November 2, 2017

To: Daniel Orodenker, Executive Officer
   Land Use Commission

From: Leo R. Asuncion, Director
       Office of Planning

Subject: AES Lawai Solar, LLC
         Special Permit No. SP17-408
         Tax Map Key: (4) 2-6-003: 001 (Por.)
         Koloa and Lawai, Kauai, Hawaii

The Office of Planning (OP) recommends approval of Special Permit Application, SP17-408, AES Lawai Solar LLC (Petitioner), with minor amendments to the conditions imposed by the County of Kauai Planning Commission.

   Hawaii Revised Statutes (HRS) § 205-4.5(a)(21) allows solar energy facilities on lands with B or C rated soils pursuant to a special permit, provided that (1) the area occupied by the solar energy facility 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; (2) proof of financial security to decommission the facility is provided to the satisfaction of the appropriate county planning department prior to commencement of commercial power generation; and (3) the solar energy facility is decommissioned at the owner’s expense within twelve months of the conclusion of operations or the facility’s useful life and the area is restored to its pre-development condition.

   The use of agricultural lands for solar energy facilities raises the issue of how to balance conflicting goals. Solar generation facilities provide an important source of renewable clean energy. There is a strong demand for the agricultural lands by solar companies because they are relatively cheap, generally located away from most residential centers, and are often on relatively flat terrain. The availability of agricultural land for solar energy generation, however, also has the effect of making agricultural land more expensive and less available for farming.

2. Factual and Procedural Background.
   The Petitioner proposes to establish a 28-megawatt (MW) solar photovoltaic (PV) system in Koloa and Lawai, Kauai. The proposed project will consist of solar panels and appurtenant facilities on an approximately 196.33-acre portion of a 1,062.291-acre parcel located within
the State Agricultural District and in the County of Kauai Agriculture and Open Districts. The Petition Area is owned by McBryde Sugar Company, LLC, which is leasing easements to operate the system to the Petitioner. The Petitioner plans to sell the electric power to Kauai Island Utility Cooperative (KIUC). KIUC will be constructing a substation adjacent to the Petition Area on approximately 2.5 acres. The substation will collect the produced solar energy and connect it to the KIUC’s island-wide electric grid. The system is unique because it will feed the electrical power generated by the system into a Battery Energy Storage System (BESS), which will discharge the stored power into the KIUC grid during the non-daylight, peak hours.

Petitioner and KIUC have entered into a 25-year Power Purchase Agreement. Petitioner is an affiliate of AES Distributed Energy, Inc., a wholly owned subsidiary of the AES Corporation. The PV system will consist of ground-mounted solar panels on single-axis trackers which will rotate along a fixed horizontal axis from east to west following the sun, which increases the efficiency of the system. The electrical output of the panels will either be directed to the BESS to be stored or go directly into the power grid operated by KIUC. The substation will be constructed concurrently with the solar project, and connected with underground lines.

3. Issues of Concern.
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.”

OP assessed the prepared project in relation to these guidelines. On September 19, 2017, the OP commented and provided recommendations to the Kauai Planning Department regarding the application, which were addressed as follows:

a. Soil Productivity
OP requested that the Petitioner should provide the approximate land area in acres that would be within Land Study Bureau (LSB) designated B and C soils. The Petitioner provided LSB data that the entire area is composed of B, C and D-rated soils as follows (Petitioner’s Exhibit 38):

- B approximately 126 acres, (64.2%)
- C approximately 45 acres, (22.9%)
- D approximately 25 acres, (12.7%)

b. Operations
Pursuant to HRS § 205-4.5(a)(21)(A),(B) and (C): Solar energy facilities are permitted via special use permit with the following conditions:
(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 above have been reflected in conditions 2 and 5 (County of Kauai Planning Commission Findings of Fact, Conclusions of Law, and Decision and Order).

c. Flora and Fauna
The applicant submitted a flora and fauna survey dated June 2017. During the survey, the consultant observed the endangered Hawaiian Moorhen and the black crowned night-heron. The study recommended certain mitigation measures. OP recommended that all mitigation measures recommended by the applicant’s consultant be required as a condition of approval (Petitioner’s Exhibits E-5, E-9), including the following:

i. Petitioner shall develop an endangered species awareness training module, which shall include all potential endangered species that may frequent the Petition area.

ii. All construction workers and solar facility employees shall undergo endangered species awareness training prior to starting work.

The above were included in the Kauai Planning Commission’s condition 6 (County of Kauai Planning Commission Findings of Fact, Conclusions of Law, and Decision and Order).

d. Coastal Zone Management
OP requested that the application should include a section addressing the objectives of HRS Chapter 205A. The revised application includes an amended section (Petitioner’s Exhibit 2) section detailing positive responses to the objectives of HRS Chapter 205A.

e. Historic and Cultural Resources
The OP comment to the Planning Department indicated that while an archaeological inventory survey (AIS) had been provided, the State Historic Preservation Division (SHPD) had not accepted the AIS, according to a letter dated August 30, 2017.
SHPD indicated that the draft AIS offers adequate information, and provided the Petitioner with a list of corrections and changes to incorporate into a revised AIS.

The petitioner revised the AIS and addressed the list of corrections requested by the SHPD. The revised AIS was accepted by SHPD on September 15, 2017 (Petitioner’s Exhibit 27) with the condition that the Archeological Monitoring Plan (AMP) be approved by SHPD.

OP recommended that the final Cultural Impact Assessment (CIA) (Petitioner’s Exhibit 28), should be included with the submittal of the Special Permit to the Land Use Commission for its consideration. The Petitioner has submitted a letter from the Principal Investigator of the CIA, which found no cultural practices within the proposed area. The consultant concluded that “Should cultural or burial sites be identified during the future ground disturbance in the project area, all work will immediately cease and appropriate agencies will be notified” (Petitioner’s exhibit 29), with which OP concurs.

4. Recommendation.

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 Kauai, consequently OP recommends approval of this Special Permit.

OP agrees with the conditions of approval from the County of Kauai Planning Commission Findings of Fact, Conclusions of Law, and Decision and Order dated September 26, 2017. However, the OP recommends omitting conditions 22 and 23 as they are covered in condition 6.

If you have any questions, please contact Tomas J. Oberding of our Land Use Division at (808) 587-2888.

cc: Matsubara, Kotake & Tabata
Department of Agriculture
Kauai Planning Department

Enclosure

OP letter to Kauai Planning Department September 19, 2017