

## Solano County

675 Texas Street Fairfield, California 94533 www.solanocounty.com

Result:

### Agenda Submittal

| Agenda #:       | 2   | Status:       | PC-Regular          |
|-----------------|---|---------------|---------------------|
| Туре:           | PC-Document   | Department:   | Planning Commission |
| File #:         | PC 23-009   | Contact:      | Matt Walsh          |
| Agenda date:    | 03/02/2023  | Final Action: |                     |
| Title:          | Conduct a noticed public hearing to consider General Plan Amendment Application G-23-01 and adopt a resolution forwarding a recommendation of approval to the Board of Supervisors to amend policies related to the development of wind energy facilities and their potential impact on Travis Air Force Base; the proposed amendments are exempted from the California Environmental Quality Act pursuant to Section 15061 (b)(3) and Section 15308 of the CEQA Guidelines |               |                     |
| Governing body: | Planning Commission   |               |                     |
| District:       |   |               |                     |
| Attachments:    | A - Draft Resolution, B - General Plan Amendments - Redline, C - Public Notice  |               |                     |

## Published Notice Required? Yes X No \_\_\_

## Public Hearing Required? Yes X No

Action By:

#### **DEPARTMENTAL RECOMMENDATION:**

Ver.

Staff recommends that the Planning Commission conduct a noticed public hearing and adopt a resolution to make and forward a recommendation of approval of General Plan Amendment Application G-23-01 amending policies related to the development of wind energy facilities and their potential impact on Travis Air Force Base to the Board of Supervisors.

Action:

#### SUMMARY:

Date:

The importance of Travis Air Force Base (TAFB) to national defense and the local economy is well documented. TAFB also plays an important role in monitoring private commercial air traffic in the Bay area. The impacts of wind farms on an airport's radar system have been observed nationally and is acknowledged by the wind turbine industry. Specifically, wind farms appear as aircraft entering the area on an airport's radar imagery. Wind turbine development in the vicinity of TAFB has caused such impacts to the TAFB traffic control system. Despite multiple efforts to address this impact, thus far the issue has not been solved and any further expansion of wind turbine projects in the vicinity of TAFB would further erode the radar system and be detrimental to operations.

To address this impact and protect the TAFB mission, the Board adopted an interim ordinance restricting the approval of new permits for commercial wind turbines and windfarms in unincorporated Solano County in 2021. This interim ordinance was adopted to allow time to evaluate current policies and implementation measures to reduce impacts on TAFB resulting from development of new commercial wind turbines and windfarms within the TAFB radar field of view. The interim ordinance is set to expire on April 6, 2023.

File #: PC 23-009, Version: 1

This General Plan text amendment is proposed to address the potential impacts to TAFB resulting from additional large-scale commercial wind turbine development in Solano County. The draft amendments propose policy restrictions against the development of new wind facilities over 100 feet in height that are within the line of sight of TAFB radar. The proposed amendments are also intended to bring the General Plan into consistency with the Travis Air Force Base Airport Land Use Compatibility Plan (ALUCP).

#### **DISCUSSION:**

#### Background

The Solano County General Plan, adopted in 2008 and updated several times since, generally encourages the development of commercial wind energy generation facilities to support renewable energy production, particularly in the Collinsville area and other areas south of Highway 12, but provides that proposals for new facilities should not be approved if the facility would cause conflicts with the mission of TAFB. The General Plan also provides that future development of wind energy within Solano County must be consistent with the ALUCP adopted by the Solano County Airport Land Use Commission for TAFB.

In 2013, Solano County prepared a Joint Land Use Study (JLUS) to analyze and address a variety of issues, including the potential impacts of commercial wind and solar facilities on TAFB. The JLUS concluded that large wind turbines over 100 feet in height can provide false readings on the radar system that TAFB uses. In 2015, as a result of the JLUS findings, the Airport Land Use Commission (ALUC) adopted an update to the TAFB Land Use Compatibility Plan that limited wind turbine height in the line of site of TAFB radar. The 2015 plan recommends that no new commercial wind turbines be located within the line-of-sight of the TAFB Digital Airport Surveillance Radar (DASR) and that proposals for new commercial turbines provide individual line-of-sight analyses to demonstrate that the turbine is not within the line-of-sight of the TAFB DASR. Because the County's General Plan already provides that new commercial wind projects must be consistent with the ALUCP, there is no inconsistency between the General Plan and the 2015 ALUCP. However, the General Plan does not explicitly reference the line-of-sight analysis recommended by the 2015 ALUCP.

