



COUNTY OF SAN DIEGO

LAND USE AGENDA ITEM

FINAL

BOARD OF SUPERVISORS

GREG COX
First District

DIANNE JACOB
Second District

DAVE ROBERTS
Third District

RON ROBERTS
Fourth District

BILL HORN
Fifth District

DATE: May 8, 2013

XX

TO: Board of Supervisors

SUBJECT: WIND ENERGY ZONING ORDINANCE AMENDMENT AND GENERAL PLAN AMENDMENT TO THE MOUNTAIN EMPIRE SUBREGIONAL PLAN (BOULEVARD SUBREGIONAL PLANNING AREA) AND BORREGO SPRINGS COMMUNITY PLAN TO ALLOW WIND ENERGY DEVELOPMENT, POD 10-007 (DISTRICTS: ALL)

SUMMARY

Overview

On February 25, 2009 (2), the Board of Supervisors directed staff to develop a new regulatory framework for wind turbines that would simplify processing and bring regulations in line with current wind turbine technologies. The Board's direction included the establishment a 50 kilowatt rated capacity as the threshold between the two tiers. Wind turbine systems that generate 50 kilowatts or less would be defined as "small wind turbine," and systems with a cumulative capacity of more than 50 kilowatts would be defined as "large wind turbine." The project being considered is composed of a series of amendments to the County's Zoning Ordinance related to wind turbines and meteorological testing (MET) facilities that implement the Board's direction.

The project also includes a General Plan Amendment to modify the Boulevard Subregional Planning Area of the Mountain Empire Subregional Plan (Boulevard Community Plan) to increase opportunities for large wind turbine projects through the Major Use Permit process. Changes are also proposed to the Borrego Springs Community Plan to allow opportunities for small wind turbine development.

Recommendation(s)

CHIEF ADMINISTRATIVE OFFICER

1. Certify that the Final Environmental Impact Report (EIR) dated January 2013 on file with the Department of Planning and Development Services as Environmental Review Number 2009-00-003 prepared for the Wind Energy Ordinance Amendment POD 10-007 has been completed in compliance with the California Environmental Quality Act (CEQA) and State CEQA Guidelines, that the EIR was presented to the Board of Supervisors and that the Board of Supervisors reviewed and considered the information contained therein before approving the project, and that the EIR reflects the Board of Supervisors' independent judgment and

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analysis (Attachment H).

2. Adopt the CEQA Findings Regarding Significant Effects of the project prepared pursuant to CEQA Guidelines Section 15091 (Attachment G).
3. Adopt the Mitigation Monitoring and Reporting Program prepared pursuant to CEQA Guidelines Section 15097 (Attachment G).
4. Adopt the Statement of Overriding Considerations prepared pursuant to CEQA Guidelines Section 15093 (Attachment G).
5. Adopt the Decision and Explanation Regarding Recirculation of the EIR prepared pursuant to CEQA Guidelines Section 15088.5 (Attachment G).
6. Adopt the Statement of Location and Custodian of Documents prepared pursuant to CEQA Guidelines Section 15091(e) (Attachment G).
7. Direct the Director of Planning and Development Services and Director of Public Works to implement the mitigation measures within their respective jurisdictions that are adopted in the CEQA Findings Regarding Significant Effects for the County of San Diego Wind Energy Ordinance Amendment POD 10-007.
8. Adopt the attached Ordinance entitled:

AN ORDINANCE AMENDING THE SAN DIEGO COUNTY ZONING ORDINANCE RELATED TO WIND ENERGY TURBINES (Attachment A)
9. Adopt the attached resolution entitled: Resolution of the San Diego County Board of Supervisors Adopting General Plan Amendment (GPA) 12-003, which adopts amendments to the Regional Land Use Element, Mountain Empire Subregional Plan (Boulevard Chapter) and Borrego Springs Community Plan. (Attachment B)
10. Provide direction to staff regarding the five policy issues summarized at the end of this report.

Fiscal Impact

N/A

Business Impact Statement

The proposed project will further County, state and federal goals of utilizing alternative renewable energy resources. The proposed ordinance streamlines and clarifies existing wind energy regulations and will increase development opportunities for both small and large wind turbines, while ensuring that such improvements do not adversely impact the environment, public health/safety, or the livability of the community.

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Advisory Board Statement

N/A

Background

With the cost of oil, gas and electricity increasing, more and more people are turning to renewable energy as a viable source of electricity. There are many types of renewable energy sources, one of which is wind energy. Because this is an emerging and developing technology, it is important that County codes and regulations be made relevant to today's technology in order to provide an effective and efficient, rather than frustrating, permitting process. It is also important that the codes address the new environmental and community challenges that are often associated with this emerging technology. As such, any amendments to County regulations should strike a balance between the needs of business, environment and community.

