for the duration of the operation of the solar energy generation facility.

Demand for sheep and lambs

The DOA reviewed the statewide sheep and lamb statistics as found in the 2012 Census of Agriculture. From 2007 to 2012, there were <u>decreases</u> in the total number of farms, the total number of sheep and lambs, the total number of sheep and lambs sold, and the number of small (1-24 head) sheep farms. The number of farms selling sheep and lambs was stable.

The 2007 to 2012 statistics for sheep and lamb farms on Oahu show that the island represents a very small fraction of the statewide numbers. However, there have been increases in nearly every category. The total number of sheep and lambs sold is an indication of demand, and sales increased from 13 in 2007 to 75 in 2012. However, this represents less than 2 percent of the total statewide sales of sheep and lamb. This small number of sales is surprising as 67 percent of Hawaii's de facto population (residents and visitors) in 2013 are on Oahu.

We also note there have been no sheep farms on Oahu with more than 100 sheep since 2007. There were 5 farms with a total of 266 sheep in 2012, or an average of 53 sheep per farm.

Proposed sheep operation

The lease rent to be charged to a local ranching business will be about \$10.00 per acre/year, or about 50 percent below the fair market rent for similar agricultural properties (Application, Attachment 5). The lease of 5 years or longer would commence after the solar farm is operational and will allow the tenant the use of the property's perimeter fencing, roadways, and other infrastructure (Application, pages 7-8). The applicant will work with the rancher, as needed, to facilitate watering systems, electrified fencing, pens, and loading facilities (Application, page 8). We believe the applicant's assistance in establishing the aforementioned infrastructure is very important for the sheep ranching operation to succeed.

The project site is said to possess adequate forage to support 100-200 head of sheep (Application, page 7). If the envisioned sheep pasture operation takes full advantage of the carrying capacity of the property, this would result in a 50 percent increase over Oahu's 2012 sheep population (2012 Census of Agriculture, Sheep and Lambs, Oahu). We note that the sheep operation analysis and recommendations are identical to that made for the Waiawa solar energy facility (2014/SUP-3). The subject Kawailoa project and the Waiawa proposal together would double the sheep population on Oahu.

Mr. George I. Atta February 19, 2015 Page -4-

Kualoa Ranch has signed a letter of intent with the applicant to pasture sheep on the property (Application, Attachment 5). Kualoa Ranch has a 4,000 acre ranch on windward Oahu and manages around 500 head of cattle. The Ranch does not manage any sheep; however, Kualoa Ranch has stated that their management team has experience with sheep (Phone call with Mr. David Morgan on February 13, 2015).

The key to selling local lamb meat is quality and supply (Application, Attachment 5, page 3). It appears that a large sheep pasture operation would be more likely to provide a consistent quality and supply that retailers and restaurants prefer. We agree with the summary in Attachment 5 (page 9-10) that "[c]areful planning in advance, establishing goals for the entire enterprise as well as those that will be keeping the sheep, a clear understanding what inputs are available, the costs of the infrastructure and inputs in the expected outcomes are all necessary for this enterprise to succeed."

Other agricultural operations

If the sheep operation is not successful, other agricultural activities compatible with a solar farm will be considered such as beekeeping, aquaponics, aquaculture, or other livestock (Application, page 8). With the exception of beekeeping, the other agricultural options will require a reliable and sufficient supply of clean water.

Water supply

The water supply for the project site will be by rainwater catchment, onsite irrigation ponds, or delivered by water truck (Application, page 8). Water delivery may become costly during dry periods. Adult sheep require up to 4 gallons of fresh water per day, so a 200-head sheep operation may require up to 800 gallons per day and distributed throughout the grazing area. Larger livestock may require more water. Aquaponic systems appear to require the least amount of water for replenishment. An aquaculture pond requires a million gallons per acre to fill and another million gallons per year to replace water lost due to evaporation and seepage (Model Aquaculture Recirculation System, Engineering and Operations Manual; National Council for Agricultural Education; Alexandria, Virginia; 1995, page 5).

Thank you for the opportunity to provide our input. Should you have any questions, please contact Earl Yamamoto at 973-9466 or email at earl.j.yamamoto@hawaii.gov.

Sincerely,

Scott E. Enright

Chairperson, Board of Agriculture

c: Office of Planning



OFFICE OF PLANNING STATE OF HAWAII

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813

Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

DAVID Y. IGE

LEO R. ASUNCION ACTING DIRECTOR OFFICE OF PLANNING

Telephone:

(808) 587-2846

Fax: Web:

(808) 587-2824 http://planning.hawaii.gov/

Ref. No. P-14652

February 17, 2015

Mr. George I. Atta, Director Department of Planning and Permitting City and County of Honolulu 650 S. King Street, 7th Floor Honolulu, Hawaii 96813

Dear Mr. Atta:

Subject:

Kawailoa Solar Farm

Project No.: 2014/SUP-6

Tax Map Keys: 6-1-006:001 and 6-1-005:001

Location: Kawailoa, Oahu, Hawaii

Thank you for the opportunity to review the subject application for a Special Use Permit to establish a 50-megawatt (MW) solar photovoltaic (PV) system in Kawailoa, Oahu. The proposed project would consist of solar panels and appurtenant facilities on approximately 384.1 acres of land located within the State Agricultural District and in the City and County of Honolulu AG-1 Restricted Agriculture zone. The PV system would be comprised of a horizontal single-axis tracking, ground-mounted PV system and would connect to existing Hawaiian Electric Company, Inc. (HECO) switchyards. In combination with the solar energy facility, the Applicant intends to lease the project area for the pasturage of sheep. The project would be located on approximately 332.3 acres (87%) of Class B land and 37.9 acres (10%) of Class C land, as rated by the Land Study Bureau (LSB) productivity rating system. Under the Agricultural Lands of Importance to the State of Hawaii (ALISH) system, the soils on the property are classified as Prime. The project area also includes approximately 1.9 acres (0.5%) of existing roadway on Class A land, and would involve installation of approximately 550 linear feet of underground electrical line beneath the roadway.

The Office of Planning (OP) notes the landowner of the subject property, Kamehameha Schools, has petitioned the Land Use Commission (LUC) to designate the subject project area, as well as 8,787 acres of the adjacent land in Kawailoa, as Important Agricultural Land (IAL). The LUC is expected to decide on the petition at a hearing on February 18, 2015. OP further notes that neither the subject application for the solar energy facility nor the petition to designate IAL state whether the power generated by the solar farm will be used for on-site agricultural activities. Instead, the application for the solar energy facility states that "the proposed project involves installation of a...solar energy facility to provide...renewable power to HECO for

integration into their electrical distribution system for delivery to customers on the island of Oahu" (p. 4).

The guidelines for Special Permits are contained within Hawaii Administrative Rules (HAR) § 15-15-95 which allow certain "unusual and reasonable" uses within Agricultural and Rural Districts other than those for which the district is classified. HAR § 15-15-95 lists six (6) guidelines for determining whether a proposed use is "unusual and reasonable." The following assesses the proposed project relative to the Special Permit guidelines:

1. The use shall not be contrary to the objectives sought to be accomplished by Chapters 205 and 205A, HRS, and the rules of the Commission.

Hawaii Revised Statutes (HRS) Chapter 205 seeks to protect agricultural lands and ensure their continued availability for agricultural use. It provides that the Agricultural District shall include lands with a high capacity for agricultural production, grazing, or other agricultural uses. Chapter 205 also recognizes, however, that some lands in the Agricultural District may not be suitable for the uses permitted in the Agricultural District and, therefore, other uses may be allowed with a Special Permit.

Pursuant to HRS §§ 205-2 and 205-4.5, as amended by Act 55 and Act 52, solar energy facilities may be permitted on land with Class B or C soils. More specifically, HRS §§ 205-2 and 205-4.5 state the following:

• HRS § 205-2(6)(A) and (B): Solar energy facilities may be permitted on land with soil classified by the LSB as overall (master) productivity rating class B, C, D, or E. Solar energy facilities placed within land rated Class B or C, however, shall not occupy more than ten percent of the acreage of the parcel, or 20 acres of land, whichever is lesser, unless a special use permit is granted.

