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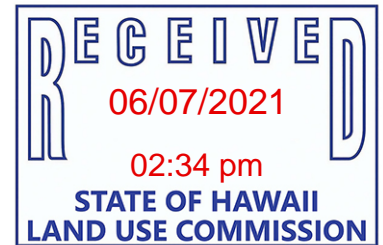
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June 7, 2021

TO: Daniel Orodener, Executive Officer
State Land Use Commission

FROM: Mary Alice Evans, Director
Office of Planning *Mary Alice Evans*

SUBJECT: Special Use Permit Application No. 2020/SUP-6
West Oahu Solar Plus Storage Project
Land Area: Approximately 97 acres
Location: Honouliuli, Ewa, Oahu
TMK: (1) 9-2-002: Por. 007



The Office of Planning (OP) has reviewed the above referenced Special Permit (SP) to establish a solar photovoltaic and battery energy storage system on approximately 97 acres of land owned by University of Hawaii West Oahu (UHWO) mauka of the H-1 Freeway. The proposed project would provide about 12.5 Megawatts (MW) of solar energy and about 50 MWh of battery storage. The proposed project would connect to Hawaiian Electric's grid by an existing 46-kV sub-transmission line that traverses the project area. Access to the site will be off Palehua Road.

Special Permit Guidelines

The guidelines for Special Permits (SP) 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 five (5) 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 Land Use Commission (LUC).**

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.

The AES Exhibit 1 document indicates that, under the Agricultural Lands of Importance to the State of Hawaii (ALISH) classification, about 90 percent of the project area is Other Important Agricultural Lands. The remaining 10 percent, located on the south side of the project area, is classified as Prime Agricultural Lands.

Soils on the proposed West Oahu Solar project site are designated by the Land Study Bureau as:

B Lands	48 Acres
D Lands	36 Acres
E Lands	13 Acres
Total	97 Acres

About half of the site has B-rated soils. LSB D and E rated lands are located on the other half of the project area. According to the document, the lands are not irrigated. As noted in HRS § 205-4.5(a)(21) solar facilities on lands classified as B rated lands for which a special permit is granted pursuant to section 205-6, may be permitted under certain restrictions relating to the decommissioning of the solar project, and the use in conjunction with compatible agricultural uses at reduced rates.

The document indicates that the project will include honey production and/or cattle grazing and production. The special permit application indicates that Aloha Bee LLC is an established beekeeping operation that manages more than 30 honeybee colonies across Oahu and also produces a variety of bee-related products. The document indicates that Aloha Bee LLC has been approached and the Petitioner will incorporate specific beekeeping requirements into the project site plan, such as the installation of about four (4) beekeeping stations located within the fenced perimeter of the solar array areas, accessible to Aloha Bee LLC via the internal service roads.

The document indicates that Rocker G Livestock is proposing to maintain their current operation within the project area. The smaller and younger steer and heifers would be utilized within the project area to minimize potential damage to solar modules.

Archaeological and Historic Resources. The Petitioner completed a Revised Archaeological Inventory Survey (RAIS), dated December 2020 as noted as Exhibit 24 within AES Exhibit 20. Several features were discovered on the project site. The Department of Land and Natural Resources, State Historic Preservation Division (SHPD)

issued a letter dated January 4, 2021, for the review and approval of the RAIS, which included recommended mitigation measures for the proposed project. The SHPD letter indicates that adverse impacts to Site number 50-80-08-5593 features 2A through 2E, Historic irrigation system and plantation infrastructure, should be avoided. Mitigation of Site number 50-80-08-5593 feature 2 should also include Historic American Engineering Record documentation. Additionally, Site number 50-80-09-2268 should be included as an addendum to the existing Ditch Historic Context Study (Mason Architects, Inc. 2018). Lastly, data recovery in the form of archaeological monitoring in the immediate vicinity of "Pump Camp 5" should be implemented. An archaeological monitoring plan should be submitted to SHPD for their review and acceptance prior to construction. With these mitigation measures, SHPD indicated that they agree with the project effect determination of "Effect, with agreed upon mitigation commitments."

OP notes, however, that these mitigation measures are not included as conditions in the Planning Commission's Finding of Fact, Conclusions of Law, and Decision and Order document (D&O). Thus, OP recommends that these should be condition(s) of the LUC's approval. The letter is attached here and also included as AES Exhibit 22, Exhibit 27 in the Department of Planning and Permitting's record of the SP to the LUC.

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

According to the application, the 97-acre project area is located in Honouliuli in the Ewa District, within the southwestern portion of the 991-acre UHWO Mauka lands. The property is bordered on the southeastern edge by H-1 Freeway and the UHWO Campus and East Kapolei. The southern and western borders of the property are vacant land, with Makakilo Quarry and the Makakilo residential area beyond. The northern area is open space and the Waianae Mountain range. To the northeast is the former Honouliuli Internment Camp site, which the National Park Service is proposing to incorporate as a National Monument. The east side of the property is bordered by Honouliuli Gulch and agricultural operations, further east is Kunia Road and Village Park residential area.