In 2018, TAFB, Solano County, and the cities of Fairfield, Suisun City, Vacaville, and Vallejo engaged in a collaborative planning effort to reduce or prevent encroachment issues associated with current and future missions at the base and growth in the local communities. The product of this collaborative planning effort was the TAFB Sustainability Study. This study notes that development of new commercial wind turbines south of TAFB, or replacement of existing turbines with taller models, impact the TAFB DASR field of view. The study concludes that regulating the siting of future wind facilities based on the recommendations made in the 2015 ALUCP would adequately address any potential adverse impacts to the DASR.

Considering the recommendations made in the 2015 ALUCP and the conclusions expressed in the 2018 Travis Sustainability Study, Solano County proposes to update and amend its General Plan to do the following:

- Prohibit the development of new commercial wind energy generation facilities north of Highway 12;
- Explicitly require that any proposals for new or modified commercial wind energy generation facilities provide line-of-sight analyses demonstrating that each new or modified turbine within the facility is not within the line-of-sight of the TAFB DASR;
- Explicitly recognize that larger commercial wind energy generation facilities can and do have adverse impacts on the TAFB DASR, and thereby negatively impact the operations and mission of Travis Air Force Base;
- Retain existing General Plan policies that generally encourage the development and use of renewable energy sources, but clarify as County land use development policy that the protection of the operations and mission of TAFB takes priority over the development of new commercial wind energy generation

#### File #: PC 23-009, Version: 1

facilities or the modification of existing facilities to increase their production capacity.

#### General Plan Amendment (Attachment B)

While much of the proposed revisions to the General Plan text involve clarification in the background discussion in both Chapter 2 (Land Use) and Chapter 4 (Resources) of the General Plan, the notable policy additions are reflected below and are proposed as new policies in the Resources Chapter:

- **RS.P-58A**: New commercial wind energy facilities and noncommercial wind turbines greater than 100 feet in height are inappropriate in areas north of Highway 12 and the Suisun Marsh Preservation Area.
- **RS.P-58B:** No wind turbine greater than 100 feet in height, measured at the apex of the blade at its highest point, shall be within a line-of-sight of the Travis AFB Digital Airport Surveillance Radar (DASR) Radar Installation. All commercial wind turbine facilities and non-commercial wind turbines greater than 100 feet in height shall provide an individual radar line-of-sight analysis to demonstrate that the placement of the proposed facility or wind turbine is not within a line-of-sight to the Travis DASR Radar Installation.
- RS.P-58C: Existing commercial and non-commercial wind turbines may be replaced only if the replacement turbine has dimensions and materials similar to the original. Replacement turbines that are significantly taller than the original, or built with materials that are significantly more reflective than the original, shall be subject to policy RS.P-58B. RS.P-58D: Policies RS.P-58B and RS.P-58C implement the Airport Land Use Commission's 2015 Airport Land Use Plan for Travis Air Force Base. For that reason, these two policies will remain in effect through December 31, 2028, unless amended prior to then by the Board of Supervisors due to changes in wind turbine designs, radar technology, or radar impact modeling methods. After December 31, 2028, policy RS.P-58E shall become effective.
- RS.P-58E: An applicant proposing installation or replacement of a wind turbine generator greater than 100 feet in height shall model anticipated impacts to verify that there will be no net increase in radar interference above baseline to Travis Air Force Base, using a modeling methodology of proven reliability. The applicant must demonstrate that the project will cause no measurable decrease in the ability of the Travis Air Force Base air navigation radar to detect targets. In addition, the applicant must demonstrate that the project will not negatively impact existing or anticipated flight operations of Travis Air Force Base.

Adoption of these amendments, in addition to clarifying amendments noted in Attachment B, are recommended by staff in order to further protect the mission of TAFB and to bring the General Plan into further consistency with the 2015 ALUCP

#### **GENERAL PLAN CONSISTENCY:**

The proposed General Plan amendment application is consistent with the Solano County General Plan in that the various land uses authorized by the amendment are compatible with the objectives, policies, general land uses, and programs specified in the plan.

#### **ENVIRONMENTAL REVIEW:**

The project qualifies for a Categorical Exemption pursuant to Section 15308 Class 8, Actions by Regulatory Agencies for the Protection of the Environment, of the California Environmental Quality Act. Section 15308 Class 8 consists of:

#### File #: PC 23-009, Version: 1

Actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement or protection of the environment where the regulatory process involves procedures for protection of the environment. Construction activities and relaxation of standards allowing environmental degradation is not included in this exemption.

