Comment Letter Z

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From: Frank Landis [mailto:franklandis03@yahoo.com]
Sent: Friday, December 23, 2011 12:20 PM
To: Schneider, Matthew
Subject: CNPSSD response to County wind EIR

December 23, 2011

Mr. Matthew Schneider
County of San Diego
Department of Planning and Land Use
5201 Ruffin Road, Suite B
San Diego, CA 92123-1666

Re: Wind Energy Zoning Ordinance and General Plan Amendment.

Dear Mr. Schneider:

We appreciate the opportunity to comment on the Wind Energy Zoning Ordinance and General Plan Amendment. The California Native Plant Society (CNPS) works to protect California's native plant heritage and preserve it for future generations. CNPS promotes sound plant science as the backbone of effective natural areas protection. We work closely with decision-makers, scientists, and local planners to advocate for well informed and environmentally friendly policies, regulations, and land management practices. Z-1

To be clear, CNPS is adamantly not against the use of wind power. Our concern is simply that the impacts that wind turbines will cause to native plants and native plant communities need to be recognized and mitigated. This is not only for the sake of native plants, but for the sake of the County's residents. Carelessly installed wind turbines will cause more harm than good. Z-2

As the Wind Energy Zoning Ordinance is currently formulated, it will cause two serious issues for native plants and native plant communities: increased fire risk, and damage to soil and hydrology. Furthermore, the biological resources analysis was inadequate on all of these points, although we concur with the general finding that there will be significant impacts that cannot be mitigated below the level of significance. Z-3

Fire is a potential hazard from all wind turbines, as demonstrated by the submissions by the Boulevard Planning Group in Appendix C of the EIR. While we concur that all technical measures should be taken to keep wind turbines from catching fire, it is extremely shortsighted to assume such measures will always work. Moreover, the most likely time for fires is during high Santa Ana winds. Turbines are most likely to fail when it will be most difficult to contain any fires they ignite. Additional measures need to be required to keep burning turbines from igniting adjacent vegetation. Z-4 Z-5 Z-6

Because fire is a serious issue both for native plants and for the County's residents, we want the County to include additional fire safety measures in the ordinance. We strongly suggest that, for small turbines: Z-7

Response to Comment Letter Z

California Native Plant Society, San Diego Chapter
Frank Landis, PhD
December 23, 2011

Z-1 This comment is introductory in nature and does not raise a significant environmental issue for which a response is required.

Z-2 The County acknowledges and appreciates the concerns of the California Native Plant Society (CNPS).

Z-3 This comment is a summarization of several issues which are responded to individually and in greater detail within the responses below.

Z-4 The County does not assume that fire prevention measures will always work. Such an assumption was never stated nor implied in the proposed ordinance and DEIR. In fact, the DEIR concludes that potential fire hazards will remain significant and unavoidable for this project.

Z-5 The County agrees that wildland fires are most likely to occur during Santa Ana winds. However, the comment does not provide substantial evidence supporting the conclusion that turbines are most likely to fail during Santa Ana winds. The likelihood of turbine failure in any situation depends on many

		variables, including the design and mechanics of the turbine, the wind speed, the duration of the wind at a given speed, etc. Large turbine projects will need to provide a detailed analysis of turbine safety under the County Guidelines for Determining Significance for Wildland Fire & Fire Protection. They must also include feasible mitigation measures to reduce risk of hazards from wildland fires. The risk of fire hazards resulting from small turbines can mainly be attributed to construction and maintenance activities, as described in DEIR Section 2.6.3.7. Therefore, this would likely occur at a time when the fire would be noticed and would result in immediate action. In addition, the proposed ordinance specifies that small turbines shall include manual and automatic over speed controls, as well as the undergrounding of utility lines. This will further minimize potential wildland fire impacts. However, as noted above in response to comment Z4, potential fire hazard impacts are still considered to be significant and unavoidable. This was disclosed in the DEIR.
	Z-6	Feasible fire suppression measures will be evaluated for all large turbine projects pursuant to the County Guidelines for Determining Significance for Wildland Fire & Fire Protection. For small wind turbines, the proposed ordinance requires design standards to minimize potential fire hazards as described above in

	response to comment Z5. **Z-7** The County does not agree with the recommendation for increased vegetation clearance around small turbines. Based on discussions with County fire authority staff, small wind turbines need only about 10 to 25 feet of vegetation clearance depending on the tower height.

* the cleared area around the base of the turbine be increased from 10 feet in radius (6951.a.9.iii, Appendix 7, page 11) to an area with a radius at least as wide as the tower is high. Moreover, the area needs to be kept free of all vegetation, especially highly ignitable grasses and weeds. Z-7 Cont.

