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November 21, 2014

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

Subject: Waiawa Solar Farm Project, Application for a Special Use Permit; Response to Agency Comments (2014/SUP-3)

Dear Mr. Young,

Based on the application for a Special Use Permit for the proposed Waiawa Solar Farm, the City and County of Honolulu Department of Planning and Permitting (DPP) has requested comments and recommendations from various public agencies, neighborhood boards and the public. This letter is intended to provide First Wind's (d.b.a. Waiawa PV, LLC) responses to the comments received as of 11/14/14, as provided by DPP.

Letters received from the City and County of Honolulu Department of Environmental Services, Honolulu Police Department, and Board of Water Supply either indicated that their facilities/services would not be impacted or the agency has no comment; as such, these letters are not further addressed.

Comments received from other agencies are replicated below (according to the comment numbers, as indicated on the attached copies), followed by First Wind's response to each.

City and County of Honolulu Fire Department

Comment #1:

Fire department access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 150 feet (46 m) from fire department access roads as measured by an approved route around the exterior of the building or facility. (National Fire Protection Association [NFPA] 1, Uniform Fire Code [UFC], 2006 Edition, Section 18.2.3.2.2)

A fire department access road shall extend to within 50 feet (15 m) of at least one exterior door that can be opened from the outside and that provides access to the interior of the building. (NFPA 1, UFC, 2006 Edition, Section 18.2.3.2.1.)

Based on previous discussions with the Honolulu Fire Department for similar projects, it is understood that an access road and turnaround would not be required if no buildings would be constructed within the project site. First Wind will work with HFD to meet their requirements for grading and building permits.

Comment #2:

A water supply approved by the county, capable of supplying the required fire flow for fire protection, shall be provided to all premises upon which facilities or buildings, or portions thereof, are hereafter constructed, or moved into or within the county. When any portion of the facility or building is in excess of 150 feet (45 720 mm) from a water supply on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains capable of supplying the required fire flow shall be provided when required by the AHJ [Authority Having Jurisdiction]. (NFPA 1, UFC, 2006 Edition, Section 18.3.1, as amended)

Based on previous discussions with the Honolulu Fire Department for similar projects, it is understood that water supply for fire flow would not be required if no buildings would be constructed within the project site. First Wind will work with HFD to meet their requirements for grading and building permits.

Comment #3:

Submit civil drawings to the HFD for review and approval.

A complete set of the civil drawings will be submitted to HFD, once they are available.

State of Hawaii Department of Agriculture

Comment #1:

We recommend the City impose a condition to the effect that the 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.

First Wind staff met with Earl Yamamoto at the Department of Agriculture (DOA) to discuss their comments and recommendations. Based on this discussion, DOA agreed to modify their recommendation to read: “We recommend the City impose a condition to the effect that the applicant and its successors and/or assigns shall have established, or shall be actively seeking to establish, an 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.” First Wind agrees with this revised recommendation.

DOA’s letter mentioned that the planned lease rent (less than \$12 per acre/year) seems to meet the intent of Act 55. First Wind is not intending to generate any profit from the lease of the land, and the intent of the lower-than market lease rate is to attract interested ranchers to lease the property.

DOA’s letter also mentioned that a large sheep operation would be more likely to provide consistent quality and supply that retailers and restaurants prefer. As the land owner, First Wind definitely agrees. While there currently are not any large sheep operations on Oahu, the expectation is that the rancher would scale up the operation in order to provide commercial supply and quality of meat product for local markets and restaurants. First Wind has provided a copy of an executed Letter of Intent with Tin Roof Ranch, and subsequently, several other ranchers have expressed interest in pasturing sheep on the property.

DOA’s letter also mentioned that water delivery may become costly during dry months, and that the Waiahole Ditch might be a source of water in the future. First Wind expects that water for the sheep pasture will be supplied from the adjacent horse ranch, which currently supplies water to the existing cattle pasture.

State of Hawaii Office of Planning

Comment #1:

OP recommends that the archaeological assessment be approved by SHPD prior to the commencement of construction of the solar farm.

The archaeological assessment was submitted to SHPD for their review and approval on August 29, 2014. First Wind concurs with the recommendation that SHPD approval be obtained prior to commencement of construction.