The project consists of adoption of revised policies relating to wind energy facilities in order to avoid impacts to TAFB. The revised policies provide additional detail that restricts the development of new or replacement wind facilities that will pose an adverse impact to operations and the mission of the airbase. The proposed policies protect the existing environment of the airbase in order to ensure continued safe operations and to avoid future conflicts between the airbase and wind energy facilities.

#### OTHER AGENCY INVOLVEMENT:

County Counsel assisted in development of the General Plan amendment application. The proposed amendments are scheduled to be considered for a consistency determination with the Travis ALUCP by the Solano County Airport Land Use Commission on March 9, 2023.

#### **PUBLIC HEARING NOTICE:**

Consistent with §28.112 and §28.04 of the Solano County Code, a public hearing notice was published in the Daily Republic at least 15 days prior to the public hearing (Attachment C).

#### RECOMMENDATION:

Based on the discussion above, staff recommends that the Planning Commission recommend that the Board of Supervisors approve General Plan Amendment Application G-23-01 to amend policies related to the development of wind energy facilities and their potential impact on Travis Air Force Base.

## SOLANO COUNTY PLANNING COMMISSION RESOLUTION NO. \_\_\_\_

# RESOLUTION RECOMMENDING APPROVAL OF GENERAL PLAN AMENDMENT NO. G-23-01 TO THE SOLANO COUNTY BOARD OF SUPERVISORS

WHEREAS, the Solano County Planning Commission has considered proposed General Plan Amendment No. G-23-01, which would amend the text and policies of the Solano County General Plan relating to commercial wind energy development to more closely reflect the recommendations made by the Solano County Airport Land Use Commission regarding such development in its Travis Air Force Base Land Use Compatibility Plan; and

**WHEREAS**, the Planning Commission has reviewed the report of the Department of Resource Management and heard testimony relative to the project at the duly noticed public hearing held on March 2, 2023; and

**WHEREAS**, on projects involving a general plan amendment, the Planning Commission is an advisory agency to the Board of Supervisors and the Commission is required to render a written recommendation to the Board, giving its reasons for the recommendation; and

**WHEREAS**, this resolution, together with the staff reports prepared by the Department of Resource Management and the minutes of the Planning Commission's proceedings, constitute the Commissions' written recommendation and report to the Board of Supervisors on the proposed General Plan Amendment; and

**WHEREAS**, after due consideration, the Planning Commission has made the following findings in regard to the proposed amendment:

- 1. The proposed amendment is exempt from the California Environmental Quality Act (CEQA) pursuant to Sections 15308 and 15061(B)(3) of the CEQA Guidelines;
- 2. The proposed amendment would not cause the Solano County General Plan to be internally inconsistent;
- 3. The proposed amendment would be beneficial to the people of Solano County.

**RESOLVED**, that the Solano County Planning Commission recommends to the Solano County Board of Supervisors that General Plan Amendment No. G-23-01 be approved.

**RESOLVED**, that the Planning Commission directs the Department of Resource Management to make any necessary grammatical corrections and formatting changes to the to the proposed amendment document, to ensure all documents presented to the

Terry Schmidtbauer, Secretary

|         |        | visors are interna<br>ts public hearing. | ally consistent and reflect the direction given by the  |
|---------|--------|--|---|
|         |        | *****                                    | *****   |
| •       | -      | 0 0                                      | resolution was adopted at the regular meeting of the sion on March 2, 2023 by the following vote: |
| AYE     | S:     | Commissioners                            |   |
|         |        |  |   |
| NOE     | ES:    | Commissioners                            |   |
| ABS     | STAIN: | Commissioners                            |   |
| ABS     | SENT:  | Commissioners                            |   |
|         |        |  | By:<br>Kay Fulfs Cayler, Chairperson<br>Solano County Planning Commission                         |
| Attest: |        |  |   |

#### **General Plan Amendments to address new Wind Turbines**

#### Chapter 2

#### Page LU-27

#### **Travis Air Force Base**

Travis AFB occupies approximately 7,100 acres of land, with two 11,000-foot runways oriented along the northeast-southwest diagonal away from existing housing developments. Travis AFB is home to the world's largest military airlift unit, the 60th Air Mobility Wing, and the wing's reserve counterpart, the 349th Air Mobility Wing. In 1995, the function of the base was expanded by the addition of air refueling assets from March AFB. In 2013, function of the base was further expanded by the construction of an Assault Landing Zone, a short runway used to train military pilots in low altitude tactical approaches, landings, and departures. The U.S. Department of Defense has been using the site for military operations since the early 1940s.