Under this statute, the proposed project requires a Special Permit as it would occupy approximately 332.2 acres (greater than 20 acres) of Class B soils and 37.9 acres of Class C soils.

• HRS § 205-4.5(a)(3): Within the Agricultural District, the raising of livestock, including poultry, bees, fish, or other animal or aquatic life that are propagated for economic or personal use are permitted.

Under this statute, the proposed pasturage of sheep, in combination with the solar energy facility, is an allowable use.

- HRS § 205-4.5(a)(2l)(A),(B) and (C): Solar energy facilities on land rated Class B or C for which a special use permit is granted are permitted provided that:
 - (A) The area occupied by the solar energy facilities is also made available for compatible agricultural activities at a lease rate that is at least fifty per cent below the fair market rent for comparable properties;
 - (B) Proof of financial security to decommission the facility is provided to the satisfaction of the appropriate county planning commission prior to date of commencement of commercial generation; and
 - (C) Solar energy facilities shall be decommissioned at the owner's expense and according to certain requirements.

The Applicant represents that each of the above criteria would be met upon approval of the Special Permit or prior to beginning commercial operation.

Regarding the objectives of HRS Chapter 205A, the application sufficiently addresses the project's compliance with applicable Coastal Zone Management (CZM) program objectives and policies and it appears that the proposed use is not contrary to the objectives of the program.

Additionally, an archaeological inventory survey (AIS) has been provided. The results of the survey indicate that there are two historic sites that could potentially be affected by the project. The application states that a draft report has been submitted to the State Historic Preservation Division (SHPD) for their review and concurrence. It further states that <u>no ground-altering activities will occur prior to obtaining approval of the AIS from SHPD</u>.

2. The desired use would not adversely affect surrounding property.

According to the application, the proposed project is not anticipated to directly or indirectly affect adjacent uses. With the exception of the existing Kawailoa wind farm, the areas immediately surrounding the project site are undeveloped, but they support a variety of uses, including agriculture, conservation, and military operations. The existing 69-megawatt (MW) Kawailoa wind farm consists of 30 2.3 MW wind turbines, some of which are located within the vicinity of the proposed solar farm. (Refer to Applicant's Figure 4).

Construction of the solar facilities would result in short-term impacts that are temporary, intermittent, and localized. Long-term impacts related to operations and maintenance, including glare, noise, ambient temperature, and electric and magnetic fields would be minimal.

As noted above, the landowner of the subject property has petitioned the LUC to designate the subject project area, as well as 8,787 acres of the surrounding property, as IAL. Pursuant to HRS § 205-42, in order to achieve the objectives for the identification of important agricultural lands, the State shall:

- (1) Promote agricultural development and land use planning that delineates blocks of productive agricultural land and areas of agricultural activity for protection from the encroachment of nonagricultural uses; and
- (2) Establish incentives that promote:
 - (A) Agricultural viability;
 - (B) Sustained growth of the agriculture industry; and
 - (C) The long-term agricultural use and protection of these productive agricultural lands.

OP finds that the existing wind turbines and the proposed solar energy facility, alone, do not further the State's objective for the identification of IAL because they are non-agricultural activities that do not promote agricultural development, nor do they promote the incentives listed above. OP notes the project area would also be leased for the pasturage of sheep, which OP does recognize as a viable agricultural activity if implemented appropriately.

3. The use would not unreasonably burden public agencies to provide streets, sewers, water, drainage, schools, fire, and police resources.

According to the application, the proposed project would not require infrastructure support from public agencies due to the following:

- Access to the site is provided by a private agricultural road (Ashley Road), which extends from Kamehameha Highway through the project area, and is maintained as part of the existing wind farm. There is no public access to the site.
- No permanent wastewater facilities would be required.
- Small amounts of water would be required for occasional cleaning of the solar panels and to support co-located ranching operations. Water would be available either from rainwater catchment equipment, onsite irrigation ponds, or transported in via truck. No hook-up to the municipal water system is planned.
- Drainage across the site currently exists in the form of surface runoff based on the natural topography; the proposed project would not significantly alter the existing drainage patterns.
- It would be unlikely to use fire or police protection services.

4. Unusual conditions, trends, and needs have arisen since the district boundaries and rules were established.

OP recognizes the State interest in reducing our islands' dependency on fossil fuels and increasing efficiency measures, with a goal to generate 40 percent clean energy by 2030. OP also recognizes the State interest in conserving the State's agricultural land resource base and assuring the long-term availability of agricultural lands for agricultural use. OP acknowledges the proposed project seeks to balance these interests by providing both renewable energy generation and agricultural production at below-market value rent.

5. The land upon which the proposed use is sought is unsuited for the uses permitted within the district.

The land upon which the proposed use is sought is suited for the uses permitted within the district. As noted above, the project would be located on approximately 332.3 acres (87%) of Class B land, as rated by the LSB productivity rating system. The project area also includes approximately 1.9 acres (0.5%) of existing roadway on Class A land. Under the ALISH system, the soils on the subject property are classified as Prime.

Having reviewed the application and applied the available information to the applicable Special Permit guidelines, OP supports the intent of the proposed project to provide renewable energy for the island of Oahu and offers the following comments:

- Concerns will remain with regard to the statewide challenge in seeking a balance of
 maintaining the availability of high quality agricultural lands while promoting
 renewable energy sources such as solar facilities on lands within the Agricultural
 District.
- OP also has concerns that while "agri-voltaic" projects such as this one are technically feasible, the agricultural aspect of these projects is sometimes not implemented as represented by the applicant, i.e. the number of sheep or other grazing animals co-located within the solar facility is negligible. The proposed project would be located on soils rated ALISH Prime; the proposed solar facility would, therefore, preclude productive agricultural land from being used for agricultural purposes and contributing to the State's goal of assuring the long-term availability of agricultural lands for agricultural use if the pasturage of sheep does not occur.

- Similarly, the subject property is under consideration by the LUC to be designated as IAL. OP notes the project area would be leased for the pasturage of sheep, which OP does recognize as a viable agricultural activity if implemented appropriately. OP also notes the proposed project is expected to have an operational life of approximately 25-30 years, following which the lands may restored to conditions comparable to their existing conditions, such that future agricultural use may occur.
- OP supports the State Department of Agriculture's (DOA) comment from a letter dated January 29, 2015 to the Office of Planning regarding Kamehameha Schools' petition to designate IAL that "the DOA would support the IAL designation for the area proposed for the solar energy facility on the Kawailoa lands if the Petitioner commits to using a substantial portion of the energy generated by the solar energy facility directly for agricultural purposes, and/or commits to using a substantial portion of the income derived from the selling of electricity to the utility for agricultural activities within the petitioned area" (p. 7). (Refer to the attached Exhibit A).
- Should the Special Permit be granted, OP recommends that the requirements of HRS § 205-4.5(a)(21)(A), (B), and (C), relating to: 1) compatible agricultural activities; 2) proof of financial security for decommissioning; and 3) decommissioning requirements, be included as specific conditions of approval.

If you have any questions, please contact Katie Mineo of our Land Use Division at (808) 587-2883.

Sincerely,

Leo R. Asuncion Acting Director

Attachment

c: Land Use Commission

DAVID Y. IGE Governor

SHAN S. TSUTSUI Lt. Governor



State of Hawaii

DEPARTMENT OF AGRICULTURE

1428 South King Street

Honolulu, Hawaii 96814-2512

Phone: (808) 973-9600 FAX: (808) 973-9613

January 29, 2015

SCOTT E. ENRIGHT Chairperson, Board of Agriculture

PHYLLIS SHIMABUKURO-GEISER
Deputy to the Chairperson

Mr. Daniel Orodenker
Executive Officer
Land Use Commission
235 South Beretania Street, Suite 406
Honolulu, Hawaii 96813

Dear Mr. Orodenker:

Subject:

Docket No. DR14-52

Petition for Declaratory Order to Designate Important Agricultural Lands in

Kawailoa and Punaluu, Oahu

Tax Map Keys: <u>Kawailoa</u> (9,171.161 acres): 6-1-05: 1(Por.); 6-1-06: 1(Por.); 6-1-07: 1; 6-2-09: 1(Por.); 6-2-10: 1(Por.); 6-2-11: 1(Por.); 6-2-11: 21. <u>Punaluu</u> (420.887 acres): 5-3-01: 41 (Por.); 5-3-03: 1 (Por.); 5-3-04: 5;

5-3-04: 7; 5-3-04- 13; 5-3-04: 18(Por.); 5-3-04: 19; 5-3-07: 23(Por.)