On February 25, 2009 (2), the Board of Supervisors (Board) took two actions related to renewable energy. The first action directed staff to develop a new two tiered framework for wind turbine regulations to simplify processing and bring regulations in line with current wind turbine technologies. The second action amended Meteorological Testing Facility (MET) regulations to allow MET facilities through the Administrative Permit process. Staff worked on the project and prepared a draft EIR in the summer of 2010 after fair arguments were raised during the project's initial public review. Minor amendments to the ordinance to address inconsistencies with State law and allow multiple small turbines and MET facilities through the Administrative Permit process were approved by the Board on September 15, 2010. The draft Wind Energy Ordinance Amendment, General Plan Amendment and EIR were made public November 8, 2011. The Planning Commission held three hearings, and a full day workshop, to review and consider the project between April and July 2012. On July 20, 2012, the Planning Commission recommended approval of the project to the Board.

At approximately the same time the Wind Energy Ordinance was under development, Iberdrola Renewables submitted an application for a Major Use Permit, Zoning Ordinance Amendment, and General Plan Amendment for the Tule Wind project. This project was considered by both the Planning Commission and Board and received final project approval from the Board on August 8, 2012. Subsequent to the Tule Wind project's approval, staff returned to the Planning Commission in order to incorporate the Tule Wind project zoning ordinance changes into the proposed Wind Energy Ordinance Amendment. On October 19, 2012, the Planning Commission recommended approval of the Wind Energy Ordinance Amendment with the Tule Wind project zoning ordinance changes to the Board of Supervisors.

On April 10, 2013, the Board directed staff to prepare a draft comprehensive Renewable Energy Plan. Staff will return in 120 days with a draft Plan that includes cost and time estimates, as well as options for Board consideration. As part of this action, it was determined by the Board that the Wind Energy Ordinance would be considered separately from the Renewable Energy Plan.

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Analysis

The Board's direction included the establishment of a 50 kilowatt rated capacity as the threshold between the two tiers. Wind turbines that generate 50 kilowatts or less would be defined as "small wind turbine," and wind turbines with a cumulative capacity of more than 50 kilowatts would be defined as "large wind turbine." Further direction was given to continue with a ministerial permit process for small wind turbines and a Major Use Permit process for large turbine systems.

Given the complexity of this proposed legislative change, coupled with the amount of public input and the number of hearings that have occurred, there is a significant amount of information to convey. This staff report has been organized as follows.

- A. Current Regulations - This section summarizes the framework of the County's existing wind energy regulations.
- B. Project Description - This section summarizes proposed changes to wind energy regulations.
- C. Project Issues - This section summarizes the main issues associated with the project.
- D. Environmental Impact Report - This section summarizes the type of analysis, determinations, and alternatives that were included in the EIR.
- E. Planning Commission Hearings and Actions - This section summarizes the issues covered and actions taken during the Planning Commission hearing process.
- F. Policy Decisions - This section summarizes the major policy items for Board of Supervisor consideration.

A. Current Regulations

The Zoning Ordinance now identifies three categories of use types relating to wind turbines. Each category is regulated on a tiered scale, based primarily on the blade swept area of the wind turbine. Other factors include height, noise, and setback requirements. The three existing categories are described below and summarized in Table 1.

1. Wind Turbine System, Small

Turbines that qualify as small have a blade swept area of up to 220 square feet (an approximate diameter of 16.5 feet for a conventional horizontal axis turbine) and are allowed by right on lots greater than one acre. The height limit is 65 feet on lots less than five acres and up to 80 feet on lots greater than five acres.

2. Wind Turbine System, Medium

Turbines in this category have a blade swept area of up to 850 square feet (an approximate diameter of 33 feet for a conventional horizontal axis turbine) and are allowed on lots greater than one acre with an Administrative Permit. The height limit is

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65 feet on lots less than five acres and up to 80 feet on lots greater than five acres.

3. Wind Turbine System, Large

Large turbines consist of a single turbine or an array of turbines sometimes referred to as wind farms or utility scale wind projects. Large turbines have a blade swept area greater than 850 square feet, but less than 6,400 square feet for all turbines cumulatively and are allowed on lots greater than five acres with approval of a Major Use Permit. The height of a large turbine system may not exceed 80 feet.