The public is interested in protecting the viability of Travis AFB, and as a part of that effort, in preventing the introduction of incompatible land uses in the vicinity. This change has arisen largely from two factors. One is a heightened awareness of the economic importance of Travis AFB. Secondly, the large number of military base closures in California in recent years, together with the ongoing program of the federal government to eliminate unneeded military bases throughout the country, has raised community concerns about the future of Travis AFB. In light of these factors, the need to ensure long-term land use compatibility between the base and its environs has become a high community priority.

In June 2002October 2015, the Solano County ALUC adopted an updated ALUCP, now called the for Travis AFB Land Use Compatibility Plan (Travis LUCP). The Travis ALUCP addresses restrictions on residential development using compatibility zones. Nonresidential development is also addressed by the Travis ALUCP according to the number of people per acre, and established the noise sensitivity of different land uses and activities, and the potential for development to create safety hazards to airport operations. In December 2013, the Solano

County ALUC amended the Travis ALUCP to include an Assault Landing Zone Training Area Overlay, where structures greater than 200 feet in height would be incompatible with operation of the Assault Landing Zone. Figure LU-6 indicates the area in which new development must be compatible with the Travis ALUCP. Please see the Travis LUCP for additional information governing actions in the compatibility zones. Various policies of the General Plan relating to new development have been updated to ensure that the General Plan remains consistent with the recommendations made in the Travis ALUCP.

The Travis Air Force Base Sustainability Study Report (Travis SSR), released in April 2018, was a collaborative planning effort by Solano County and the cities of Fairfield, Suisun City, Vacaville, and Vallejo relating to land use regulation, conservation, and natural resource management issues affecting Travis AFB and local communities. Compatibility factors addressed in the Travis SSR include the growing population and pressure to develop land, the potential increase of alternative energy development in the vicinity, and the natural and biological resources that surround Travis AFB. Development policies in the General Plan also reflect recommendations made in the Travis SSR.

#### Page LU-71

#### **Goal and Policies**

The following goal and policies were developed based on community input and along with the land use diagram will be used to review and update proposals for new development in the Collinsville-Montezuma Hills Area Plan.

#### Goal

SS.G-3: Protect and maintain the historic communities of Birds Landing and Collinsville while continuing to provide opportunities for industrial development that are compatible with the Collinsville area.

#### **Policies**

SS.P-19: Support the continued commercial use of existing commercial parcels in Birds Landing. SS.P-20: Explore historic preservation for historic buildings located within the study area. Preserve the residential character of the Collinsville town site; ensure that any SS.P-21: future nonresidential uses are compatible with the residential character and that an adequate buffer is established between residential and nonresidential uses. SS.P-22: Preserve and enhance residential and commercial uses in Birds Landing. SS.P-23: Focus on renewable energy, other than wind energy, in the development of Water Dependent Industrial uses. SS.P-24: Provide adequate circulation for new industrial development in the Water Dependent Industrial land use designation, and protect circulation for adjacent, nonindustrial land uses, including agricultural and other local traffic. SS.P-25: Support the development of Commercial Recreation uses in designated portions of the Collinsville town site. SS.P-26: Maintain and support the expansion of neighborhood commercial uses appropriate for the traditional community in Birds Landing. SS.P-27: Protect existing historic communities from floodwaters by supporting the ongoing maintenance of levees and other flood control mechanisms.

#### Page LU-72

#### Regulations

SS.1-7 Review and update the Collinsville Montezuma Hills Area Plan and Program

consistent with the Collinsville special study area land uses, policies and
programs. The Area Plan policies and programs that apply to the secondary
management area of the Suisun Marsh shall be reviewed and updated consistent
with the Suisun Marsh Protection Plan.

Related Policies: SS.P 19, SS.P 20, SS.P 21, SS.P 22, SS.P 23, SS.P 24, SS.P 25, SS.P 26, SS.P 27

Agency/Department: Department of Resource Management

Funding Source: General Fund, Project Applicants

Time Frame: 2011

#### Page LU-74

SS.I-13: Continue to promote Promote the development of renewable commercial grid-

<u>level solar</u> energy production <u>and battery storage</u> in the Collinsville area.

Renewable energy should be considered in the development of the Water

Dependent Industrial area. Maintain an agricultural or marsh buffer between

homes in Collinsville and any future industrial uses to mitigate visual impacts,

glare, noise, and particulates.