U.S. Fish and Wildlife Service

Comment #1:

*The federally endangered Hawaiian hoary bat (*Lasiurus cinereus semotus*) may forage and roost in the project area. There is no proposed or designated critical habitat located in the area. 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.*

First Wind staff met with representatives from both the USFWS and the State of Hawaii Department of Forestry and Wildlife (DOFAW) on November 5, 2014. Based on this discussion, First Wind concurs with the recommendation and agrees to not disturb, remove or trim woody plants greater than 15 feet (4.6 meters) tall during the bat birthing and pup rearing season (June 1 through September 15). In addition, the perimeter fence will not include barbed wire to avoid the potential for bats to be inadvertently snagged.

Comment #2:

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.

Operations personnel at the site will be trained to document and report any downed wildlife (i.e., birds and bats) encountered during routine (ca. bi-weekly) site inspections. Training will include recognizing protected species, and establishing standardized protocols for documenting and reporting occurrences of downed wildlife. Protocols will include contacting USFWS and DOFAW if protected species are found to determine appropriate measures for avoiding and minimizing further impacts.

State of Hawaii Land Use Commission

Comment #1:

These sections require that the site be made available for agricultural activities and that the lease rate for these activities should be 50% or less of the fair market rent for comparable properties. We suggest the placement of appropriate conditions to reflect these requirements.

First Wind concurs with this recommendation. As detailed in the Special Use Permit application, First Wind plans to lease the project area for the pasturage of sheep, which is widely recognized as a compatible use with solar panels. First Wind executed a Letter of Intent to lease the property to Tin Roof Ranch to pasture sheep on the site. The Lease would commence after the solar project is operational, with a nominal lease rent at less than \$12 per acre per year, for a term of at least five years. Additionally, First Wind plans to install perimeter fencing and roads as part of the proposed solar project, at no cost to the sheep operation, and will work with the rancher to facilitate watering systems, electrified fencing, pens and loading facilities, depending on the needs of the operation.

Comment #2:

An approved archaeological assessment with any necessary mitigation measures identified must be provided prior to approval in order that appropriate conditions can be determined.

The archaeological assessment was submitted to SHPD for their review and approval on August 29, 2014/ Consistent with the recommendation provided by Office of Planning, First Wind will obtain SHPD approval prior to commencement of construction. SHPD concurrence is required for approval of building permits by DPP. The Project will also be required to comply with any conditions specified by SHPD in the construction of the project.

Comment #3:

Further, because this is the first Special Permit under the recent changes to Chapter 205, HRS, the County should provide for a date by which the Project should begin, specify the duration of the activity along with any conditions for cessation of the activity.

The date for the start of construction will be dictated by many factors, but First Wind anticipates that construction would start within 18 months of issuance of a Special Use Permit. The project would have an operating term not to exceed 35 years, following which the facility may be re-powered with new equipment (under subsequent permits/approvals) or decommissioned. First Wind requests that any permit conditions be consistent with this anticipated timeline.

Comment #4:

And, finally the County should require annual reporting in order that the planning and regulatory bodies can track the progress and adherence to conditions over the Project's lifetime.

First Wind looks forward to providing annual reports as specified by the County.

We appreciate your efforts in support of processing the Special Use Permit application for the Waiawa solar farm project. Please contact me if you have any questions regarding the responses provided above, or if you require further information.

Sincerely,



CH2M HILL
Paul Luersen, AICP
Agent for First Wind

Enclosure

cc: Wren Wescoatt, First Wind (Waiawa PV, LLC)

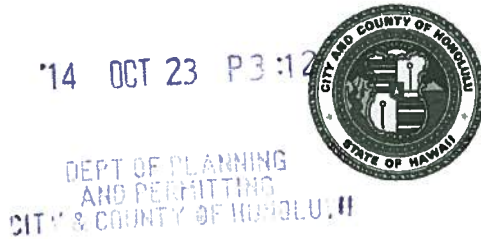
HONOLULU FIRE DEPARTMENT
CITY AND COUNTY OF HONOLULU

836 South Street
Honolulu, Hawaii 96813-5007
Phone: 808-723-7139 Fax: 808-723-7111 Internet: www.honolulu.gov/hfd

KIRK CALDWELL
MAYOR

MANUEL P. NEVES
FIRE CHIEF

LIONEL CAMARA JR.
DEPUTY FIRE CHIEF



October 21, 2014

**TO: GEORGE ATTA, FAICP, DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING**

FROM: SOCRATES D. BRATAKOS, ASSISTANT CHIEF

**SUBJECT: SPECIAL USE PERMIT APPLICATION NO. 2014/SUP-3
SOLAR ENERGY FACILITY
CENTRAL OAHU, HAWAII
TAX MAP KEY: 9-5-003: 004 (PORTION)**