Table 1. Current Regulations

Turbine Tier	Number of turbines permitted	Permit Required	Max. Permitted Blade Area	Maximum Height
Small	One	Ministerial	220 s.f. (approx. 16.5 ft diameter)	65 ft ≤ 5 acre lot 80 ft > 5 acre lot
Medium	Multiple	Administrative Permit	850 s.f. (approx. 33 ft diameter)	65 ft ≤ 5 acre lot 80 ft > 5 acre lot
Large	Multiple	Major Use Permit	6,400 s.f. (approx. 7 turbines w/ 33ft blade diameter)	80 ft

B. Project Description

The amendments to the Zoning Ordinance would eliminate the current Wind Turbine System Medium category, as well as the reliance on blade swept areas to classify turbine sizes. The proposed amendment utilizes a two-tier (category) framework based on the criteria described below and summarized in Table 2.

1. Small Wind Turbine

The proposed amendment would allow up to three tower mounted turbines no greater than 80 feet in height or five roof mounted turbines meeting the height limit of the zone (typically 35 feet) through a ministerial Zoning Verification Permit process.

In order to qualify as a small wind turbine, the cumulative rated capacity of all turbines on the lot cannot exceed 50 kilowatts. A 10 kilowatt wind turbine is commonly recommended for an average size home. Therefore, the proposed 50 kilowatt rated capacity threshold can accommodate power needs for homes and other accessory structures, such as wells and agricultural structures common in the backcountry.

Design and siting criteria have been incorporated into the ordinance to minimize impacts. Design provisions include prohibiting trellis style towers, eliminating the use of guy-wires and requiring manual and automatic speed controls. Siting provisions include

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prohibiting turbines on ridgelines, maintaining buffers from sensitive biological areas, and limiting the ground disturbance area for turbines.

2. Large Wind Turbine

The proposed amendment would allow the development of multiple large wind turbines. The number, height, location and setbacks would be evaluated through the discretionary Major Use Permit process. The primary changes related to large turbines are described as follows.

- a) Turbine Classification – Eliminates blade swept area restrictions and establishes a threshold of more than 50 kilowatts to define a large wind turbine.
- b) Wind Resource Map – Establishes permitted location for large wind turbines based on available wind resources.
- c) Noise – Requires an acoustical analysis to establish property-line setbacks.
- d) Height – Removes current 80-foot height limitation and allows height to be established through discretionary review of the Major Use Permit.
- e) Decommissioning Plan – Incorporates a decommissioning plan requirement into existing removal surety requirements.
- f) Findings – Adds separate Major Use Permit findings specific to large wind turbine projects.

The proposed ordinance amendment eliminates blade swept area restrictions and uses a 50 kilowatt or above threshold as the criteria to define the large turbine tier. Eliminating the blade swept area restriction will allow for the development of a greater number of turbines. The project also introduces a Wind Resources Map, which defines the areas within the county where large turbines would be permitted. The Wind Resources Map boundaries were established from National Renewable Energy Laboratory data, which define the wind resource areas capable of supporting large turbine development in the unincorporated area.

With regard to noise, the proposed ordinance requires large turbine applicants to prepare and submit an acoustical study to demonstrate compliance with all applicable noise level limits, including a new low frequency noise limit, during the Major Use Permit review process. Setbacks required to meet the proposed noise provision will vary as a result of the type and size of turbines, number and location of turbines, topography and prevailing weather conditions. In cases where utility-scale wind turbine projects are proposed, noise setbacks are estimated to range from 1 to 1 ½ miles from property lines. Ordinance provisions have also been included to allow Major Use Permit applicants to obtain noise setback waivers from neighboring property owners. Additionally, an applicant may seek a noise waiver from the decision making body if the project's benefits are found to

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outweigh its impacts.

The project also deletes the current 80 foot height limit and allows turbine height to be established through the discretionary review process. Turbines will be required to comply with Federal Aviation Administration height and marking requirements and shall not create an airport hazard or interfere with military or emergency service aviation operations. Other updated provisions include requiring biannual compliance review, decommissioning plan, and Major Use Permit findings that are specific to large wind turbines.

Table 2. Proposed Regulations

Turbine Tier	Number of Turbines permitted	Permit Required	Energy Capacity	Maximum Height
Small	3 towers	Ministerial	< 50kW	80 feet
Large	Multiple	MUP	≥ 50 kW	Set through MUP process

3. Meteorological Testing Facilities

The project also includes amendments to the Zoning Ordinance regarding the regulation of meteorological (MET) testing facilities. MET facilities are temporary testing equipment placed in areas to determine whether there is adequate wind to support commercial sized wind turbine projects. In addition to the more traditional tower mounted MET facilities, smaller trailer-size MET facilities are becoming more common. The proposed changes will allow these smaller temporary MET facilities that meet the height limits of the zone be allowed upon approval of a ministerial Zoning Verification Permit. The Zoning Verification Permit process would ensure that the proposed MET facility complies with all applicable regulations.