Total Area: 9,592.048 acres

Thank you for the opportunity to comment on this important petition. The Department of Agriculture (DOA) expresses its appreciation to the petitioner for their interest in and effort to identify potential Important Agricultural Lands (IAL). We note that the petitioner is not seeking a reclassification of land pursuant to Section 205-45(b), Hawaii Revised Statutes (HRS) in conjunction with this petition to designate IAL. The petitioner is also voluntarily waiving all rights to claim any credits due pursuant to Section 205-45(h), HRS (Petition, page 23). This is the third IAL petition involving agricultural lands on the island of Oahu and the ninth IAL petition statewide.

In the following, we provide responses to the petitioner's statements as to how the petitioned area meets the eight criteria for identifying IAL (Section 205-44, HRS).



Mr. Daniel Orodenker January 29, 2015 Page -2-

Land Currently Used for Agricultural Production

Past agricultural production

According to the Agricultural Land Assessment (ALA) found in Appendix G of the petition, the lands of Kawailoa were used for taro and other various agricultural crops in the 1800's. (ALA, p. 2). Starting in the mid-1800's, sugar cultivation was the primary agricultural crop that was being cultivated by Castle and Cooke and later managed by Waialua Sugar Company. Upon further review by Department staff, sugarcane appears to have been planted throughout Kawailoa with the exception of the middle section where pineapple also appeared to be cultivated.

Punaluu was also used for taro and other various agricultural crops in the 1800's. (ALA, p. 3). Sugar cultivation was the primary agricultural crop in early 1900's to 1970. Upon further review by Department staff, sugarcane appears to have been planted throughout Punaluu. Taro and pineapple were also produced in smaller quantities. (ALA, p. 3).

Current Agricultural Production

According to the petition, only around 11% of the land in Kawailoa is currently in agricultural production. Approximately 722 acres (7.8%) of land is utilized for diversified agriculture and include seed corn, banana, taro, papaya, mango, and hydroponic lettuce. (ALA, p. 4). The location of current diversified agricultural production appears to be on the lower half of Kawailoa (ALA, Figure 1A). Other agricultural uses include approximately 60-80 head of cattle on 297 acres (3%), and 0.7 acres of koa windbreak (Petition, Exhibit H). The livestock use appears to be in the middle of the Kawailoa area abutting Anahulu Valley (ALA, Figure 1A). All current agricultural uses appear to be on lands that are near existing irrigation infrastructure (ALA, Figure 6A). Approximately 30 wind turbines for electrical generation occupy a portion of the property above 600 feet elevation (Petition, Exhibit H).

According to the petition, around 36% of the land in Punaluu is currently in agricultural production (ALA, p. 5). Approximately 120 acres (29%) of land is utilized for diversified agriculture and include banana, papaya, mango, cucumber, mixed vegetable, taro, and cacao. There also exists approximately 22 acres (5%) of livestock, 11 acres (3%) of aquaculture, and several nurseries. Additional research by Department staff determined that the location of the existing agricultural uses indicated in ALA Figure 1B is generally consistent with the location of past sugarcane cultivation on the land.

Future agricultural production

For Kawailoa, diversified agriculture will remain the primary focus. (ALA, p. 4). The mauka unirrigated lands are designated for multiple uses consisting of livestock, orchard, forestry and renewable energy (Petition, p. 9). These planned future uses appear to be in consonance with the Moku O Waialua North Shore Plan (Exhibit C, p. 2).

Mr. Daniel Orodenker January 29, 2015 Page -3-

Petitioner plans to increase renewable energy development by increasing the amount of wind turbines on the land, and is considering a 50MW facility on 500 acres of land which includes sheep grazing. (ALA, p. 4). The DOA notes that according to the Moku O Waialua North Shore Plan, alternative energy development is designated to be located in the eastern region of Kawailoa (Exhibit C, p. 2). Petitioner also plans to increase the availability of lands to farmers and provide long term leases (ALA, p. 4).

For Punaluu, diversified agriculture will remain the primary focus (see ALA, Figure 2B). The petitioner's "Punaluu Ahupuaa Plan" (Petition, Exhibit D) states that 175 acres of agricultural use will be added to what we presume to be the existing 133 acres of diversified agriculture, livestock, and aquaculture. This will bring the total area in agriculture to 308 acres, or 73 percent of the petitioned area. Petitioner also plans renovate the agricultural water system in the area, develop an overall agriculture production and land conservation plan, establish longer term leases with tenants, and construct a central agricultural baseyard facility (ALA, p. 5). These planned future uses appear to be in consonance with the Punaluu Ahupuaa Plan (Petition, Exhibit D).

Land with soil qualities and growing conditions that support agricultural production of food, fiber, or fuel- and energy-producing crops

According to the Land Study Bureau's Detailed Land Classification (LSB) for the Island of Oahu, 3,034.663 acres (33.3%) in Kawailoa is rated "A", 1,632.211 acres (17.8%) is rated "B", 1,134.423 acres (12.4%) is rated "C", 241.536 acres (2.6%) is rated "D", and 3,054.79 acres (33.3%) is rated "E" (see ALA, Figure 3A). Additional research by Department staff indicates that the majority of "C", "D", and "E" rated lands in Kawailoa would not improve in rating if irrigation was available. Soil rockiness and/or unfavorable slope severely limits agricultural use of these lands.

According to the LSB, 39.44 acres (9.4%) in Punaluu is rated "B", 146.313 acres (34.7%) is rated "C", 51.859 acres (12.3%) is rated "D", and 183.257 acres (43.5%) is rated "E" (see ALA, Figure 3B). Additional research by Department staff indicates that the majority of "D" and "E" rated lands in Punaluu would not improve if irrigation was available. The majority of "C" rated lands in Punaluu is already irrigated.

Lands identified under agricultural productivity ratings systems, such as the Agricultural Lands of Importance to the State of Hawaii (ALISH) system adopted by the Board of Agriculture on January 28, 1977

According to the Agricultural Lands of Importance to the State of Hawaii (ALISH) classification system, the Kawailoa site is comprised of 5,852.319 acres (63.8%) in "Prime", 198.572 acres (2.2%) is in "Other Important", and 3,120.27 acres (34%) is not classified according to ALISH (see ALA, Figure 5A). The lands in Kawailoa that are not in ALISH are generally consistent with the lands designated as "E" by the LSB.

Mr. Daniel Orodenker January 29, 2015 Page -4-

For the Punaluu site, 25.243 acres (6%) is in "Prime", 262.547 acres (62.4%) is in "Other Important", and 133.097 (31.6%) is not classified according to ALISH (see ALA, Figure 5B). Some of lands in Punaluu that are not in ALISH are not consistent with the lands designated as "E" by the LSB.

Land types associated with traditional native Hawaiian agricultural uses, such as taro cultivation, or unique agricultural crops and uses, such as coffee, vineyards, aquaculture, and energy production

The Kawailoa and Punaluu areas have been historically associated with traditional native Hawaiian agricultural uses. In Kawailoa, archaeological surveys indicate that traditional native Hawaiian agricultural uses were limited to the lower lands and gulches, while the upper table lands did not exhibit any traditional sites (Petition, p. 14). Historic native Hawaiian uses included taro pond fields, water courses/ditches, and dry planting fields for cultivation of taro, awa, hala, ipu, kukui, koa, banana, sugarcane, sweet potato, and wauke (Petition, p. 14).