In response to your memorandum dated October 2, 2014, regarding the above-mentioned subject, the Honolulu Fire Department (HFD) requires that the following be complied with:

1. Fire department access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 150 feet (46 m) from fire department access roads as measured by an approved route around the exterior of the building or facility. (National Fire Protection Association [NFPA] 1, Uniform Fire Code [UFC]TM, 2006 Edition, Section 18.2.3.2.2.)

A fire department access road shall extend to within 50 feet (15 m) of at least one exterior door that can be opened from the outside and that provides access to the interior of the building. (NFPA 1, UFCTM, 2006 Edition, Section 18.2.3.2.1.)
2. A water supply approved by the county, capable of supplying the required fire flow for fire protection, shall be provided to all premises upon which facilities or buildings, or portions thereof, are hereafter constructed, or moved into or within the county. When any portion of the facility or building is in excess of 150 feet (45 720 mm) from a water supply on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire

George Atta, FAICP, Director
Page 2
October 21, 2014

hydrants and mains capable of supplying the required fire flow shall be provided when required by the AHJ [Authority Having Jurisdiction].
(NFPA 1, UFC™, 2006 Edition, Section 18.3.1, as amended.)

3. Submit civil drawings to the HFD for review and approval.

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



SOCRATES BRATAKOS
Assistant Chief

SDB/CN:bh

NEIL ABERCROMBIE
Governor



SCOTT E. ENRIGHT
Chairperson, Board of Agriculture

KEN H. KAKESAKO
Deputy to the Chairperson

State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 South King Street
Honolulu, Hawaii 96814-2512
Phone: (808) 973-9600 FAX: (808) 973-9613

October 31, 2014

DEPT OF AGRICULTURE
AND PERMITTING
CITY & COUNTY OF HONOLULU
14 OCT 31 P 3:10
RECEIVED

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-3)
Solar Energy Facility
Waiawa PV, LLC
TMK: 9-5-03: portion 4 (Waipio, Oahu)
Area: 313 of 524 total acres

The Department of Agriculture has reviewed the subject application and offers the following comments and recommendations.

Background

The 313-acre project site is within the State Agricultural District, is outside of the City's Urban Community Boundary (Central Oahu Sustainable Communities Plan, December 2002, Map A-2), and has "B" rated soils according to the Detailed Land Classification – Island of Oahu (Land Study Bureau, December 1972). As such, solar energy facilities with a compatible agricultural activity may be permitted by special use permit, pursuant to Act 55, Session Laws of Hawaii 2014). 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 12)



Recommendation

The Department of Agriculture strongly supports existing farming operations and those seeking to start new farming enterprises. The Department 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, 2014 Session Laws of Hawaii. "B" rated agricultural lands are a scarce and valuable resource with good capacity to contribute substantially to food self-sufficiency. The project site also possesses some of the characteristics that may qualify it as potential Important Agricultural Lands, pursuant to Part III of Chapter 205, Hawaii Revised Statutes (HRS).

We believe this large-scale project which is the first to seek approval via Act 55 should comply fully with the Act's purpose and intent which is to "...enable the complementary uses of utility scale solar energy generation and local food production..." on "B" and "C" rated agricultural land (Act 55, SLH 2014, Section 1) (emphasis added). We recommend the City impose a condition to the effect that the 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.

#1

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 decreases 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 \$12.00 per acre/year, or about 50 percent below the fair market rent for similar agricultural properties (Application, page 6). This would be in compliance with Act 55, 2014 SLH. The 5-year lease 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, page 4). The applicant will work with the rancher, as needed, to facilitate watering systems, electrified fencing, pens, and loading facilities (Application, page 7). 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 5). 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).