The proposed amendments to each section of the Zoning Ordinance are included as Attachment B in strikeout/underline format.

4. General Plan Amendment

This General Plan Amendment (GPA) (Attachment C) proposes to amend two community plans. It includes changes to the Boulevard Subregional Planning Area of the Mountain Empire Subregional Plan (Boulevard Community Plan) to allow opportunities for large wind turbine projects through the Major Use Permit process; and it includes changes to the Borrego Springs Community Plan to allow opportunities for small wind turbine projects through the ministerial permit process.

- a) Boulevard Community Plan – Policies within the existing Boulevard Community Plan limit development opportunities for large wind turbines. The GPA included with this project would remove or revise prohibitive policy language to allow

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increased opportunities for large turbine development subject to the approval of a Major Use Permit.

- b) Borrego Springs Community Plan – A current policy within the Borrego Springs Community Plan related to viewshed protection would prohibit ministerial permitting of small wind turbines due to the fact that it calls for discretionary review and analysis. The GPA would revise this policy and allow small turbine development subject to the approval of a ministerial Zoning Verification Permit.

C. Project Issues

In working with stakeholders throughout the processing of this project, several major issues have emerged, which are summarized below.

1. Wind Energy Regulations and Standards Researched

Some public comments suggested that County staff look at wind energy regulations in other jurisdictions and duplicate those standards here in San Diego County. County staff did, review and consider a number of wind ordinances while researching and drafting the proposed Ordinance and continued its outreach after hearing from the public. Jurisdictions researched are listed in Table 3 below.

Table 3. Researched Wind Regulations from other Jurisdictions

California	Nationwide	International
Alameda	Maine	Australia
Imperial	Texas	Denmark
Kern	Wisconsin	Germany
Los Angeles		New Zealand
Marin		United Kingdom
Riverside		
San Bernardino		
Solano		

What became clear from this research is that there is no universally accepted method for regulating wind turbines, and regulations are often based on local conditions. For example, parcelization, density and neighboring land use patterns all may influence the degree and type of regulations required. While some have pointed to other jurisdictions as examples of successful regulations, it is important to understand the local context of where turbine projects in these other counties are being sited. For example, in Solano County, large turbines are located in areas that feature low densities and large lot sizes. In contrast, San Diego County’s prime wind resources are located in highly parcelized areas and, in many cases, are close to residential properties. As a result, the regulations in Solano County cannot be relied upon as the basis for wind regulations in San Diego County.

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2. Low Frequency Noise

The current code requires turbines to meet noise limits that are audible to the human ear, which is referred to as the “a-weighted” measurement. One of the key provisions of the proposed ordinance amendment as it relates to large wind turbines is the new limitation on low frequency “c-weighted” noise. A common example of low frequency noise is the bass from amplified music; although the music source may be some distance away and may not be loud, the low frequency component (the low bass sound) can be felt or may cause vibrations which generate other noises.

Wind turbines are known to create very low frequency noise as a result of the turbine blades moving through the air, particularly when the blade passes the tower. The “a-weighted” sound can be mitigated through use of walls, berms and construction methods. Low-frequency “c-weighted” sound can only be mitigated by distance from the source. Therefore, establishing proper setbacks for siting large wind turbines is essential to addressing wind turbine noise impacts.

During the development of the ordinance, some people raised concerns that the County’s proposed low frequency noise limit is too restrictive, while others argued the opposite. County staff reviewed research suggesting noise setbacks from as small as 0.2 mile to as much as 6.2 miles. Based on research papers on the subject, there is a growing consensus that distances between 1 to 1½ miles from residential uses are adequate to address low frequency wind turbine noise. The County’s proposed low frequency noise provision is in line with this setback range. It should be noted that mechanical and other audible noise associated with wind turbines will continue to require compliance with existing noise ordinance “a-weighted” requirements.

3. Pure-Tone Noise

Concerns have been raised related to large turbines creating pure-tone noise. Pure-tone noise is the distracting noise typically heard when the turbine blades are out of alignment or the system is out of balance, and is sometimes described as a whine or humming sound. Pure-tone testing is conducted when the turbines are in operation. In response to these concerns, an operational requirement has been incorporated into the proposed ordinance to limit the impacts of pure-tone noise on neighboring properties. This new provision was developed with technical noise experts, and several noise consultants. Pure-tone noise provisions are utilized in other jurisdictions’ wind regulations and Kern County’s pure-tone ordinance provisions served as the model for the County’s proposed standards.

