



Agenda Submittal

Agenda #: 2 **Status:** ALUC-Regular-OD
Type: ALUC-Document **Department:** Airport Land Use Commission
File #: AC 20-006 **Contact:** Jim Leland (707) 784-6765
Agenda date: 2/6/2020 **Final action:**
Title: ALUC-19-18 (Benicia Solar Project)
Conduct a Public Hearing to consider a Consistency Determination for the Benicia Solar Project with the Travis Air Force Base Land Use Compatibility Plan (County of Solano). (Project Planner: Jim Leland)
Governing body: Airport Land Use Commission
District:
Attachments: 1. A Application, 2. A1 Project Description, 3. A2 Vicinity Map, 4. A3 Aerial Map, 5. A4 Plans, 6. A5 SGHAT Analysis, 7. A6 Proposed Zoning Text Amendment, 8. Attachment B Travis Context Map Map.pdf

Date	Ver.	Action By	Action	Result
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Published Notice Required? Yes ☐ No ☐

Public Hearing Required? Yes ☐ No ☐

Published Notice Required? Yes ☐ No ☒

Public Hearing Required? Yes ☐ No ☒

INTRODUCTION

On January 9, 2020, the Solano County Airport Land Use Commission considered a request for a consistency determination from the City of Benicia for a solar project on Lake Herman Road. The project consisted of two major components, a zoning text amendment and a specific solar project on Lake Herman Road. Each component is described below.

Zoning Text Amendment (See Attachment A6 Proposed Zoning Text Amendment)

The zoning text amendment would permit solar facilities on open space lands within the City of Benicia. The zoning amendment establishes standards for the development of solar utilities which include measures regulating:

1. Protection of agriculture,
2. No municipal services required,
3. Setbacks,
4. Height not exceeding 15 feet,
5. Noise levels,

6. Decommissioning procedures,
7. Stormwater management, and
8. Traffic minimization

Lake Herman Road Solar Project (Attachment A1 Project Description)

The proposal is to establish a commercial scale solar electric generation project on the north side of Lake Herman Road opposite the intersection with Reservoir Road. The project site is approximately 90 acres in size and is located within Compatibility Zone D of the Travis Plan.

The project will be located on property in the City of Benicia with an open space zoning designation.

According to the project description, the project will:

“..... generate a total of 5.0 Megawatts (MW) AC (7 MW DC) of clean, reliable solar energy when complete. The Project will interconnect to PG&E’s pre-existing electrical distribution system located on site. The power generated from this facility will be sold to Marin Clean Energy (MCE) through a long-term Power Purchase Agreement (PPA). Additionally, the Project will be equipped with energy storage technology that will allow on site renewable energy generation to be stored and dispatched onto the grid when needed.

The Lake Herman Solar Project will utilize approximately 18,424 solar modules and 40 string inverters, which convert the sun’s energy into usable, AC power. Single axis tracking technology will be utilized to allow the modules to efficiently track the sun throughout the day and maximize the efficiency of solar collection. The modules will be mounted on a steel racking system, which will be anchored into the ground using driven steel piers. The overall height of the array will be no more than 8 feet tall.”

As a part of the specific project, a Solar Glare Hazard Analysis Tool (SGHAT) was utilized to assess the project impacts to flight operations at Travis Air Force Base, as required under the Travis Plan (See Attachment A5 Solar Glare Analysis). The report indicated no impact to Travis.

Commission Action of January 9, 2020

The Commission conducted its hearing on the two project components and took the following actions:

1. Approved the Zoning Text Amendment with the condition that the solar standards proposed in the zoning text amendment be revised to include the following language:

“ All solar utility projects shall prepare a solar glare analysis utilizing a SGHAT compliant analytical tool. Solar utility projects, including the results of the SGHAT analysis, shall be submitted to the Solano County Airport Land Use Commission for a consistency determination prior to approval by the City.”

2. Continued consideration of the specific solar project until February 6, 2020 in order for Travis AFB to complete its review of the SGHAT analysis submitted by the City of Benicia and their applicant.

Items Before the Commission

Both items are before the Commission again.