In Punaluu, archaeological surveys and cultural impact assessments indicated that traditional native Hawaiian uses were prevalent in (Petition, p. 15). Historic native Hawaiian uses include taro pond fields, water courses/ditches, and dry planting fields for cultivation of taro, awa, hala, ipu, kukui, koa, banana, noni, olona, sweet potato, and wauke (Petition, p. 15). Approximately 11 acres (Petition, Exhibit I) is currently being used to cultivate taro, and approximately 11 acres is in aquaculture (ALA, p. 5).

Lands with sufficient quantities of water to support viable agricultural production

Along with good quality soil, a reliable and sufficient supply of irrigation water is critical for maximal agricultural production. Irrigation water should be available in a quantity that meets the maximum daily demand over a sustained period of time which usually occurs during the summer months. Information on the location and total acreage of irrigated lands, the existing and estimated future irrigation water demands, and the available amount of water for irrigation per day is necessary to determine whether or not lands have sufficient quantities of water to support viable agricultural production.

The existing irrigation system services all of the southern portion (Opae'ula) of the Kawailoa area, but only services approximately 2/5ths of the makai half of the northern portion (Kawailoa). The irrigation system in Kawailoa connects Waimea River, Ka'alaea Stream, Kawailoa Stream, Laniakea Stream, and Anahulu River with ditches, pipelines and reservoirs (see ALA, Figure 6A). Petitioner plans to maintain and fix aging irrigation infrastructure and has recently expended over \$13 million to improve agricultural water resources for current and planned future irrigation needs (ALA, p. 7). Kawailoa receives between 35 to 80 inches of rain per year (see ALA, Figure 6A).

Mr. Daniel Orodenker January 29, 2015 Page -5-

The petition states that the proposed IAL lands in Punaluu are primarily irrigated by the Punaluu Stream and ditches that are connected to the stream. Petitioner has upgraded the existing water system by piping over 5,000 linear feet of the former Punaluu irrigation ditch (ALA, p. 8). Petitioner states that from 2009 to 2014, approximately \$1.5 million has been invested in upgrading the irrigation system in Punaluu, and plans to invest another \$5 million for stream restoration work (ALA, p. 8). Punaluu receives between 65 to 120 inches of rain per year.

The DOA notes that for both the Kawailoa and Punaluu areas, the petitioner may need to petition the Commission on Water Resource Management to amend the interim instream flow standard for any new or expanded diversions of surface water.

Land whose designation as Important Agricultural Lands is consistent with general, development, and community plans of the County

The petition area is fully within the State Agricultural District. The Kawailoa area is zoned as AG-1 (Restricted Agriculture) by the City and County of Honolulu, and the Punaluu area is zoned as AG-2 (General Agriculture). The Kawailoa area is primarily designated as Agricultural in the North Shore Sustainable Communities Plan, except for the streams and fringes of the streams which are designated as Preservation. The Punaluu area is largely designated as "Agricultural" in the Koolau Loa Sustainable Communities Plan, except for the streams and fringes of streams which is in Preservation. The Punaluu lands appears to abut the Urban District on the makai edges of the petition area.

Land that contributes to maintaining a critical land mass important to agricultural operating productivity

The Kawailoa/Opaeula area (9,171.161 acres) has a history of sugarcane and pineapple cultivation on the lands that were level enough to support agricultural activity. The lower two-fifths of Kawailoa contains nearly all the "A" and "B" rated land and is relatively unbroken by gulches. Similarly, the makai two-thirds of Opaeula possesses all the "A" and "B" rated lands and is relatively unbroken by gulches. The upper reaches of both Kawailoa and Opaeula appear to have more land area in gulches which makes it difficult for agricultural use in both areas above the ditch system. Further, the Kawailoa area is entirely separated from the Opaeula area by Opaeula Gulch. We note what appears to be a large number of kuleana properties within the Gulch. With the exception of Drum Road on the mauka edge of both areas, there are no roadways connecting Kawailoa and Opaeula.

The petitioner's "North Shore Plan – Paalaa to Kapaeloa" states that the upper reaches of Kawailoa and Opaeula are to be used for "Establish alternative energy uses" such as solar energy, wind, and hydro-power (Petition, Exhibit C), and leaves the lower lands for diversified agriculture. There are 30 wind turbine operating in upper Kawailoa, on

Mr. Daniel Orodenker January 29, 2015 Page -6-

plateaus between the gulches. Given the agricultural history and the land use plan for Kawailoa/Opaeula, the "critical land mass" criterion would clearly apply to the lower elevations where the petitioner identifies "Diversified Agriculture" as the primary use of the land (Petition, Exhibit C).

The Punaluu area (420.887 acres) appears to have been the eastern terminus of the former Kahuku Plantation Company. Unlike the Kawailoa/Opaeula site, Punaluu has a substantial acreage classified as Preservation along the branches of the Punaluu Stream, according to the Koolauloa Sustainable Communities Plan (Petition, Exhibit G, Figure 7B). The property also abuts the Urban District along the makai edge (Petition, Exhibit G, Figure 8B). The current agricultural operations (Petition, Exhibit G, Figure 1B) is largely verified by recent satellite imagery. There appears to be agricultural activity in lands adjacent and to the northwest of the Punaluu site. There is a relatively steep area along the southern boundary that forms an arc.

The petitioner's "Punaluu Ahupuaa Plan" (Petition, Exhibit D) states that 175 acres of agricultural use will be added to what we presume to be the existing 133 acres of diversified agriculture, livestock, and aquaculture. This will bring the total area in agriculture to 308 acres, or 73 percent of the petitioned area. The Punaluu stream is fundamental to the agricultural activities in the area and is appropriate to be included in the petition. Given the agricultural history and the agricultural land use plan for the Punaluu site, the "critical land mass" criterion would to most of the petitioned area.

Land with or near support infrastructure conducive to agricultural productivity, such as transportation to markets, water, or power

Kawailoa is near Kamehameha Highway and Haleiwa Village. In the future, petitioner plans to increase the residential and commercial areas in Haleiwa Village. (Petition, Exhibit C). The service area for the existing irrigation system in the northern Kawailoa area (Kawailoa) appears to be limited to approximately 2/5ths of the makai half of the proposed designation.

CONCLUSION

The DOA supports the majority of the petitioner's request to have 9,592 acres of agricultural land in the Kawailoa/Opaeula and Punaluu areas designated as Important Agricultural Land.

In the Kawailoa/Opaeula site, the petitioner's plan for the eastern part of the property is to undertake alternative energy uses such as wind, hydro, and solar energy. Specifically, the petitioner states that 500 acres will be set aside for a 50MW solar energy facility with compatible sheep grazing. This area is also the most poorly suited to agricultural use because of the numerous gulches, poorer soil quality, and lack of

Mr. Daniel Orodenker January 29, 2015 Page -7-

supplemental irrigation water supply. Further, we do not recall any other request for IAL designation that included acreage for a utility-scale solar energy facility.

Notwithstanding our concerns, if the petitioner confirms and commits to using a substantial portion of the energy generated by the proposed solar energy facility directly for agricultural purposes, and/or confirms and commits to using a substantial portion of the income derived from the selling of electricity to the utility for agricultural activities within the petitioned area, the Department would support IAL designation for the area proposed for the solar energy facility as described in the petition (Exhibit C, "Plan Map and Projects").

Also for the Kawailoa/Opaeula site, the petitioner should provide the Commission with information showing that the irrigation water system and improvements will provide a quantity of irrigation water sufficient to maintain plant and animal health during dry periods.

In the Punaluu site, there appears to be abundant irrigation water supply, fairly productive soils, and 120 acres of existing diversified agricultural activities. We note from Exhibit I of the petition that there is existing agricultural activity on some of the LSB "E" rated land that is also not classified by the Agricultural Lands of Importance to the State of Hawaii. There appears to be agricultural land to the north of the petitioned area that are in crop production. The Department believes that the Punaluu site, in its entirety, should be designated as IAL.