4. Fire Hazards

Concerns have been raised that large wind turbine development may increase the risks of wild fire. Modern turbines can often exceed 400 feet in height and are typically located in remote areas which can create challenges for firefighting efforts.

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Under the proposed ordinance, all large turbines will be required to obtain a Major Use Permit. Fire risks will be closely analyzed as part of this discretionary and environmental review process. Some examples of project specific fire mitigation measures that were required for a recently approved project included: 1) Providing funding for the training and acquisition of necessary firefighting equipment and services to improve the response time and firefighting effectiveness; 2) Providing funding for the local Fire Safe Council for coordinating a Community Wildfire Protection Plan (CWPP) and Evacuation Plan. Funding for the Council will enable the organization to apply for grant funding, and ultimately, to implement fuel reduction and evacuation plans; and, 3) Requiring turbines to be equipped with fire suppression/detection systems.

Therefore, all projects have been, and will continue to be required to comply with County Fire regulations, to complete a Fire Protection Plan and, if necessary, to provide project specific mitigation that will be reviewed by the Local Fire Authority Having Jurisdiction, the County Fire Authority, and ultimately, the County decision making body. At this time, however, it cannot be assured that all future large wind turbine projects will have less than significant impacts related to fire hazards. Refer also to the additional discussion on significant impacts below under Environmental Impact Report (Section D).

5. Health

Public concerns have been raised regarding potential health effects from large turbines. In response, the County's Health and Human Services Agency (HHS) conducted a review of research on the human health effect of wind turbines and issued a Public Health Position Statement (Attachment F). HHS's analysis included an examination of the available research on potential health impacts from noise, electromagnetic radiation, shadow flicker, blade glint and land surface temperature relationship. The Public Health Position Statement concluded that the health effects of many forms of renewable energy generation, such as wind turbines, have not been assessed to the same extent as those from traditional energy sources (e.g., fossil fuel, radiation, etc.). The pathological effects on humans due to wind farms have only recently begun to be studied. However, based on the review of the available evidence, including journal articles, surveys, literature review and government reports, HHS concluded that while anecdotal reports support adverse health effects, there are no epidemiological evidence-based studies to support direct pathological effects from wind turbines and that any potential impact on humans can be mitigated by following existing planning guidelines related to turbine placement.

6. Biology

Throughout the processing of the Wind Energy Ordinance Amendment, concerns have been raised related to the potential biological effects of permitting small wind turbines under a ministerial process. While large turbines would still be subject to discretionary review and undergo project specific environmental analysis to assess and avoid biological impacts, small turbines would be permitted ministerially through a streamlined process.

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This led to public concerns about potential effects to habitat and existing preserves, as well as issues related to direct impacts to birds and bats from turbine blades. As such, the proposed ordinance includes a number of provisions to minimize biological impacts. County staff worked closely with the state and federal Wildlife Agencies and environmental stakeholders to develop and incorporate design criteria that would avoid or minimize impacts to species and habitat. Examples include setback requirements from transmission towers and lines, blue line streams, known roost sites for bat species and known golden eagle nest sites. The ordinance also limits the area of ground disturbance around the base of the turbine tower and prohibits small turbines on ridgelines. Refer also to the discussion under Section E, Planning Commission Hearings and Actions, of this staff report for additional details regarding biological concerns and proposed siting criteria.

D. Environmental Impact Report

A draft EIR was prepared for the project pursuant to CEQA, and was circulated for public review from November 8th to December 23rd of 2011. For each environmental topic, the analysis of the proposed small wind turbines and MET towers regulations was provided followed by an analysis of the proposed large wind turbines regulations. In addition, project alternatives for both small and large wind turbine regulations were included and analyzed in the EIR.

The analysis of small wind turbines and MET towers concluded potentially significant environmental impacts related to aesthetics, biology, cultural resources, and fire hazards would result from the project. All feasible design criteria were included in the regulations for small turbines and MET facilities to minimize impacts. For example, small wind turbines are prohibited on ridgelines in order to minimize potential impacts to birds as well as to reduce potential adverse effects to scenic resources. While all feasible design criteria have been included, the project's adverse environmental effects would still be significant and unavoidable.

The analysis of large wind turbines concluded potentially significant environmental impacts related to aesthetics, air quality, agriculture and forestry resources, biological resources, cultural resources, fire hazards, noise, land use, and traffic/transportation would result from the project. Mitigation measures are proposed that will help to reduce these types of impacts. For example, a shadow flicker study requirement will be incorporated into the County CEQA Significance Guidelines for Aesthetics and will be required during the discretionary review process for large wind turbine Major Use Permits. The shadow flicker study will determine whether shadows created by the turbines will affect scenic areas or sensitive receptors and, more importantly, to determine whether changes can be included to reduce adverse aesthetic effects from shadow flicker. While all feasible mitigation measures have been included in the project, the environmental effects related to large wind turbines would still be potentially significant and unavoidable.