Related Policy: SS.P-23

Agency/Department: Department of Resource Management

Funding Source: General Fund

Time Frame: Ongoing

#### Chapter 4

#### Page RS-4

#### **Relationship to Other General Plan Chapters**

State planning law requires general plans to be internally consistent, meaning that statements in one section are in agreement with all other portions of the plan. The Resources chapter contains goals, policies, and programs closely related to those contained in the Land Use, Agriculture, and Public Health and Safety chapters. However, this chapter differs by being almost exclusively oriented toward natural resources.

The Land Use chapter defines a planned land use pattern, identifying natural resource, agricultural, residential, commercial, industrial, and public use designations. Public and private lands intended for conservation, open space, and recreational purposes are identified on the Land Use diagram using the Water Bodies and Courses, Park and Recreation, Marsh, Watershed, Agriculture, and Public/Quasi-Public land use designations. The Land Use chapter and diagram also present four-five special purpose designations land use overlays intended to further preservation of one or more resources, including a Vacaville-Fairfield-Solano Greenbelt Overlay to provide a permanent separation between the Vacaville and Fairfield urban areas, a Resource Conservation Overlay to conserve biological resources, an Agricultural Reserve Overlay to promote consolidation of agricultural conservation easements and mitigation lands, a Tri-City and County Cooperative Planning area to promote conservation of open space resources, and a Wind Energy Resources Overlay to identify desired locations for wind energy facilities Travis Reserve Area Overlay to maintain existing agricultural uses on lands that may be needed for the expansion of Travis Air Force Base or development of a civilian or joint-use airport.

The Agriculture chapter provides goals and policies to protect the County's farmland resources.

Many similarities exist between the policies in the Resources chapter and the Agriculture chapter, including policies regarding urban-agricultural buffers created to reduce conflict

between adjacent land uses and community separators used to reinforce individual identity and physical separation of communities.

The Public Facilities and Services chapter addresses supply and use of resources and essential services, whereas the Resources chapter addresses their preservation and conservation. Water facilities and service and water resources and quality are closely linked. Policies in this chapter protect the water resources that are the foundation of a public water system. Energy resources and utilities are also closely related. The Resources chapter discusses energy resources within the county and various means of energy generation and conservation, whereas energy infrastructure and supply are discussed in the Public Facilities and Services chapter.

#### Pages RS-52 & 53

Wind energy converts the movement of wind to electricity through mechanical wind turbines. Wind electricity can be generated both on a small scale in agricultural and residential land and on a large scale through wind farms. Climatic conditions have blessed Solano County with excellent wind energy resources, and the county is one of five major utility-scale producers of wind energy in California.

While the county has extensive wind energy resources, numerous environmental concerns remain related to wind turbines. The biggest of these issues is are the potential for wind turbines to interfere with the air traffic navigation radar used by Travis Air Force Base and the potential for bats and birds to be caught in the turbines and killed. A number of design improvements which have become standard practice have reduced these the potential effects on bat and bird populations but the potential effects on air traffic navigation radar remain unresolved. In addition, newer turbine designs are much taller than older ones and these taller turbines can interfere with flight paths used by Travis Air Force Base even when the turbine structure does not intrude into navigable airspace.

The County has identified the Collinsville-Montezuma Hills south of Highway 12 as the primary wind resource area in the county. Noncommercial accessory wind turbine installations less than 100 feet in height and with a total rated power output of 100 kilowatts or less do not have a potential to cause significant environmental impacts or interfere with Travis Air Force Base, and are allowed with a building permit in any agricultural or natural resource zoning district. These types of installations are defined as less than 100 feet in height, with a total rated power output of 100 kilowatts or less. The guidelines and standards found within the General Plan implementation programs are directed at commercial, non-accessory wind turbine installations. Agricultural lands within the county are particularly appropriate for wind harvesting as turbines generally do not interfere with daily agricultural operations and can provide additional revenue on these properties.

Wind-Commercial wind energy development is and noncommercial wind turbine generators more than 100 feet in height are inappropriate in certain-most areas of the county, in order to protect public health and safety and natural resources. These areas are urban areas, the agricultural areas north of Highway 12, the Suisun Marsh Primary and Secondary Management AreaAreas, the Stebbins Cold Canyon Natural Area, San Pablo Bay National Wildlife Refuge, and the Jepson Prairie preserve owned by the Solano Land Trust. In addition, commercial wind energy development is inappropriate in areas where such development could materially interfere with the operation of air traffic navigation radar at Travis Air Force Base or the flight paths used by Travis aircraft.