Singerely,

Scott E. Enright, Chairperson

Board of Agriculture

c: Office of Planning



United States Department of the Interior



FISH AND WILDLIFE SERVICE Pacific Islands Fish and Wildlife Office 300 Ala Moana Boulevard, Room 3-122 Honolulu, Hawai'i 96850



In Reply Refer To: 2015-TA-0154

Mr. George I. Atta FAICP, Director Department of Planning and Permitting City and County of Hawai'i 650 South King Street, 7th Floor Honolulu, Hawai'i 96813

FEB 1 7 2015

Subject:

Technical Assistance for the Special Use Permit for the Kawailoa Solar Farm

Project, O'ahu

Dear Mr. Atta:

The U.S. Fish and Wildlife Service received your letter on January 22, 2015, requesting our comments on the Application for a Special Use Permit for First Wind's (d.b.a. Kawailoa Solar, LLC) proposed development of the Kawailoa Solar Farm Project, a 55 megawatt (MW) solar energy facility on approximately 384.1 acres² on the north shore of O'ahu [TMK: (1) 6-1-005:001 (por.) and 6-1-006:001 (por.)]. The proposed solar farm would be co-located with the existing Kawailoa wind farm. By interconnecting to the same electrical switchyards and transmission lines as the existing wind farm, the proposed solar project builds on work that was done to support the wind farm and enables connection to Hawaiian Electric Company, Inc.'s electrical grid without the need for new interconnection infrastructure.

The solar farm would be comprised of a horizontal single-axis tracking, ground-mounted photovoltaic system, designed to maximize the use of the terrain, with the panels facing approximately due south. Each panel would generate power at 1,000 volts and on average, are expected to extend approximately 4 feet 6 inches to 9 feet 6 inches off the ground. Electrical equipment including combiner boxes, collector lines, inverters, weather monitoring stations, and switch gear would be installed in the vicinity of the panels, as needed to increase the electrical voltage and aggregate the generated electricity for transmittal via the collector system. The proposed Kawailoa Solar Farm would produce clean, low-cost renewable energy for the island of O'ahu.

The area was historically part of a large sugar plantation, and is comprised of agricultural fields located atop a series of tablelands interspersed with gulches formed by intermittent drainages. First Wind intends to lease the proposed site for sheep ranching. Except for the transformers,



most of the fenced area would be available to support 100-200 head of sheep on a year-round basis.

We have reviewed the information you provided and pertinent information in our files, including data compiled by the Hawai'i Biodiversity and Mapping Program as it pertains to listed species and designated critical habitat in accordance with section 7 of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 et seq.). Our data indicate that the endangered Hawaiian stilt (Himantopus mexicanus knudseni), Hawaiian gallinule (Gallinula chloropus sandvicensis), Hawaiian coot (Fulica alai), Hawaiian duck (Anas wyvilliana) (collectively referred to as Hawaiian waterbirds), endangered Hawaiian goose (Branta sandvicensis), threatened Newell's shearwater (Puffinus auricularis newelii), and federally endangered Hawaiian petrel (Pterodroma sandwichensis) could transit the area and be impacted by components of your project. The federally endangered Hawaii hoary bat (Lasiurus cinereus semotus) may forage and roost in the project area. There is no proposed or designated critical habitat located in the vicinity of the proposed project area. We offer the following comments to assist the Planning Commission and First Wind.

The Hawaiian hoary bat roosts in both exotic and native woody vegetation and, while foraging, will leave young unattended in "nursery" trees and shrubs when they forage. If trees or shrubs suitable for bat roosting are cleared during the breeding season, there is a risk that young bats could inadvertently be harmed or killed. To minimize impacts to the endangered Hawaiian hoary bat, woody plants greater than 15 feet (4.6 meters) tall should not be disturbed, removed, or trimmed during the bat birthing and pup rearing season (June 1 through September 15). Site clearing should be timed to avoid disturbance to Hawaiian hoary bats in the project area. Additionally, Hawaiian hoary bats have been snagged on barbed wire fencing while flying. We recommend that the solar facility fence design be designed to avoid the use of barbed wire.

Please note that some photovoltaic systems on the continental United States are resulting in impacts to migratory waterfowl and shorebirds. This source of mortality has been described previously (McCrary et. al. 1986), and recent impacts are being observed at solar facilities in California, including the Desert Sunlight Solar Farm and Genesis Solar Energy Project. Birds have been inadvertently attracted to these sites due to solar panels' resemblance to water and their proximity to important migratory flyways (Donnelly-Shores 2013 and Clarke 2013). Once attracted, collisions with the solar arrays have resulted in injuries and mortalities; once grounded, birds are also subject to predation (Kagan et. al. 2014). While attraction to solar arrays has not yet been documented in Hawai'i, the State harbors a significant diversity of waterbird and shorebird species. We recommend that personnel at the solar site be educated about the potential for birds to be attracted and inadvertently harmed. If monitoring indicates that species are occurring at the photovoltaic system, or additional information about the facility's impacts to native Hawaiian species becomes available, please contact us so we may assist you in avoiding and minimizing impacts.

We hope this information assists the Planning Commission with their approval process. We appreciate your efforts to conserve listed species. If you have questions about our comments,

please contact Jiny Kim, Island Team Biologist; O'ahu, Kaua'i, North Western Hawaiian Islands, and American Samoa Geographic Team (phone: 808-792-9400, fax: 808-792-9581).

Sincerely,

Aaron Nadig

Island Team Manager

O'ahu, Kaua'i, North Western Hawaiian Islands, and American Samoa

DECRIMENT OF TRANSPORTATION SERVICES CITY AND COUNTY OF HONOLULU

RECEIVED

650 SOUTH KING STREET, 3RD FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 768-8305 • Fax: (808) 768-4730 • Internet: www.honolulu.gov

KIRK CALDWELL 15 FEB 17 A11 :34

DEPT OF PLANNING AND PERMITTING CITY & COUNTY OF HONOLULU



MICHAEL D. FORMBY DIRECTOR

MARK N. GARRITY, AICP DEPUTY DIRECTOR

TP1/15-595784R

February 13, 2015

MEMORANDUM

TO:

George I. Atta, FAICP, Director

Department of Planning and Permitting

FROM:

Michael D. Formby, Directo

Department of Transportation Services (DTS)

SUBJECT:

Application for a Special Use Permit, Solar Energy Facility, Kawailoa,

North Shore, Oahu, Project Number 2014/SUP-6, TMK: 6-1-005:

Portion of 001 and 6-1-006: Portion of 001

This responds to your correspondence of January 16, 2015, regarding the subject project. Based on our review, we have no comments to offer at this time. However, the DTS recommends that prior to the start of the project, the affected Neighborhood Board, residents, and businesses should be regularly apprised of the status of the project and implementation actions.

Thank you for the opportunity to review this matter. Should you have any further questions on the matter, you may contact Virginia Sosh of my staff at 768-5461.

Young, Raymond

From:

Steve.Molmen@hawaii.gov

Sent:

Friday, February 13, 2015 3:22 PM

To:

Young, Raymond

Subject:

Application for a Special Use Permit, Solar Energy Facility, Kawailoa, North Shore, Oahu

Attachments:

20150213151720627.pdf

Dear Mr. Atta and Mr. Young,

Attached, please find our comments on the subject project. No hard copy will be sent.

Best regards,

Steve Molmen, Supervising Land Agent Land Division Department of Land and Natural Resources State of Hawaii 1151 Punchbowl Street, Suite 220 Honolulu, HI 96809-0621

Tel.: (808) 587-0439 Fax: (808) 312-6357

Email: steve.molmen@hawaii.gov

Confidentiality Notice: This e-mail message, including any attachments, is for the sole use of the intended recipient(s) and may contain confidential and/or privileged information. Any review, use, disclosure or distribution by unintended recipients is prohibited. If you are not the intended recipient, please contact the sender by reply e-mail and destroy all copies of the original message.