Zoning Text Amendment

After the Commission's action on January 9th, staff has had several discussions with city representatives. The Benicia City Attorney has proposed alternative wording for the condition of approval cited above, as follows:

"Solar facilities shall comply with the applicable provisions of the Travis Air Force Base Airport Land Use Compatibility Plan".

Staff has reviewed the language suggested by the City Attorney and is in agreement that it is preferable because it is more inclusive. Our language was specific to the requirement that a SGHAT study be prepared and submitted. The City's alternative is a general requirement that requires solar projects to comply with all applicable provisions of the Plan, including any additional requirements which the Commission may adopt in the future for solar utility projects.

Specific Solar Project on Lake Herman Road

The specific project was continued from January 9th to permit Travis AFB to complete its review of the solar glare hazard analysis (SGHAT) study for the project. Travis has the expertise to review these studies for the Commission. Travis AFB has completed their review and has responded to staff that they have concluded that the Lake Herman Road solar installation creates no concerns for the Base.

Based on the discussion above, staff is making the following recommendation:

RECOMMENDATION

Adopt the recommended findings and determine that the Benicia Solar Project, including the inclusion of the recommended additional language from the City of Benicia (above), is **consistent** with the Travis Air Force Base Land Use Compatibility Plan.

DISCUSSION

REQUIRED TESTS FOR CONSISTENCY

ALUC Review Requirements

State law, under Section 21661.5 of the Public Utilities Code, requires that any proposed zoning regulations or revisions to the local zoning ordinance be reviewed for consistency with adopted airport land use compatibility plans.

The ALUC is concerned with those aspects of the proposed zoning changes which have the potential to be incompatible with of the Travis Air Force Base Land Use Compatibility Plan.

California Airport Land Use Planning Handbook

The State Department of Aeronautics has published the California Airport Land Use Planning Handbook as a guide for Airport Land Use Commissions in the preparation and implementation of Land Use Compatibility Plans and Procedure Documents. Section 6.4.2 sets forth procedures for the review of local zoning ordinances and directs agencies to consider the topics listed in Table 5A, as follows:

Zoning or Other Policy Documents (from Table 5A, CalTRANS Airport Land Use Planning Handbook)

The Handbook lists the following topics for consideration when reviewing zoning or other policy documents.

- *Intensity Limitations on Nonresidential Uses*

- *Identification of Prohibited Uses*
- *Open Land Requirements*
- *Infill Development*
- *Height Limitations and Other Hazards to Flight*
- *Buyer Awareness Measures*
- *Non-conforming Uses and Reconstruction*

Staff has reviewed the Benicia Solar Project in light of the tests outlined above as well as the specific compatibility factors applicable to lands within the City of Benicia. Our analysis is presented below.

ALUC Context

The Benicia Solar Project applies to properties which lie within the area of influence of the Travis AFB Land Use Compatibility Plan (Travis Plan), more particularly within Compatibility Zone D (See Attachments B, C and D).

Travis Air Force Base Land Use Compatibility Plan

The requirements for Compatibility Zone D are listed below under the appropriate topical areas from topics suggested for consideration as identified in the State Handbook. They are as follows:

- **Intensity Limitations** *None*
- **Identification of Prohibited Uses** *Hazards to Flight (See below)*
- **Open Land Requirements** *None*
- **Infill Development** *Not Applicable*
- **Height Limitations and Other Hazards to Flight**
 - ALUC review required for objects > 200 feet AGL
 - All proposed wind turbines must meet line-of-sight criteria in Policy 3.3.4
 - All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review
 - All new or expanded meteorological towers > 200 feet AGL, whether temporary or permanent, require ALUC review
 - Areas within the Bird Strike Hazard Zone must prepare a WHA and incorporate all feasible mitigation measures.
 - Outside of the Bird Strike Hazard Zone but within the Outer Perimeter, any new or expanded land use that has the potential to attract the movement of wildlife that could cause bird strikes are required to prepare a WHA.
- **Buyer Awareness Measures** *None*
- **Non-conforming Uses and Reconstruction** *Not Applicable*

Staff has reviewed the proposed Benicia Solar Project Ordinance for consistency with the compatibility criteria for Compatibility Zone D of the Travis Plan. Our analysis is presented below.