CEQA requires the EIR to describe a range of reasonable alternatives to the proposed project that would feasibly attain most of the project objectives but would avoid or lessen any significant

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environmental impacts. There are two project alternatives analyzed in the EIR, but they were not recommended by the Planning Commission: a Limited Small Wind Turbine Alternative, and a Limited Large Wind Turbine Alternative. The Limited Small Wind Turbine Alternative involves three components, as follows.

1. Reduced Project Area – Small wind turbines permitted without discretionary review would only be allowed in previously disturbed/developed areas.
2. Reduced Height – The maximum wind turbine tower would be 65 feet.
3. Fewer turbines – A maximum of two small wind turbines would be allowed on a legal lot. One additional wind turbine (three total) would be allowed when all turbines are mounted on an existing permitted structure.

The Limited Large Wind Turbine Alternative also involves three substantial changes as compared to the proposed project. The three main components of this alternative are described here.

1. Reduced Project Area-1 – This alternative would reduce the project area and shift development away from village areas by limiting turbine development to rural and semirural areas, as designated by the General Plan, and requiring a 2,000-foot setback from Interstate highways.
2. Reduced Project Area-2 – Large wind turbines would be permitted within wind resource areas classified as “fair” through “superb” and would not be permitted within “marginal” wind resource areas as shown on the Wind Resources Map.
3. Existing General Plan Policies – This alternative would retain the existing policies and language of the General Plan. As such, the policies in the Boulevard and Borrego Springs community plans that restrict wind turbine development would not be amended.

The County received 35 comment letters and emails during public review of the draft EIR. Based on these comments and Planning Commission actions, minor changes were made to the document. The proposed final EIR was made available to the public on March 26, 2013, which includes formal responses to the public comments received. County staff has also prepared CEQA Findings Regarding Significant Effects, a Mitigation Monitoring and Reporting Program and a Statement of Overriding Considerations for the proposed project (Attachment G).

E. Planning Commission Hearings and Actions

The Planning Commission held a total of five public hearings and one full day workshop related to the development of the Wind Energy Ordinance Amendment and associated environmental analysis. A summary of each hearing/workshop is available in Attachment J.

On July 20, 2012, the Planning Commission recommended that the Board adopt the proposed Wind Energy Ordinance Amendment and General Plan Amendment with certain changes that are described below. The recommended changes are included in the ordinance that is before the

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Board for consideration today. This section describes the major issues and discussions that occurred during the Planning Commission hearing process.

1. Low Frequency Noise Waiver

A setback waiver provision is proposed as part of the ordinance that allows decision makers to waive noise setback requirements if the project's benefits are found to outweigh its impacts. The waiver can be approved by the Planning Commission, and the Commission's decision is appealable to the Board.

At the May 11, 2012 Planning Commission Workshop, staff presented a series of maps that reflected the land use and parcelization patterns of the primary wind resource areas in the unincorporated area. Due to the availability of wind resources, existing parcelization and proximity to existing transmission lines, the Boulevard community area is the most viable area within the County's land use jurisdiction for utility scale wind turbine development. Staff's analysis further found that the areas south of Interstate 8 within the Boulevard area are highly parcelized and contain a number of residences within the expected setback buffers of the wind resources.

As a result of this analysis, the Planning Commission recommended that the Board not apply the noise waiver provision countywide, but limit it to the utility scale wind resource areas north of Interstate 8 within the Boulevard area. The intent of this recommendation is to encourage wind farm development to locate away from the most parcelized and developed region south of Interstate-8. The designated Noise Waiver Areas are shown on the Wind Resources Map (see Attachment E).

2. Health

In recognition that wind turbines are an emerging and evolving technology and that research concerning the health effects from wind turbines lack current substantiated information, the Planning Commission directed staff to report back to the Commission in three years with a literature review of the most current research regarding the human health effects from wind turbines.

3. Biology

In response to concerns raised by the Wildlife Agencies, the Planning Commission recommended the inclusion of additional siting criteria for small wind turbines relative to sensitive areas. The additional criteria include setback requirements from recorded open space easements, designated preserve areas and riparian vegetation. In addition, the Commission recommended that Administrative Permits (a discretionary permit) be required for small turbines proposed in Pre-Approved Mitigation Areas of the County's Multiple Species Conservation Program.

4. Miscellaneous

The Planning Commission recommended that the provisions stated below be added to or

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clarified in the proposed ordinance.