DAVID Y, IGE GOVERNOR OF HAWAII





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621 HONOLULU, HAWAII 96809

February 13, 2015

CARTY S. CHANG
INTERIN CHARPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DANIEL S. QUINN INTERIM FIRST DEPUTY

W. ROY HARDY ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMESSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING

UMMISSION ON WAITER KESOURCE BANNAGEMENT
CONSERVATION AND CRSOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

City and County of Honolulu
Department of Planning and Permitting
Attention: Mr. George I. Atta
Mr. Raymond Young
650 South King Street, 7th Floor
Honolulu, Hawaii 96813

via email: rcsyoung@honolulu.gov

Dear Mr. Atta and Mr. Young,

SUBJECT:

Application for a Special Use Permit, Solar Energy Facility, Kawailoa, North

Shore, Oahu

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR) Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comments.

At this time, enclosed are comments from (1) Land Division – Oahu District; (2) Engineering Division; and (3) Division of Aquatic Resources. No other comments were received as of our suspense date. Should you have any questions, please feel free to call Supervising Land Agent Steve Molmen at 587-0439. Thank you.

Sincerely,

Russell Y. Tsuji Land Administrator

Enclosure(s)

DAVID Y. IGE GOVERNOR OF HAWAII





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621 HONOLULU, HAWAII 96809

January 22, 2015

MEMORANDUM

TO:

DLNR Agencies:

X Div. of Aquatic Resources

Div. of Boating & Ocean Recreation

X Engineering Division

X Div. of Forestry & Wildlife

Div. of State Parks

X Commission on Water Resource Management

X Office of Conservation & Coastal Lands

X Land Division - Oahu District

X Historic Preservation

FROM:

SUBJECT: LOCATION: Russell Y. Tsuji, Land Administrator

Application for a Special Use Permit, Solar Energy Facility, Kawailoa, North Shore, Oahu Kawailoa, North Shore, Oahu; Tax Map Key: 6-1-005: Portion of 001 and 6-1-006: Portion of

APPLICANT:

Kawailoa Solar, LLC by its consultant CH2M Hill

Transmitted for your review and comment on the above-referenced document. We would appreciate your comments on this document which can be found here:

1. Go to: https://sp01.ld.dlnr.hawaii.gov/LD

2. Login: Username: LD\Visitor Password: 0pa\$\$word0 (first and last characters are zeros)

Click on: Requests for Comments. Click on the subject file "Application for a Special Use Permit, Solar Energy Facility, Kawailoa, North Shore, Oahu", then click on "Files" and "Download a copy". (Any issues accessing the document should be directed to Jonathan Real, Applications/Systems Analyst at 587-0427 or Jonathan.C.Real@hawaii.gov)

Please submit any comments by February 12, 2015. If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Supervising Land Agent Steve Molmen at (808) 587-0439. Thank you.

Attachments

We have no objections. We have no comments. Comments are attached.

Signed:

Print Name:

Date:

WILLIAM M. TAM INTERIM DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES NG AND OCEAN RECRE

AQUATIC RESOURCES
BOATING AND CCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
INSTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

DAVID Y. IGE GOVERNOR OF HAWAII





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621 HONOLULU, HAWAII 96809

January 22, 2015

BOARD OF LAND AND NATURAL RESOURCES
MMISSION ON WATER RESOURCE MANAGEMENT

AQUATIC RESOURCES NG AND OCEAN RECREATION BOATING AND OCEAN RECHEALISM
BOATING AND OCEAN RECHEALISM
COMESSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND RESOURCE SHYORCEMENT
ENGINEERING
FORESTRY AND WILDLEE
HISTORIC PRESERVATION
KAHOOLAWE SLAND RESERVE COMMISSION
LAND
LAND
LAND
LAND
LAND
LAND

LAND STATE PARKS

15 JAN 26 MOB47 ENGINEERING

MEMORANDUM

TO: PR!

DLNR Agencies:

X Div. of Aquatic Resources

Div. of Boating & Ocean Recreation

X Engineering Division

X Div. of Forestry & Wildlife

Div. of State Parks

X Commission on Water Resource Management

X Office of Conservation & Coastal Lands

X Land Division - Oahu District

X Historic Preservation

FROM: 70:

SUBJECT:

LOCATION:

Russell Y. Tsuji, Land Administrator

Application for a Special Use Permit, Solar Energy Facility, Kawailoa, North Shore, Oahu

Kawailoa, North Shore, Oahu; Tax Map Key: 6-1-005: Portion of 001 and 6-1-006: Portion of

APPLICANT:

Kawailoa Solar, LLC by its consultant CH2M Hill

Transmitted for your review and comment on the above-referenced document. We would appreciate your comments on this document which can be found here:

Go to: https://sp01.ld.dlnr.hawaii.gov/LD

Login: Username: LD\Visitor Password: Opa\$\$word0 (first and last characters are zeros)

Click on: Requests for Comments. Click on the subject file "Application for a Special Use Permit, Solar Energy Facility, Kawailoa, North Shore, Oahu", then click on "Files" and "Download a copy". (Any issues accessing the document should be directed to Jonathan Real, Applications/Systems Analyst at 587-0427 or Jonathan.C.Real@hawaii.gov)

Please submit any comments by February 12, 2015. If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Supervising Land Agent Steve Molmen at (808) 587-0439. Thank you.

Attachments

We have no objections. We have no comments. Comments are attached.

Signed:

Print Name: O Corty S. Chang. Chief Engineer

Date:

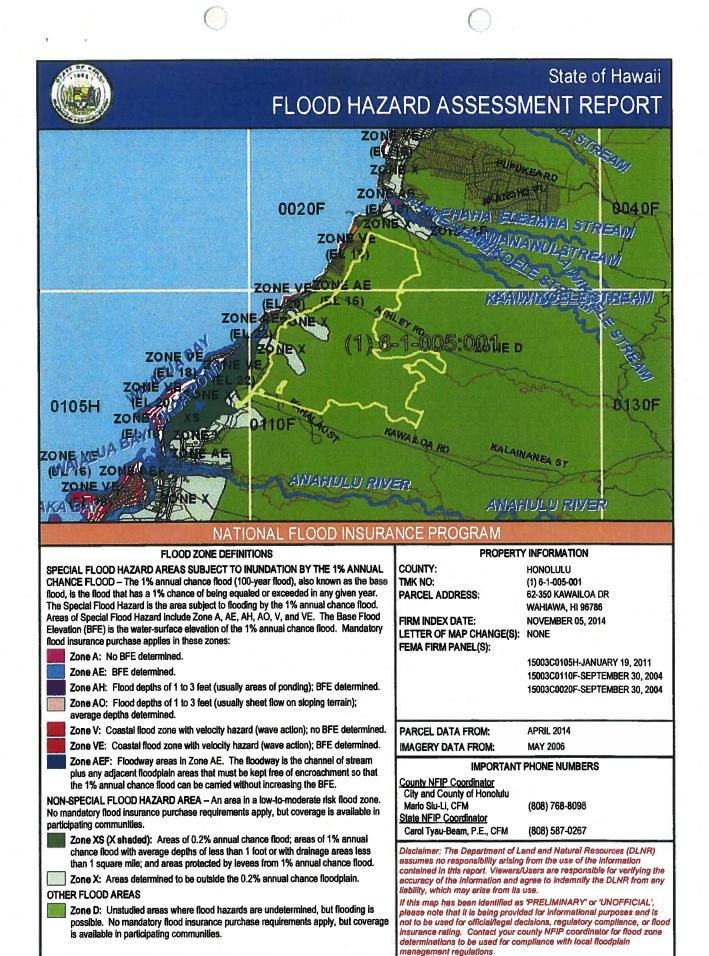
DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION

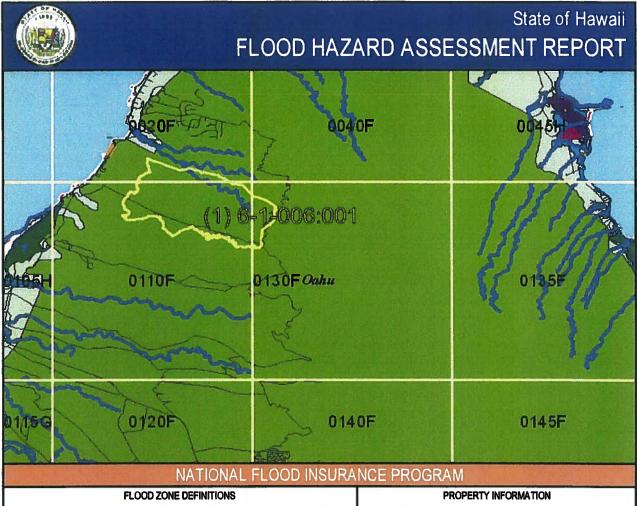
LD/Russell Y. Tsuji

REF: Special Use Permit Application for Solar Energy Facility, Kawailoa, North Shore Oahu.005

COMMENTS

	We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone D, an area where flood hazards are undetermined.
	Please take note that the project site according to the Flood Insurance Rate Map (FIRM), is located
	in Zone .
	Please note that the correct Flood Zone Designation for the project site according to the Flood
	Insurance Rate Map (FIRM) is
	Please note that the project must comply with the rules and regulations of the National Flood
	Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR),
	whenever development within a Special Flood Hazard Area is undertaken. If there are any
	questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of
	Land and Natural Resources, Engineering Division at (808) 587-0267.
	Land and Tatalal Resolution, Engineering Division at (000) 507 0207.
	Please be advised that 44CFR indicates the minimum standards set forth by the NFIP. Your
	Community's local flood ordinance may prove to be more restrictive and thus take precedence
	over the minimum NFIP standards. If there are questions regarding the local flood ordinances,
	please contact the applicable County NFIP Coordinators below:
	() Mr. Mario Siu Li at (808) 768-8098 of the City and County of Honolulu, Department of
	Planning and Permitting.
	() Mr. Frank DeMarco at (808) 961-8042 of the County of Hawaii, Department of Public
	Works.
	() Mr. Carolyn Cortez at (808) 270-7253 of the County of Maui, Department of Planning.
	() Mr. Stanford Iwamoto at (808) 241-4896 of the County of Kauai, Department of Public
	Works.
	The applicant should include project water demands and infrastructure required to meet water
	demands. Please note that the implementation of any State-sponsored projects requiring water
	service from the Honolulu Board of Water Supply system must first obtain water allocation credits
	from the Engineering Division before it can receive a building permit and/or water meter.
	The applicant should provide the water demands and calculations to the Engineering Division so it
	can be included in the State Water Projects Plan Update.
	Additional Comments:
	Other:
1	I you have any questions, please call Mr. Dennis Imada of the Planning Branch at 587-0257.
u	you have any questions, please can int. Definis initiada of the relating Branch at 367-0237.
	Λ. 1. (
	Signed: Churchige
	CARTY S. CHANG, CHIEF ENGINEER
	alatic
	Date: 2 9 19





SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD — The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water-surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones:

Zone A: No BFE determined.

Zone AE: BFE determined.

Zone AH: Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.

Zone AO: Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.

Zone V: Coastal flood zone with velocity hazard (wave action); no BFE determined.

Zone VE: Coastal flood zone with velocity hazard (wave action); BFE determined.

Zone AEF: Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

NON-SPECIAL FLOOD HAZARD AREA – An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

Zone XS (X shaded): Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

Zone X: Areas determined to be outside the 0.2% annual chance floodplain.

OTHER FLOOD AREAS

Zone D: Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

COUNTY: TMK NO: HONOLULU (1) 6-1-006-001

PARCEL ADDRESS:

FIRM INDEX DATE:

NOVEMBER 05, 2014

LETTER OF MAP CHANGE(S): NONE

FEMA FIRM PANEL(S):

15003C0110F-SEPTEMBER 30, 2004 15003C0020F-SEPTEMBER 30, 2004 15003C0130F - PANEL NOT PRINTED

PARCEL DATA FROM: APRIL 2014
IMAGERY DATA FROM: MAY 2006

IMPORTANT PHONE NUMBERS

County NFIP Coordinator

City and County of Honolulu

Mario Siu-Li. CFM

(808) 768-8098

State NFIP Coordinator

Carol Tyau-Beam, P.E., CFM (808) 587-0267

Disclaimer: The Department of Land and Natural Resources (DLNR) assumes no responsibility arising from the use of the information contained in this report. Viewers/Users are responsible for verifying the accuracy of the information and egree to indemnify the DLNR from any liability, which may arise from its use.

If this map has been identified as 'PRELIMINARY' or 'UNOFFICIAL', please note that it is being provided for informational purposes and is not to be used for official/legal decisions, regulatory compliance, or flood insurance rating. Contact your county NFIP coordinator for flood zone determinations to be used for compliance with local floodplain management regulations.

DAVID Y. IGE GOVERNOR OF HAWAII





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621 HONOLULU, HAWAII 96809

January 22, 2015

MEMORANDUM

TO:

DLNR Agencies:

X Div. of Aquatic Resources

Div. of Boating & Ocean Recreation

X Engineering Division

X Div. of Forestry & Wildlife

Div. of State Parks

X Commission on Water Resource Management

X Office of Conservation & Coastal Lands

X Land Division - Oahu District

X Historic Preservation

FROM:

SUBJECT: LOCATION: Russell Y. Tsuji, Land Administrator

Application for a Special Use Permit, Solar Energy Facility, Kawailoa, North Shore, Oahu

Kawailoa, North Shore, Oahu; Tax Map Key: 6-1-005: Portion of 001 and 6-1-006: Portion of

APPLICANT:

Kawailoa Solar, LLC by its consultant CH2M Hill

Transmitted for your review and comment on the above-referenced document. We would appreciate your comments on this document which can be found here:

1. Go to: https://sp01.ld.dlnr.hawaii.gov/LD

Login: Username: LD\Visitor Password: 0pa\$\$word0 (first and last characters are zeros)

Click on: Requests for Comments. Click on the subject file "Application for a Special Use Permit, Solar Energy Facility, Kawailoa, North Shore, Oahu", then click on "Files" and "Download a copy". (Any issues accessing the document should be directed to Jonathan Real, Applications/Systems Analyst at 587-0427 or Jonathan.C.Real@hawaii.gov)

Please submit any comments by February 12, 2015. If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Supervising Land Agent Steve Molmen at (808) 587-0439. Thank you.

Attachments

We have no objections. We have no comments. Comments are attached.

Signed:

Print Name

CONSERVATION AND COASTAL LANDS ERVATION AND RESOURCES ENFORCEMENT

ENGINEERING FORESTRY AND WILDLIFE INSTORIC PRESERVATION KAHOOLAWE ISLAND RESERVE CON LAND STATE PARKS



DAVID Y. IGE GOVERNOR OF HAWAII





STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621 HONOLULU, HAWAII 96809 CARTY S. CHANG
INTERIM CHARPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

DANIEL S. QUINN INTERIM FIRST DEPUTY

W. ROY HARDY ACTING DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND RESOURCES MANAGEMENT
CONSERVATION AND RESOURCES ENFORCEMENT
MANAGEMENT
MANAGEMENT

FORESTRY AND WILDLIFE
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE BLAND RESERVE COMMISSION
LAND
STATE PARKS

Date: February 3, 2015 DAR # 5065

MEMORANDUM

TO:

Carty S. Chang, Interim Chairperson (

DATE:

FROM: SUBJECT: Paul Murakawa, Aquatic Biologist

Application for a Special Use Permit, Solar Energy Facility, Kawailoa, North

Shore, Oahu: TMK 6-1-005:Portion of 001 and 6-1-006:Portion of 001

Comment

Date Request

Receipt

Referral

Due Date

1/22/15

1/23/15

1/28/15

2/12/15

Requested by: Russell Y. Tsuji, Land Division Administrator

Summary of Proposed Project

Title:

Application for a Special Use Permit, Solar Energy Facility, Kawailoa.

North Shore, Oahu

Project by:

Kawailoa Solar, LLC.