Based on current radar technology and wind turbine materials, the method of siting wind turbines beyond the radar line-of-sight is the most proven and effective method for minimizing wind turbine impacts on a radar's aircraft detection capabilities. Siting wind turbines outside of the radar's line-of-sight is critical to mitigating additional cumulative effects arising from the addition of new turbines to those already existing within the current radar line-of-sight, as every additional turbine within the radar's line-of-sight negatively impacts the radar. However, radar technology and turbine designs are constantly improving, and better methods are being developed to model how new turbine installations could impact air traffic navigation radar.

In other areas of the county The County anticipates that the line-of-site method for evaluating potential impacts of wind turbines on radar operation will become outdated during the planning horizon of this General Plan, at which point proposals for commercial wind energy development will be processed under the normal use permit procedure. Additional documentation may be required due to lack of existing data. Wind Under the use permit procedure, commercial wind energy development, depending on size and location of the project, may require both wind resource verification and an environmental impact report to meet CEQA requirements. The County incorporates by reference the most up-to-date mapping of wind resource areas available from the California Energy Commission, or subsequent agency, into the General Plan. Applicants seeking permits for commercial wind turbine installations shall be required to demonstrate that the wind resource in their area is adequate using the mapping, wind studies and technology current to their permit application. Any future development of wind energy must be consistent with Airport Land Use Plans, the purposes for those plans as described in the State Aeronautics Act, and air operations of Travis Air Force Base and the Rio Vista Airport.

#### <u>Pages RS-55 – 57</u>

#### **Policies**

- RS.P-49: Ensure energy conservation and reduced energy demand in the county through required use of energy-efficient technology and practices.
- RS.P-50: Provide incentives for city and county residents and businesses to produce and use renewable sources of energy.
- RS.P-51: Promote Solano County as a model for energy efficiency and green building.
- RS.P-52: Ensure adequate and affordable supplies of energy to meet the energy needs of the county.
- RS.P-53: Enable renewable energy sources to be produced from resources available in Solano County, such as solar, water, wind, and biofuels to reduce the reliance on energy resources from outside the county.

- RS.P-54: Reduce Solano County's reliance on fossil fuels for transportation and other energy-consuming activities.
- RS.P-55: Require responsible extraction, storage, and transportation of natural gas resources that minimize the impact on the natural environment.
- RS.P-56: Provide information, marketing, training, and education to support reduced energy consumption, the use of alternative and renewable energy sources, green building practices, recycling, and responsible purchasing.
- RS.P-57: Encourage the use of technology or siting to minimize adverse impacts from energy production facilities on the environment, including wildlife and agricultural resources.
- RS.P-58: Require the siting of energy facilities in a manner compatible with surrounding land uses, including Travis Air Force Base, and in a manner that will protect scenic resources.
- RS.P-58A: New commercial wind energy facilities and noncommercial wind turbines greater

  than 100 feet in height are inappropriate in areas north of Highway 12 and the

  Suisun Marsh Preservation Area.
- RS.P-58B: No wind turbine greater than 100 feet in height, measured at the apex of the blade at its highest point, shall be within a line-of-sight of the Travis AFB Digital Airport Surveillance Radar (DASR) Radar Installation. All commercial wind turbine facilities and non-commercial wind turbines greater than 100 feet in height shall provide an individual radar line-of-sight analysis to demonstrate that the placement of the proposed facility or wind turbine is not within a line-of-sight to the Travis DASR Radar Installation.
- RS.P-58C: Existing commercial and non-commercial wind turbines may be replaced only if the replacement turbine has dimensions and materials similar to the original.

  Replacement turbines that are significantly taller than the original, or built with materials that are significantly more reflective than the original, shall be subject to policy RS.P-58B.

- RS.P-58D: Policies RS.P-58B and RS.P-58C implement the Airport Land Use Commission's 2015

  Airport Land Use Plan for Travis Air Force Base. For that reason, these two policies

  will remain in effect through December 31, 2028, unless amended prior to then by

  the Board of Supervisors due to changes in wind turbine designs, radar technology,

  or radar impact modeling methods. After December 31, 2028, policy RS.P-58E shall
  become effective.
- RS.P-58E: An applicant proposing installation or replacement of a wind turbine generator greater than 100 feet in height shall model anticipated impacts to verify that there will be no net increase in radar interference above baseline to Travis Air Force Base, using a modeling methodology of proven reliability. The applicant must demonstrate that the project will cause no measurable decrease in the ability of the Travis Air Force Base air navigation radar to detect targets. In addition, the applicant must demonstrate that the project will not negatively impact existing or anticipated flight operations of Travis Air Force Base.
- RS.P-59: Encourage on-site renewable energy production and use and energy conservation measures.