Pages 51-56. Section 6.6 Visual Resources. The Petitioner has included information on visual impacts to the surrounding areas. The solar arrays would be visible from surrounding locations and roadways such as the H-1 Freeway, Kunia Road, Farrington Highway, Kualakai Parkway and local streets. The application includes a photo study of the public views and vistas which indicates that views of the solar project would be partially blocked by the topography, vegetation and intervening structures located along the roadway corridors, and views of the Waianae Mountain range would not be significantly affected.

Attachment P Glare Study and FAA Determination of No Hazard to Air Navigation.

The project was issued a determination of no hazard on June 9, 2020 by the FAA. As a mitigation measure, if it is determined that the project is creating a hazardous condition for pilots, Petitioner would be notified by the FAA or the State DOT, and they would mitigate the hazard. This mitigation measure would also apply to radio frequency interference on aircraft hazards. The communication system would be disabled and investigated to ensure that there is no radio frequency interference.

Pages 44-45. Section 6.2.1. Vegetation. The application indicates that there were no federally or State-listed endangered, threatened, or candidate plant species identified in the project area.

Pages 45-46. Section 6.2.2 Wildlife. The application indicates that several threatened and endangered wildlife species could occur in the vicinity, such as the Hawaiian hoary bat, Hawaiian short-eared owl and Hawaiian seabird and waterbird species. The application lists mitigation measures for these species. These mitigation measures should be included as conditions to an approval of the Special Permit.

3. The proposed 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 additional infrastructure support from public agencies for the proposed solar project, based on the following summary:

- The proposed project is for a solar photovoltaic and battery energy storage system on approximately 97 acres of land, and would provide about 12.5 MMW of solar energy and about 50 MWh of battery storage. The proposed project would connect to Hawaiian Electric's grid by an existing 46-kV sub-transmission line that traverses the project area.
- Traffic Impacts. Page 39. Comments on the Traffic Impact Study from the State Department of Transportation indicates that there would be no significant impact to State highway facilities.
- Page 69. The application indicates that the project would not have adverse impacts on water or wastewater systems. The proposed project will not be connected to the Municipal systems. The proposed project will not impact the Department of Education school facilities.

- Page 69. The proposed project will incorporate multiple layers of fire prevention and suppression measures on the property. Thus, the proposed solar project will not impact the fire protection services. The project is also not expected to impact police services.

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

OP recognizes the State interest in encouraging renewable energy to promote energy self-sufficiency in appropriate locations around the State. We note that the proposed solar project is within the State Agricultural District using lands with soils that are classified as B, D and E. Solar facilities are allowed outright on D and E lands, and are allowed via the Special Permit procedures under HRS § 205-4.5(a)(21) on lands classified as B under certain restrictions relating to the decommissioning of the solar project, and the use in conjunction with compatible agricultural uses at reduced rates. The application appears to meet these requirements.

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 suitable for the uses permitted within the district. As noted above, the project would be located on approximately 97 acres of Class B, D and E lands as rated by the LSB productivity rating system. Under the ALISH system, 90 percent are Other Important Agricultural Lands and 10 percent are classified as Prime Agricultural Lands. The project site lands would be considered suitable for agricultural uses which allow solar energy facilities.

State Issues and Concerns

OP also offers the following comments on other matters of concern.

- A. Pursuant to Hawaii Administrative Rules § 15-15-95(b), Special Permits for areas greater than 15 acres require approval of both the county planning commission and the LUC. Since the proposed project site is larger than 15 acres, the LUC must approve the project and can impose additional conditions of approval.
- B. HRS § 205-4.5(a)(21) provides 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. (See D&O Condition 1)

- (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 (See D&O Condition 4)
- (C) Solar energy facilities shall be decommissioned at the owner's expense according to the following requirements:
 - (i) Removal of all equipment related to the solar energy facility within twelve months of the conclusion of operation or useful life; and
 - (ii) Restoration of the disturbed earth to substantially the same physical condition as existed prior to the development of the solar energy facility.

Recommendation

Having reviewed the application relative to State interests and the applicable Special Permit guidelines, OP recommends approval of the State Special Permit to establish the West Oahu Solar Plus Storage Project, subject to the conditions described below. OP concurs that the proposed project meets the criteria for an unusual and reasonable use within the State Agricultural Land Use District. The applicant has met the requirements for the issuance of a Special Permit for the proposed use, and appropriate conditions can be imposed to mitigate any adverse impacts from the proposed project. However, additional mitigation measures to mitigate impacts to wildlife, and archaeological and historic resources should also be included.

OP recommends that the LUC revise proposed D&O Condition 7 to include the Petitioner's proposed mitigation measures as indicated on Pages 45-46, Section 6.2.2 Wildlife. OP further recommends that the LUC require additional conditions to the approval to address SHPD concerns and recommended mitigation measures.

Revision to Condition 7.