Location:

In the vicinity of Ashley Road, Kawailoa, North Shore, Oahu: TMK 6-1-

005: Portion of 001 and 6-1-006: Portion of 001

Brief Description:

The applicant is seeking a Special Use Permit to create a solar energy facility on 384 acres of land owned by the B.P. Bishop Trust Estate in Kawailoa, Oahu. This project has two components, solar panels and sheep grazing.

Comments:

The Division of Aquatic Resources (DAR) reviewed the application and has the following comments. In the application, it states:

"Storm water runoff would be appropriately addressed through design features that incorporate best management practices (BMPs) to minimize the quantity and water quality

impacts of the runoff. Areas that are temporarily disturbed during construction would be vegetated using grass species suitable for soil stabilization and erosion control, as well as for grazing stock."

The BMPs were not included with the application. DAR requests that the BMPs be included in the application so that DAR has the opportunity to review the BMPs prior to the start of the project.

This project also includes a sheep grazing component where sheep are able to graze between and under the solar panels. There is no mention of the BMPs that the applicant proposes to implement to mitigate for the negative impacts as a result of the sheep grazing. Additionally, there is no mention of BMPs proposed to mitigate for soil exposure, erosion and resulting soil runoff from reaching the river in the valley below. DAR recommends that BMPs be developed for the grazing portion of the project and requests the opportunity to review these BMPs.

Thank you for providing DAR the opportunity to review and comment on the proposed project. Should there be any changes to the project plans; DAR requests the opportunity to review and comment on those changes.

DAVID Y. IGE GOVERNOR OF HAWAI



STATE OF HAWAII
DEPARTMENT OF HEALTH

P. O. BOX 3378 HONOLULU, HI 96801-3378 VIRGINIA PRESSLER, M.D. DIRECTOR OF HEALTH

In reply, please refer to

EPO 15-011

February 10, 2015

Mr. George I. Atta, FAICP
Director, Department of Planning and Permitting
City and County of Honolulu
650 South King Street, 7th Floor
Honolulu, Hawaii 96813
Via email only to: rcsyoung@honolulu.gov

Dear Mr. Atta:

SUBJECT:

Application for a Special Use Permit

Solar Energy Facility, Kawailoa, North Shore, Oahu TMK: 6-1-005: Portion of 001 and 6-1-006: Portion of 001

The Department of Health (DOH), Environmental Planning Office (EPO), acknowledges receipt of your letter to our office on January 16, 2015. Thank you for allowing us to review and comment on the proposed project. EPO recommends that you review the standard comments and available strategies to support sustainable and healthy design provided at: http://health.hawaii.gov/epo/home/landuse-planning-review-program/. Projects are required to adhere to all applicable standard comments.

We encourage you and project applicants to examine and utilize the Hawaii Environmental Health Portal. The portal provides links to our e-Permitting Portal, Environmental Health Warehouse, Groundwater Contamination Viewer, Hawaii Emergency Response Exchange, Hawaii State and Local Emission Inventory System, Water Pollution Control Viewer, Water Quality Data, Warnings, Advisories and Postings. The Portal is continually updated. Please visit it regularly at: https://eha-cloud.doh.hawaii.gov

You may also wish to review the revised Water Quality Standards Maps that have been updated for all islands. The Water Quality Standards Maps can be found at: http://health.hawaii.gov/cwb/site-map/clean-water-branch-home-page/water-quality-standards/.

We request that you utilize all of this information on your proposed project to increase sustainable, innovative, inspirational, transparent and healthy design.

Mahalo nui loa,

Laura Leialoha Philips McIntyre, AICP

Program Manager, Environmental Planning Office

HONOLULU FIRE DEPARTMENT

CITY AND COUNTY OF HONOLULU

RECEIVED

Phone: 808-723-7139

636 South Street Honolulu, Hawaii 96813-5007 Fax: 808-723-7111 Internet: www.honolulu.gov/hfd

KIRK CALDWELL

"15 FEB -5 P2:14

DEPT OF PLANHED AND PERMITTING CITY & COUNTY OF HONOLULU



MANUEL P. NEVES FIRE CHIEF

LIONEL CAMARA JR. DEPUTY FIRE CHIEF

February 3, 2015

TO:

GEORGE ATTA, FAICP, DIRECTOR

DEPARTMENT OF PLANNING AND PERMITTING

FROM:

SOCRATES D. BRATAKOS, ASSISTANT CHIEF

SUBJECT: SPECIAL USE PERMIT APPLICATION NO. 2014/SUP-6

SOLAR ENERGY FACILITY

KAWAILOA, NORTH SHORE, OAHU

TAX MAP KEYS: 6-1-005: PORTION OF 001

6-1-006: PORTION OF 001

In response to your memorandum dated January 16, 2015, regarding the abovementioned subject, the Honolulu Fire Department requires that the provisions of the Fire Code of the City and County of Honolulu be complied with in respect to photovoltaic systems and fire department access and water supply requirements.

Should you have questions, please contact Battalion Chief Terry Seelig of our Fire Prevention Bureau at 723-7151 or tseelig@honolulu.gov.

SOCRATES D. BRATAKOS

South D. Bratisfice

Assistant Chief

SDB/SY:bh

File No.: 2014/SUP-6

DEPARTMENT OF PLANNING AND PERMITTING SUMMARY DESCRIPTION

APPLICANT : Kawailoa Solar, LLC

LANDOWNER : B. P. Bishop Trust Estate

REQUEST : A Special Use Permit to establish a solar energy

facility on lands classified by the Land Study Bureau

as Class A, B, and C, pursuant to Sections 205-2

and 205-4.5, Hawaii Revised Statutes

LOCATION : In the vicinity of Ashley Road, approximately 6,000

feet south of Waimea Beach Park and 4 miles northeast of Haleiwa Town, at Kawailoa, North

Shore, Oahu, Hawaii

TAX MAP KEY : 6-1-005: Portion of 1 and 6-1-006: Portion of 1

LAND AREA : Approximately 384.1 Acres

NORTH SHORE SUSTAINABLE

COMMUNITIES PLAN LAND USE MAP

STATE LAND USE DISTRICT

EXISTING USE

SURROUNDING LAND USE

Agriculture

Agricultural

0---

Open space

Wind turbine renewable energy generation system,

open space, diversified agriculture, military training

and preservation lands

DEPARTMENT:

Honolulu Police Department

COMMENTS:

Thank you for the opportunity to review and comment on the subject application.

This project should have no significant impact on the services or operations of the Honolulu Police Department.

If there are any questions, please call Major Kerry Inouye of District 2 (Wahiawa) at 723-8703.

MARK TSUYEMURA, Management Analyst

Office of the Chief

DEPARTMENT OF ENVIRONMENTAL SERVICES RECEITY AND COUNTY OF HONOLULU

VED 1000 ULUOHIA STREET, SUITE 308, KAPOLEI, HAWAII 96707 TELEPHONE: (808) 768-3486 ● FAX: (808) 768-3487 ● WEBSITE: http://envhonolulu.org

KIRK CALDWELL JAN 30 P4 :01

DEPT OF PLANWING AND PERMITTING CITY & COUNTY OF HONOLULU



LORI M.K. KAHIKINA, P.E. DIRECTOR

TIMOTHY A. HOUGHTON DEPUTY DIRECTOR

ROSS S. TANIMOTO, P.E. DEPUTY DIRECTOR

IN REPLY REFER TO PRO 15-010

January 30, 2015

MEMORANDUM

TO:

George I. Atta, FAICP, LEED AP, CEI, Director

Department of Planning and Permitting

FROM:

↓ Lori M.K. Kahikina, P.E., Director

Fess Janne

SUBJECT:

Application for a Special Use Permit

Solar Energy Facility, Kawailoa, North Shore, Oahu

Tax Map Key: 6-1-005: Portion of 001 and 6-1-006: Portion of 001

We have reviewed the subject document as transmitted to us by your memo dated January 16, 2015, reference number 2014/SUP-6 (RY). Based on our review, we do not foresee any significant impacts to our facilities or services from this project.

Should you have any questions, please call Marisol Olaes, Civil Engineer at 768-3467.