Tin Roof Ranch which has signed a letter of intent with the applicant to pasture sheep on the property (Application, Attachment 5) has a diversified agricultural operation on 7 acres on the North Shore which includes a herd of 20 sheep and sells lambs to local restaurants and a butcher shop (Application, page 6). The key to selling local lamb meat is quality and supply (Application, Attachment 8, pages 3-4). 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 10) that "Careful 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 7). With the exception of beekeeping, the other agricultural options will require a reliable and sufficient supply of clean water.

Water supply

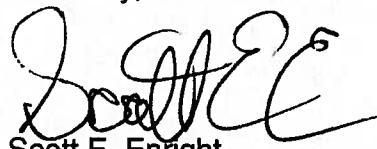
The water supply for the project site will be by rainwater catchment or delivered by water truck (Application, page 7). Water delivery may become costly during dry periods. Adult sheep require up to 4 gallons of fresh water per day, so a 200-head sheep operation may require up to 800 gallons per day and distributed throughout the grazing

Mr. George I. Atta, AICP
October 31, 2014
Page 4

area. Larger livestock may require more water. Aquaponic systems appear to require the least amount of water for operation as it recycles water. 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). One possible source of water for agricultural purposes is the Waiahole Ditch, a major source of irrigation water for central Oahu agricultural lands. The ditch appears to abut the southwestern edge of the project site. The ditch is owned and operated by the Agribusiness Development Corporation, an agency administratively attached to the Department of Agriculture.

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.

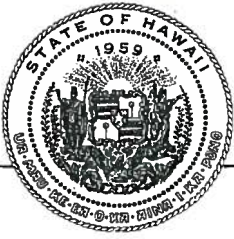
Sincerely,



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

NEIL ABERCROMBIE
GOVERNOR

LEO R. ASUNCION
ACTING DIRECTOR
OFFICE OF PLANNING

RECEIVED

Telephone: (808) 587-2846
Fax: (808) 587-2824
Web: <http://planning.hawaii.gov/>

14 NOV -6 12:45

Ref. No. P-14557

NOV 3 2014
DEPT OF PLANNING
AND PERMITTING
CITY & COUNTY OF HONOLULU

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: Waiawa Solar Energy Facility
Special Permit No. 2014/SUP-3
Tax Map Key: (1) 9-5-003:004 (portion), Waipio, Oahu

Thank you for the opportunity to review the subject application for a Special Use Permit to establish a 47-megawatt solar photovoltaic farm, in Waipio, Oahu. The facility will include a substation, control building, transformers, weather monitoring stations and switch gear. The proposed project will occupy an approximately 313-acre portion of a 524-acre parcel. This site was previously proposed for the Koa Ridge Mauka development in the early 2000s, but which reclassification to the Urban District was denied by the State Land Use Commission in Docket No. A00-734 on June 27, 2002. The property remains within the State Land Use Agricultural District and is zoned by the City and County of Honolulu as AG-1 Restricted Agricultural Zoning District.

Based on our review of the subject project relative to the Special Permit guidelines in Hawaii Administrative Rules § 15-15-95, we offer the following comments:

- 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 provides that the Agricultural District shall include lands with a high capacity for agricultural production, grazing, or other agricultural uses. It also recognizes that some lands may not be suitable for the uses permitted in the Agricultural District and therefore other uses may be allowed with a special permit.

In accordance with HRS §§ 205-2 and 205-4.5, as amended by Act 55, Session Laws of Hawaii 2014 (see attachment), solar energy facilities are permitted

on lands greater than 20 acres with a soil productivity rating of "B" or "C" rating if a Special Permit is obtained. The applicable HRS sections relating to lands in the State Agricultural District are as follows:

- HRS § 205-2(6) (B): Solar energy facilities are not allowed to occupy more than 10 percent of a parcel's acreage, or 20 acres, whichever is less, unless a special use permit is granted. As such, the proposed 313-acre solar farm would be permissible with the granting of a Special Permit.
- HRS § 205-4.5 (a) 1 and 3: We find that the dual uses of the "agri-voltaic" method proposed: pasture cultivation (sheep, low-line cattle ranching or aquaponic system) in conjunction with the solar farm will fit within the definition of agricultural activities listed (cultivation of crops and raising of livestock, respectively).
- HRS § 205-4.5a (2)(A),(B) and (C): The Applicant discusses conformance with this section on pages 12 and 13 of the application, including having the site be made available for agricultural activities with sheep/cattle grazing or aquaponic system with a lease rate that is at least 50% below the fair market rent for comparable properties. OP recommends that the requirements of this HRS section relating to 1) compatible agricultural activities, 2) proof of financial security for decommissioning, and 3) decommissioning requirements, be included as specific conditions of approval.