#### **Implementation Programs**

#### Regulations

- RS.I-37: Amend and maintain the zoning ordinance to guide the siting <u>or repowering of commercial, non-accessory</u> wind turbine installations <u>and noncommercial wind turbines greater than 100 feet in height, consistent with the limitations described in policies RS.P-58A through RS.P-58C</u>. Include the following standards into the ordinance:
  - Require a minimum setback of 1,000 feet or three times total turbine height, whichever is greater, from a dwelling unit, residential building site, or land zoned for residential uses.
  - Require a minimum setback of three times total turbine height from any zoning district (other than residential) which does not allow wind turbines.

- Require a minimum setback of three times total turbine height from any
  property line, public roadway, transmission facility, or railroad. This
  minimum setback may be waived in the case of wind farms located on
  adjacent parcels, provided an agreement has been reached between the
  neighboring property owners.
- Require a setback of 1/4 mile from the right-of-way of any scenic roadway.
- In the Cordelia Hills, wind energy development shall be set back to those areas which are beyond the sight of existing residential neighborhoods and areas planned for residential development, and set back to areas beyond view from I-80 and I-680. No turbine shall be sited within this zone.
- Define noncommercial wind energy generators as "wind-driven machines"
  that convert wind energy into production of electrical power for the primary
  purpose of on-site use and not for resale, that are 100 feet or less in height,
  and that have a total rated power output of 100 kilowatts or less.
- Require that Travis Air Force Base be notified of any permit application for commercial wind energy development or a noncommercial wind turbine more than 100 feet in height.
- Require applicants to demonstrate that the project will not cause material
   adverse impacts to radar operations at Travis Air Force Base or to flight paths
   used by Travis Air Force Base.
- Establish a procedure for plan check and testing of wind electric generators
  prior to use permit or building permit approval. Certification of all detailed
  plans for electrical systems, electrical substations, support towers, and
  foundations by California licensed professional engineers shall be required.
  Performance testing of wind turbine generators shall be required to ensure
  against catastrophic failure.
- Include commercial wind turbine development as a permitted use in the following zone districts:

Exclusive Agricultural (A)

#### Limited Agricultural (A-L)

Water-Dependent Industrial (I-WD)

Limited Manufacturing (M-L)

General Manufacturing (M-G)

Watershed and Conservation (W)

 Non-commercial wind energy development shall be allowed in districts as currently provided for in the ordinance.

Related Policies: RS.P-22, RS.P-37, RS.P-58 – RS.P-58E

Agency/Department: Department of Resource Management

Funding Source: General Fund
Time Frame: By 20112024

#### Pages RS-61 - 64

RS.I-50: During review of wind turbine generator proposals, consider the following:

- Wind turbine generators shall not be located in areas that conflict with the mission of Travis Air Force Base or other air operation facilities.
- Commercial turbines and non-commercial turbines over 100 feet in height or
  with a total rated power output of more than 100 kilowatts in designated
  wind resource areas require a public hearing and use permit approval by the
  Planning Commission.
- Following use permit approval, building permits and grading permits are required. Noncommercial turbines 100 feet or less in height and 100 kilowatts or less in rated power output require only building permits and grading permits.
- Submittal requirements for use permit applications within the wind resource areas-include the following:
  - Permit application
  - Project description form (requires information on size and characteristics of project, physical and performance specifications of

- equipment, transmission system, certification, project schedule and phasing, circulation, and access).
- Acoustical analysis
- Archaeological survey
- Radar Impact analysis, if wind turbine generators greater than 100
  feet in height will be within line-of-sight of the air traffic navigation
  radar at Travis Air Force Base.
- Geotechnical report (must correlate to standard county requirements for geotechnical analysis)
- Site plan
- Elevation package (elevation drawings to scale of proposed turbines and accessory uses).
- Notification of the Federal Aviation Administration of any application with wind turbines over 200 feet in height within 20,000 feet of a runway of any airport.
- Notification of the utility and the California Public Utilities
   Commission of application filing.
- Notification of application filing to microwave communications link owners within 2 miles of the proposed installation.
- Adjacent property owner's notification package.
- o Current aerial photographs or panoramic photographs of the site.
- Evidence of liability and workers compensation insurance.
- o Map locating all residences within 2 miles of the proposed project.
- Certification of detailed plans for electrical systems and transmission lines, substation, support towers, generators, and foundations by California licensed professional engineers (electrical, civil, and structural).
- Performance test documentation by a licensed engineer for all proposed turbine types.