- i. Update the small turbine certification provision to specify reliance on the California Energy Commission's May 23, 2012 List of Eligible Equipment.
- ii. Update the pure-tone noise provision related to large turbines to incorporate language to address repeating sources of sound.
- iii. Incorporate ordinance language to allow applicants to utilize an alternative turbine manufacture/model after a Major Use Permit application has been filed.
- iv. Include ordinance language to ensure that large turbine sites are maintained and kept clean of debris/turbine parts.
- v. Clarify the ridgeline definition and sensitive species setback provision related to small turbines.

Subsequent to the Planning Commission's action on July 20, 2012, the Board of Supervisors, on August 8, 2012, adopted amendments to some of the wind regulations in the Zoning Ordinance in connection with the approval of the privately-initiated Tule Wind project. The amendments exempt the Tule Wind project from the existing height and setback requirements for large wind turbines. Given the Board's action, staff added the same setback exemption to the proposed Wind Ordinance and referred the revised ordinance back to the Planning Commission on October 19, 2012, because the Planning Commission had not previously considered this exemption. (The elimination of the height limit in the proposed ordinance amendment made it unnecessary to include a height limit exemption for the Tule Wind project.) The Planning Commission considered and recommended adoption of the Tule Wind project zoning ordinance changes and also considered the issues related to grandfathering/exempting existing projects as described below.

5. Grandfathering/Exempting Existing Projects

Prior to the October 19, 2012 Planning Commission hearing, Iberdrola Renewables, the Tule Wind project applicant, submitted letters contending that the Tule Wind project is grandfathered under the existing Zoning Ordinance and further requested to be exempted from the proposed Wind Energy Ordinance or any future amendments to the code relative to wind regulations. Staff and County Counsel reviewed the applicable "grandfathering" provision in the current Zoning Ordinance (Section 1019) and determined that this provision does not apply. Section 1019 only applies if a permit application is pending when the Zoning Ordinance is amended. In such cases, the application must comply with the code that was in effect when the application was deemed complete. The section was never intended to apply to a project after the permit is issued. Once the permit has been issued, any changes to the Zoning Ordinance that do not affect the conditions in the permit would apply. In addition, any amendment to the permit or subsequent permits for

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the project would be required to comply with the current code.

Staff reviewed the Tule Wind project in relation to the proposed Wind Energy Ordinance Amendment, and determined the Tule Wind project meets the provisions of the proposed ordinance amendments that would apply to the Tule Wind project. However, one operational standard related to pure-tone noise cannot be evaluated for compliance prior to turbine operations and is not exempted or grandfathered under Section 1019 of the Zoning Ordinance. The Planning Commission considered Tule's exemption request at the October 19, 2012 hearing, and the Commission elected not to include it in the proposed ordinance amendment.

F. Policy Decisions

Given the project issues and Planning Commission actions outlined above, staff has identified five policy decisions/questions that are listed below for the Board's consideration.

1. Should small wind turbines be allowed in the Pre-Approved Mitigation Areas without discretionary environmental review?

Under existing regulations, a single small wind turbine is allowed on a property regardless of the parcel's particular location. The Wind Energy Ordinance Amendment proposes to expand that allowance to three free-standing small turbines or five roof-mounted turbines allowed ministerially. During the Planning Commission hearing process, the Wildlife Agencies recommended a provision which would require a discretionary permit for any small turbines located on properties designated as Pre-Approved Mitigation Area in the County's Multiple Species Conservation Program to ensure that the placement and operation of the turbines conform to MSCP requirements. The permit granted to the County under the MSCP granted take authority under existing standards (a single small wind turbine). Thus, any additional turbines should be reviewed under a discretionary permit process to determine compliance with MSCP requirements. The Planning Commission agreed with this recommendation and, therefore, a section has been added to the draft ordinance requiring an Administrative Permit for small wind turbines proposed in existing Pre-Approved Mitigation Areas.

2. Should setback waivers be limited to the wind resource areas north of Interstate-8 in the Boulevard area?

Project analysis discussed at the Planning Commission found that the areas south of Interstate 8 within the Boulevard area are highly parcelized and contain a number of residences within the expected setback buffers of the wind resources. Therefore utility scale turbine development is not viable south of Interstate-8 in the Boulevard community area. As a result, the Planning Commission has recommended that a setback waiver provision related to noise be limited to utility scale wind resource areas north of Interstate-8 within the Boulevard area. The setback waiver allows decision makers to

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waive noise setback requirements if the project's benefits are found to outweigh its negatives. The project's EIR evaluated the impacts of a setback waiver applied throughout large wind turbine project area identified in the proposed Wind Resource Map. Therefore, the Board has the option to not limit setback waivers.