The project is also subject to the objectives and policies of HRS Chapter 205A. The Applicant has addressed the project's compliance with applicable CZM objectives and policies through an assessment of impacts provided on the application. Also, an archaeological assessment is provided, but there is no determination of its acceptability from the State Historic Preservation Division (SHPD) at this time.

#1

Therefore, OP recommends that the archaeological assessment be approved by SHPD prior to the commencement of construction of the solar farm.

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

The project site is largely surrounded by undeveloped or inactive agricultural lands with nearby Mililani communities stretching along the northwestern vicinity, as well as the future Koa Ridge development southwest of the site. No major glare, noise or nuisance is anticipated by the proposed use.

Mr. George Atta, Director

November 3, 2014

Page 3

The Applicant states that any visual impacts to the nearby residential areas will be minimal and will be mitigated by the existing trees, natural landforms, and proposed landscape vegetations to be planted along the northern and western boundaries of the project area. Glare and reflectivity impacts have been assessed by the Applicant.

As indicated on pages 10 thru 13 of the application, long-term impacts by the proposed solar farm are expected to be very minimal. We concur that the proposed use does not appear to have any major or long term adverse effects on the surrounding area.

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

The proposed use does not require sewer, drainage, fire or police resources with only private water source to be delivered for the purpose of irrigation and panel cleaning. Access to the site will be via a private road off Ka Uka Boulevard by the H-2 Freeway.

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

We acknowledge that the Applicant seeks to balance the renewable energy with compatible agricultural uses based on the justification provided on pages 14 and 20 of the application. While previous sugarcane and pineapple cultivation in the Waipio area are no longer economically viable, the generation of renewable energy as proposed will help to reduce the State's need and reliance on imported fossil fuels.

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


The parcel contains soils that are classified as "B" under the Land Study Bureau (LSB) overall master productivity rating, and as "Prime", "Unique" and "Other" under the Agricultural Lands of Importance to the State of Hawaii (ALISH) system. While soils on the site are suitable for crop cultivation, solar energy facilities are also permissible uses in the Agricultural District and for which the applicant has proposed complementary agricultural uses. The temporal nature of solar facilities further provides the opportunity to restore the site for other agricultural uses following future decommissioning.

Mr. George Atta, Director
November 3, 2014
Page 4

The Office of Planning (OP) does not have objections to the solar farm operation as proposed at this location. However, statewide concerns remain with regards to seeking a balance in maintaining the availability of high quality agricultural lands while promoting renewable energy resources on lands within the Agricultural District.

If you have any questions, please contact Jenny Lee of our Land Use Division at (808) 587-2805.

Sincerely,


Leo Leo R. Asuncion
Acting Director

Attachment

c: Land Use Commission



RECEIVED United States Department of the Interior



'14 NOV -6 P12:47

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

DEPT OF PLANNING
In Reply Refer to PERMITTING
2015-1-100000 COUNTY OF HONOLULU

NOV 05 2014

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

Subject: Technical Assistance for the Application for a Special Use Permit for the Development of Waiawa Solar Farm Project, O'ahu

Dear Mr. Atta:

The U.S. Fish and Wildlife Service received your letter on October 3, 2014, requesting our comments on the Application for a Special Use Permit for First Wind's (d.b.a. Waiawa PV, LLC) proposed development of the Waiawa Solar Farm Project, a 47 megawatt (MW) solar energy facility on approximately 313 acres on O'ahu's central plain [TMK: (1) 9-5-003:004 (por.)]. The proposed project would provide clean, renewable power to Hawaiian Electric Company for integration into their electrical distribution system using a ground-mounted photovoltaic system with 47 1.0 MW AC fixed-tilt blocks. The panels are expected to extend approximately 4 feet 6 inches to 9 feet 6 inches off the ground. Each panel would generate power at 1,000 volts; electrical equipment including container boxes, collector lines, inverters, transformers, weather monitoring stations, and switchgear 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 project would interconnect with an existing 138 kilovolt (kV) transmission line that traverses the property.