ANALYSIS

Intensity Limitations on Nonresidential Uses

Within Compatibility Zone D, there are no limitations on intensity for non-residential land uses and as a result the Benicia Solar Project is consistent with this provision.

Identification of Prohibited Uses

There are no prohibited uses within Compatibility Zone D. Therefore, the Benicia Solar Project is consistent with this provision.

Open Land Requirements

Compatibility Zone D has no open land requirements for development. As a result, the Benicia Solar Project is consistent with this requirement.

Infill Development

This project is not a part of an infill development. No further consideration is required for this criterion.

Height Limitations and Other Hazards to Flight

The “Height Limitations” and “Other Development Conditions” listed in Compatibility Zone D are as follows:

1. ALUC review required for objects > 200 feet AGL
2. All proposed wind turbines in excess of 100 feet in height must meet line-of-sight criteria in Policy 3.4.4
3. All new or expanded commercial-scale solar facilities must conduct an SGHAT glint and glare study for ALUC review
4. All new or expanded meteorological towers > 200 feet AGL, whether temporary or permanent, require ALUC review
5. For areas within the Bird Strike Hazard Zone, reviewing agencies shall prepare a WHA for discretionary projects that have the potential to attract wildlife that could cause bird strikes. Based on the findings of the WHA, all reasonably feasible mitigation measures must be incorporated into the planned land use.
6. For areas outside of the Bird Strike Hazard Zone but within the Outer Perimeter, any new or expanded land use involving discretionary review that has the potential to attract the movement of wildlife that could cause bird strikes are required to prepare a WHA.

None of the hazards listed above are associated with the lawful use of the property for cannabis business purposes for reasons discussed in the following sections.

1 & 4. Height Review for Objects Greater than 200 Feet in Height

The Benicia Solar Project do not permit any structures taller than 50 feet, so ALUC review of this item is not required.

2. Wind Turbines in Excess of 100 Feet in Height

The Benicia Solar Project do not permit any wind turbines, so ALUC review of this item is not required.

3. Commercial Scale Solar Projects

Commercial Solar projects require review by the Airport Land Use Commission. The Travis Plan requires that commercial solar projects submit a SGHAT analysis for review by the ALUC (See Attachment A5). The Solar Glare Hazard Analysis indicates that there will be no adverse impact to Travis AFB by the installation and operation of the proposed solar project. Travis AFB has confirmed that there are no issues for the Base created by this project. As such, the Benicia Solar Project is consistent with this provision.

5 & 6 Projects within the Bird Strike Hazard Zone or the Outer Perimeter Area

The solar project lies outside of the Bird Strike Hazard Zone and the Outer Perimeter Area. As a result, the Benicia Solar Project is not subject to the bird strike requirements within the Travis Plan.

Buyer Awareness Measures

The proposed project lies within Compatibility Zone D and outside of any noise contours of concern. As a result, Buyer Awareness Measures are not required by the Travis Plan.

Non-conforming Uses and Reconstruction

The project is proposed on vacant land and does not require review under the non-conforming provisions.

CONCLUSION

The analysis above, including the SGHAT, demonstrates that the specific solar project being proposed is consistent with the Travis Plan. The zoning text amendment could permit other solar facilities on other open space lands. Staff is recommending that the solar standards proposed in the zoning text amendment be revised to include the following language:

“All solar utility projects shall prepare a solar glare analysis utilizing a SGHAT compliant analytical tool. Solar utility projects, including the results of the SGHAT analysis, shall be submitted to the Solano County Airport Land Use Commission for a consistency determination prior to approval by the City.”

This provision would reflect the requirements of the Travis Plan which apply to new solar projects being considered by local jurisdictions.

RECOMMENDATION

Adopt the recommended findings and determine that the Benicia Solar Project, including the recommended additional language from above, is **consistent** with the Travis Air Force Base Land Use Compatibility Plan.

Attachments

Attachment A: Application
Attachment A1 Application Project Description
Attachment A2 Vicinity Map
Attachment A3 Aerial Map
Attachment A4 Plans
Attachment A5 SGHAT Analysis

Attachment A6 Proposed Zoning Text Amendment

Attachment B: Travis Plan Context Map

Attachment C: Resolution (To be Distributed at Hearing)