3. Does the proposed project adequately address public health concerns?

Public concerns have been raised regarding potential health effects from large turbines. In response, the HHSA conducted a review of research on the human health effect of wind turbines and issued a Public Health Position Statement. HHSA has concluded that, while anecdotal reports support adverse health effects, there are no epidemiological evidence-based studies to support direct pathological effects from wind turbines and that any potential impact on humans can be mitigated by following existing planning guidelines related to turbine placement. HHSA conclusions are consistent with other jurisdictions that have reviewed health concerns related to wind turbines. In addition, the Planning Commission has recommended that staff report back to the Commission in three years with a literature review of the most current research regarding the human health effects from wind turbines.

4. Does the proposed project adequately address concerns related to fire?

Concerns have been raised that utility scale wind development may increase the risks of wild fire. Under the proposed ordinance, all large turbines will be required to obtain a Major Use Permit. Fire risks will be closely analyzed as part of the discretionary and environmental review process individual projects. Therefore, all projects have been, and will continue to be required to comply with County fire regulations, to complete a Fire Protection Plan and, as appropriate, to provide project specific mitigation that will be reviewed by the Local Fire Authority Having Jurisdiction, the County Fire Authority and ultimately, the County decision making body.

5. Should the Tule Wind Project be exempt from the proposed Wind Energy Ordinance Amendment?

During the Planning Commission hearing process Iberdrola Renewables requested that the Tule Wind project be exempted from the proposed wind ordinance amendment. Staff reviewed the Tule Wind project in relation to the proposed Wind Ordinance, and determined that while the Tule Wind project was approved prior to the consideration of the ordinance before you today, the project still meets the provisions of the proposed ordinance amendments that would apply to the project. However, one operational standard related to pure-tone noise cannot be evaluated for compliance prior to turbine operations and is not exempted or grandfathered under Section 1019 of the Zoning Ordinance. Iberdrola Renewables has stated a concern that this pure-tone standard would require them to perform an additional study which they feel would delay or possibly make their project infeasible. Based on the proposed ordinance, the County would only

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require evidence of compliance with the pure-tone standard if a complaint is received in the future. While no study is required by the County, Iberdrola Renewables has expressed the need to complete their own study as a matter of due diligence. The Planning Commission elected not to include an exemption for Tule in their recommendation because they felt the pure-tone provision was an appropriate protection to neighboring properties.

The Board may elect to exempt the Tule Wind project from the proposed pure-tone noise provision by incorporating an exemption specific to the Tule Wind project into the pure-tone provision (Section 6952 f.3).

Environmental Statement

An Environmental Impact Report (EIR) has been prepared for this project and is on file at the Department of Planning & Development Services as Environmental Review Number 09-00-003. A Notice of Preparation (NOP) soliciting input on the scope of the EIR was issued in September of 2010. The Draft EIR was made available for public review in November of 2011. Staff has prepared responses to comments received during public review. The NOP, EIR, comments and responses can be viewed on the project website and are attachments to this report (Attachment H).

Linkage to the County of San Diego Strategic Plan

Today’s proposed actions supports the Sustainable Environments Initiative in the County of San Diego’s 2013-2018 Strategic Plan by streamlining wind energy regulations and bringing them up to date with current technologies. In this way, the proposed action ensures that planning, development and infrastructure support the economy and a strong region.

Respectfully submitted,

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FUNCTION TO INSERT
SIGNATURE

SARAH E. AGHASSI
Deputy Chief Administrative Officer

ATTACHMENT(S)

Attachment A – Zoning Ordinance Amendment (POD10-007)	20
Attachment B – Zoning Ordinance Amendment (POD10-007) Strikeout/underline	36
Attachment C – Resolution Approving GPA 12-003	57

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AGENDA ITEM INFORMATION SHEET

REQUIRES FOUR VOTES: Yes No

WRITTEN DISCLOSURE PER COUNTY CHARTER SECTION 1000.1 REQUIRED
 Yes No

PREVIOUS RELEVANT BOARD ACTIONS:
February 25, 2009 (2) and September 15, 2010 (5) (Attachment I)

BOARD POLICIES APPLICABLE:
N/A

BOARD POLICY STATEMENTS:
N/A

MANDATORY COMPLIANCE:
N/A

ORACLE AWARD NUMBER(S) AND CONTRACT AND/OR REQUISITION NUMBER(S):
N/A

ORIGINATING DEPARTMENT: Planning and Development Services

OTHER CONCURRENCE(S): Health and Human Services Agency
County Fire Authority

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