The proposed project site would be located on a portion of the TMK that is east of the H-2 Freeway, north of the Ka Uka Boulevard interchange, within a contiguous area that is irregular in shape. Elevation of the project site ranges from approximately 720 feet above sea level to approximately 940 feet. The topography is gently sloping, transitioning to steep gulches along the northern and southern edges of the property (Kīpapa Gulch and Pānakauahi Gulch, respectively).

The proposed project would be located on approximately 313 acres of Class B soils, based on the Land Study Bureau productivity rating system. The area is comprised of former agricultural



fields that were previously cultivated with pineapple and sugarcane and is currently used for cattle grazing. There are no structures within the proposed project site. First Wind intends to

lease the proposed site for sheep ranching. Except for the transformers and switchyards, most of the fenced area would be available to support 100-200 head of sheep on a year-round basis.

This response is in accordance with section 7 of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 *et seq.*). We offer the following comments to assist the Planning Commission and First Wind: We understand a biological survey conducted by SWCA Environmental Consultants indicated no threatened or endangered species found on the proposed project site. However, 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 area.

#1 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.

#2 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, including the federally endangered Hawaiian coot (*Fulica alai*), Hawaiian stilt (*Himantopus mexicanus knudseni*), Hawaiian gallinule (*Gallinula chloropus*), Hawaiian duck (*Anas wyvilliana*), and Hawaiian goose (*Branta sandvicensis*). 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 Aaron Nadig, Assistant Field Supervisor; O'ahu, Kaua'i, North Western Hawaiian Islands, and American Samoa (phone: 808-792-9400, fax: 808-792-9581).

Sincerely,

A handwritten signature in black ink, appearing to read "Aaron Nadig". The signature is fluid and cursive, with the first name "Aaron" written in a larger, more prominent script than the last name "Nadig".

Aaron Nadig
Island Team Manager
O'ahu, Kaua'i, North Western Hawaiian Islands,
and American Samoa

NEIL ABERCROMBIE
Governor

SHAN TSUTSUI
Lieutenant Governor

RICHARD LIM
Director

MARY ALICE EVANS
Deputy Director



LAND USE COMMISSION
Department of Business, Economic Development & Tourism
State of Hawai'i

DANIEL ORODENKER
Executive Officer

BERT K. SARUWATARI
Planner

SCOTT A.K. DERRICKSON, AICP
Planner

FRED A. TALON
Drafting Technician

RILEY K. HAKODA
Chief Clerk/Planner

HAUNANI NAGEL
Administrative Assistant

November 6, 2014

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

DEPT OF PLANNING
AND PERMITTING
CITY & COUNTY OF HONOLULU

14 NOV 13 P2:11

RECEIVED

Dear Mr. Atta:

Re: Waiawa Solar Energy Facility
Special Permit No. 2014/SUP-3
Tax Map Key No.: (1) 9-5-003:004 (portion)
Waipi`o, island of O`ahu, Hawai`i

We have reviewed the subject application for a State Special Use Permit (SP) for a 47-Megawatt solar photovoltaic farm in Waipi`o. The facility proposes a substation, control building, transformers, weather monitoring stations, and switch gear. The proposed Project will occupy approximately 313-acres of the 524-acre parcel. This site was part of a proposed State Land Use District boundary reclassification for the Koa Ridge Mauka development in 2002 (Docket No. A00-734). That docket was dismissed without prejudice by the State Land Use Commission in 2007. The property is currently within the State Land Use Agricultural District.

In 2014, the State Legislature amended Sections 205-2 and 205-4.5, Hawai`i Revised Statutes (HRS) to allow solar energy facilities on lands greater than 20 acres with soil productivity ratings of "B" or "C" if a State Special Permit is obtained (Act 55, Session Laws of Hawai`i, 2014). These sections require that the site be made available for agricultural activities and that the lease rate for these activities should be 50% or less of the fair market rent for comparable properties. We suggest the placement of appropriate conditions to reflect these requirements.

The archaeological assessment provided did not include any supplements or attachments to show that the State Historic Preservation Division (SHPD) had reviewed and determined its acceptability. An approved archaeological assessment with any necessary mitigation

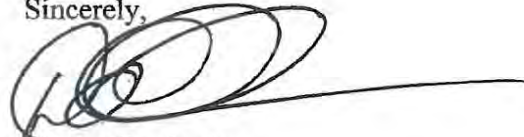
#2 | measures identified must be provided prior to approval in order that appropriate conditions can be determined.