- Contribution to escrow account for removal of inoperable or unsafe wind equipment and associated uses, including foundations.
- Following review of the applicant's site plan by county planning staff, a biological assessment would be required if it is determined that sensitive biological resources identified by the Resource Conservation Overlay (Figure RS-2) could be affected by the proposed project. If the proposed wind turbine siting would fall within or near areas of sensitivity, additional biological assessment of the probable impacts of the project would be required as part of the permit application. Findings of the biological assessment would determine need for biological resource monitoring and mitigation for protection of biological resources. For projects proposed in areas of low biological sensitivity, no additional biological information would be required.
- Submittal requirements for building permit and grading permit applications shall be as follows:
  - Completed permit application.
  - Detailed plans and specifications for structures, foundations, electrical systems, certified by a California licensed professional engineer. Plans will be checked for compliance with such codes as the Uniform Building Code, the National Electrical Code, and applicable ANSI and IEEE standards.
  - Grading and erosion, sediment, and runoff control plans.
- A standard set of minimum conditions would apply to every permit approval.
   These conditions could be modified or added to at the discretion of Resource
   Management Department staff, Planning commission, or Board of
   Supervisors.
- Additional environmental information beyond that required for permit processing would not be required for projects proposed within the wind resource areas.

- In addition to the required safety setbacks, applicants would be required to demonstrate that the CNEL 50 influence area of proposed wind turbines would not coincide with residential areas or individual dwelling units. No turbines which exhibit high infrasonic noise generation potential would be permitted within one mile of residential uses or land zoned for residential uses.
- The zoning ordinance should require a bond or other guarantee, such as a contribution to an escrow account, for removal of inoperable or unsafe wind equipment and associated uses, including foundations, after use permit approval.

Related Policies: RS.P-22, RS.P-50, RS.P-52, RS.P-53, RS.P-54, RS.P-56, RS.P-57, RS.P-58\_

RS.P-58E

Agency/Department: Department Resource Management

Funding Source: General Fund

Time Frame: Ongoing

#### **DEPARTMENT OF RESOURCE MANAGEMENT**



Planning Services Division

## NOTICE OF PUBLIC HEARING

(Planning Commission)

**NOTICE IS GIVEN** that the Solano County Planning Commission will hold a PUBLIC HEARING to consider a General Plan Amendment (G-23-01) to incorporate and revise policies related to: new or expansion of wind turbine facilities and their potential for adverse impacts to Travis Air Force Base. The project has been determined not to have a significant effect on the environment and is exempt from the California Environmental Quality Act (CEQA) pursuant to Sections 15308 and 15061(B)(3) of the CEQA Guidelines. (Project Planner: Matt Walsh, 707-784-6765)

The hearing will be held on **Thursday, March 2, 2023 at 7:00 p.m.** in the Board of Supervisors Chambers, County Administration Center, 1<sup>st</sup> Floor, 675 Texas Street, Fairfield, California.

The County of Solano does not discriminate against persons with disabilities. If you wish to participate in this meeting and you will require assistance in order to do so, please contact the Department of Resource Management at 707-784-6765 at least 24 hours in advance of the event to make reasonable arrangements to ensure accessibility to this meeting.

#### **PUBLIC COMMENTS:**

In-Person: You may attend the public hearing at the time and location listed above and provide comments during the public speaking period. Phone: You may provide comments verbally from your phone by dialing 1-415-655-0001 and entering Access Code 2467 197 1378. Once entered in the meeting, you will be able to hear the meeting and will be called upon to speak during the public period. Email/Mail: Written comments be can emailed PlanningCommission@SolanoCounty.com or mailed to Resource Management. Planning Commission, 675 Texas Street, Suite 5500, Fairfield, CA 94533 and must be received by 10:00 a.m. the day of the meeting. Copies of written comments received will be provided to the Planning Commission and will become a part of the official record but will not be read aloud at the meeting.

Staff reports and associated materials will be available to the public approximately one week prior to the meeting at <a href="www.solanocounty.com">www.solanocounty.com</a> under Departments; Resource Management; Boards, Commissions & Special Districts; Solano County Planning Commission.

If you challenge the proposed consideration in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the Planning Commission at, or prior to, the public hearing.