7. The Applicant shall comply with the recommendations of the U.S. Fish and Wildlife Service and the State Department of Land and Natural Resources, Division of Forestry and Wildlife regarding the protection of endangered Hawaiian hoary bat, Hawaiian short-eared owl, and endangered and threatened Hawaiian water bird and shorebird species at the Petition Area by implementing the following mitigation measures:

- a. No trees or shrubs greater than 15 feet tall shall be disturbed, trimmed or removed during the Hawaiian hoary bat birthing and pupping season (June 1 through September 15).
- b. Any fences that are erected as part of the Project shall not have barbed wire to prevent entanglements of the Hawaiian hoary bat.

- c. A wildlife education and observation program (WEOP) shall be implemented for all construction and regular on-site staff. Staff shall be trained to identify listed species that may be found on-site (including Hawaiian hoary bat, pueo, Hawaiian seabirds and waterbirds) and to take appropriate steps if these species are observed. If a federally or state-listed species is observed to be impacted by the Project, a systematic post-construction monitoring program shall be developed and implemented.
- d. Speed limits shall be established and enforced within the Project area and along the access road.
- e. Construction activities shall be restricted to daylight hours as much as possible during the seabird peak fallout period (September 15–December 15) to avoid the use of nighttime lighting that could attract seabirds.
- f. Should nighttime construction be required during the seabird peak fallout period, a biological monitor shall be present in the construction area from approximately 0.5-hour before sunset to 0.5-hour after sunrise to watch for the presence of seabirds. Should a seabird (or other listed species) be observed and appear to be affected by the lighting, the monitor shall notify the construction manager to reduce or turn off construction lighting until the individual(s) move out of the area.
- g. Any on-site lighting shall be fully shielded, triggered by motion detector, and fitted with light bulbs having a correlated color temperature of four thousand Kelvin or less, to the extent possible. Lighting shall also be directed away from the solar arrays to minimize the potential for reflection and shall only be used when necessary.
- h. Construction of overhead lines shall be minimized to reduce the collision risk for seabird species.
- i. Prior to clearing vegetation within the Project area, pre-construction pueo surveys shall be conducted by a qualified biologist following the Pueo Project survey protocol. If a ground nest or an owl nesting on the ground is observed, an approximately 50-foot buffer shall be established and marked in the field. In accordance with existing protocol for UH West O‘ahu, a designated UH West O‘ahu representative shall be contacted immediately, and that representative shall provide notification to DOFAW. No vegetation clearing shall occur until pueo nesting ceases.
- j. If a live pueo is observed on-site by Project staff all activities within 50 feet of the bird shall cease, and the bird shall not be approached.
- k. No rodent baiting shall occur as part of the Project to prevent secondary poisoning from toxins in pueo prey.
- l. No surface water features shall be created by the Project during construction or operation to avoid attracting waterbirds to areas with sub-optimal habitat.

Addition of Conditions 13 through 15.

13. Previously Unidentified Burials and Archaeological/Historic Sites. In the event that historic or archaeological resources, including human skeletal remains, are found and/or identified during construction activities, all work shall cease in the immediate vicinity of the find, the find shall be protected from additional disturbance, and the State Historic Preservation Division (SHPD) shall be contacted immediately as required by HRS Chapter 6E and its applicable rules. Without limitation to any condition found herein, if any burials or archaeological or historic sites or artifacts not previously identified in studies referenced to in these Findings of Fact and Conclusions of Law are discovered during the course of construction of the Project, all construction activity in the vicinity of the discovery shall stop until the issuance of an archaeological clearance from the SHPD that mitigation measures have been implemented to its satisfaction.

14. Archeological/Historic Sites. Petitioner shall adhere to mitigation commitments as specified in the SHPD letter dated January 4, 2021 or as modified by SHPD:

1. Avoidance of adverse impacts to SIHP Site 50-80-08-5593 Feature 2 (2A through 2E) within the project area;
2. Historic American Engineering Record (HAER) documentation of SIHP Site 50-80-08-5593 Feature 2;
3. Incorporation of the portion of SIHP Site 20-80-09-2268 within and immediately adjacent to the project area into an Addendum to the existing Ditch Historic Context Study (Mason Architects, Inc. 2018); and
4. Data Recovery in the form of archaeological monitoring in the immediate vicinity of "Pump Camp 5."

Prior to any ground disturbance or construction, Petitioner shall comply with all interim and/or permanent mitigation and preservation measures recommended and approved by the SHPD. Petitioner shall confirm in writing to the LUC that the SHPD has found Petitioner's preservation mitigation commitments to be acceptable and has determined that any required historic preservation measures have been successfully implemented. The SHPD shall be notified at the initiation of the Project.

15. Archaeological Monitoring. Petitioner shall employ archaeological monitors for Pump Camp 5 feature. Petitioner shall submit an archaeological monitoring plan for ground disturbing activities to the SHPD for its review and acceptance or approval prior to project initiation. Data obtained from the archaeological monitoring plan shall be provided to the SHPD upon the completion of the monitoring of the Project.

Mr. Daniel Orodener, Executive Officer
June 7, 2021
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Thank you for the opportunity to review the Special Permit application. If you have any questions, please contact Lorene Maki of our Land Use Division at Lorene.k.maki@hawaii.gov

c: Department of Agriculture
HSEO