#3 | Further, because this is the first Special Permit under the recent changes to Chapter 205, HRS, the County should provide for a date by which the Project should begin, specify the duration of the activity along with any conditions for cessation of the activity. And, finally

#4 | the County should require annual reporting in order that the planning and regulatory bodies can track the progress and adherence to conditions over the Project's lifetime.

If you have any questions, please contact Scott A.K. Derrickson AICP, at 587-3921.

Sincerely,



Daniel Orodener
Executive Officer

Cc: OP

DEPARTMENT OF ENVIRONMENTAL SERVICES
CITY AND COUNTY OF HONOLULU

1000 ULUOHIA STREET, SUITE 308, KAPOLEI, HAWAII 96707
TELEPHONE: (808) 768-3486 • FAX: (808) 768-3487 • WEBSITE: <http://envhonorulu.org>

KIRK CALDWELL
MAYOR

RECEIVED
*14 OCT 16 P2:42
DEPT OF PLANNING
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 14-148

October 13, 2014

MEMORANDUM

TO: George I. Atta, FAICP, LEED AP, CEI, Director
Department of Planning and Permitting

FROM:  Lori M.K. Kahikina, P.E., Director

SUBJECT: Application for a Special Use Permit
Solar Energy Facility, Waipio, Central Oahu, Oahu
TAX MAP KEY: 9-5-003: 004 (portion)

We have reviewed the subject document as transmitted to us by your memo dated October 2, 2014, reference number 2014/SUP-3 (RY), and we do not believe the proposed project will impact our services or facilities.

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

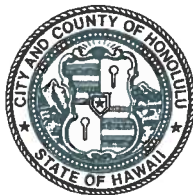
POLICE DEPARTMENT
CITY AND COUNTY OF HONOLULU

801 SOUTH BERETANIA STREET · HONOLULU, HAWAII 96813
TELEPHONE: (808) 529-3111 · INTERNET: www.honolulu-pd.org

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KIRK CALDWELL
MAYOR

'14 OCT 13 10:15



LOUIS M. KEALOHA
CHIEF

DAVE M. KAJIHIRO
MARIE A. MCCAULEY
DEPUTY CHIEFS

OUR REFERENCE

DEPT OF PLANNING
AND PERMITTING
CITY & COUNTY OF HONOLULU
MT-DK

October 10, 2014

MEMORANDUM

TO: George I. Atta, FAICP, Director
Department of Planning and Permitting

ATTENTION: Raymond Young, Planner VI

FROM: Louis M. Kealoha, Chief of Police

SUBJECT: Application for a Special Use Permit
Solar Energy Facility, Waipio, Central Oahu
Tax Map Key: 9-5-003:004 (por.)
Project Number 2014/SUP-3


Thank you for the opportunity to review the subject application.

The Honolulu Police Department has no concerns regarding the project at this time.

If there are any questions, please contact Major Clayton Saito of District 3 (Pearl City) at 723-8803 or via email at csaito1@honolulu.gov.

Sincerely,

Louis M. Kealoha
Chief of Police

By 
Mark Tsuyemura
Management Analyst VI
Office of the Chief

BOARD OF WATER SUPPLY

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

RECEIVED



October 29, 2014

'14 NOV -3 P 4:00

DEPT OF PLANNING
AND PERMITTING
CITY & COUNTY OF HONOLULU, HI

KIRK CALDWELL, MAYOR

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ADAM C. WONG, Vice Chair
MAHEALANI CYPHER
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 *ek*

TO: GEORGE I. ATTA, FAICP, DIRECTOR
DEPARTMENT OF PLANNING AND PERMITTING

FROM: ~~FOR~~ ERNEST Y. W. LAU, P.E., MANAGER AND CHIEF ENGINEER *el*

SUBJECT: YOUR MEMORANDUM DATED OCTOBER 2, 2014 ON
THE APPLICATION FOR A SPECIAL USE PERMIT, SOLAR
ENERGY FACILITY, WAIPIO – TAX MAP KEY: 9-5-003: 004

We do not have comments on the proposed solar energy facility.

We do not have a water system in this area.

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