* For all turbines, all cleared areas need to be keep free of highly ignitable grasses and weeds. In the desert, this notably includes species like Sahara mustard (Brassica tournefortii) and red brome grass (Bromus rubens), both of which increase the chance of fires in this formerly fire free landscape. Z-8

* Where vegetation is cleared around turbines, the areas cleared should be mitigated nearby if possible, following standard County practices. The County should promulgate this specifically as a partial carbon offset for the carbon costs of erecting each turbine, rather than as an additional burdensome measure. Z-9

Damage to soils, especially in the desert is our second concern. As written, the ordinance provides an incentive for developers to clear, rather than grade, by only requiring a permit for grading. We are concerned that wind turbine installers will attempt to clear paths to turbines in areas that should be graded, thereby causing three problems: erosion, changes to hydrology, and decreases in carbon sequestration. Clearing can lead to erosion, scouring and slope collapse, changes in hydrology due both to clearing and to soil compaction, and damage to soil crusts that contain both small plants and mosses. The loss of the soil crust increases the ability for weeds to colonize the site, and possibly decreases a site's ability to sequester carbon dioxide (as documented in Boulevard Planning Group's submission in Appendix C). Z-10

To fix damage to soils, we suggest that the County take the following actions: Z-11

* Require permits for clearing native vegetation, and for building access routes over any substantial slope whether graded or not. We have no issue with people who wish to install wind turbines in highly disturbed, accessible areas. Rather, we want to prevent people from trying to avoid a permit by clearing unsafe routes through native vegetation on steep slopes. A clearing permit will also help avoid issues with compaction. Z-12 Z-13

* Require a permit for any access or cable route that crosses a gully, wash, or stream, whether grading is involved on not. Z-14

* Educate land owners in the value of intact soil crusts. As documented by Boulevard Planning Group (Appendix C, page 207), desert soils with intact crusts can sequester as much carbon as intact chaparral or some oak woodlands. This is a potential source of revenue for landowners as the State looks for ways to offset its carbon emissions, and anyone who is willing to install a wind turbine should be aware that their land can sequester carbon if it is left undamaged and under native vegetation. Z-15

Finally, we are disappointed that the biological resources analysis failed to address both fire and damage to soils. Given the vivid and extensive documentation provided by Boulevard Planning Group, these issues should have been dealt with in the biological analysis. We strongly suggest that a supplementary analysis is appropriate and necessary in this case, and we hope that biological resource analyses in the future will be more complete. Z-16

Z-8 The need for vegetation clearance and weed management around large wind turbines will be determined based on the Fire Protection Plan prepared for each large wind turbine project. The County does not agree that extensive vegetation clearance is needed for small wind turbines (see response to comment Z6 above).

Z-9 For large turbine projects, impacts from vegetation clearance will be analyzed and appropriate mitigation measures applied through the County's Guidelines for Determining Significance: Biological Resources. For small turbines, the County does not agree that vegetation clearance beyond 25 feet around the base is necessary. Compensatory mitigation for vegetation clearance around small wind turbines is not feasible (see responses to comments L29 and L117).

Z-10 The County appreciates the commenter's concern related to potential erosion that may arise from clearing activities associated with the ministerial process for small wind turbines. As discussed in DEIR Section 3.1.2.3.3, potential erosion and siltation impacts from small wind turbine development would be less than significant. As part of the building permit process, the installation of small turbines will still require best management practices (BMPs) to minimize erosion. In addition, the County has added the following provision to the proposed ordinance under Section 6951.a:

Thank you for consideration of our comments. Sincerely, Frank Landis, PhD Conservation Chair California Native Plant Society, San Diego Chapter	"2. Area of Disturbance. A small wind turbine shall not result in an area of ground disturbance (including grading, clearing, brushing, or grubbing) during installation that is larger than a 25 foot radius around the base of a tower, and an access path to the tower that is a maximum of four feet wide. The entire area of disturbance shall be clearly defined on the plans submitted for Zoning Verification Permit review." This provision will prevent unforeseen erosion and siltation impacts from installation of small wind turbines. **Z-11** With the addition of the language noted in response to comment Z10 above, vegetation clearing associated with small turbines will be very limited. Any clearing of vegetation that is not incidental to installation of the small wind turbine would require a clearing permit pursuant to the County Code of Regulatory Ordinances (see Division 7. Excavation and Grading, Clearing and Watercourses). **Z-12** The Limited Small Turbine Alternative analyzed in Chapter 4 would require small turbines to be located only in disturbed areas under the ministerial process. **Z-13** Please see responses to comments Z10 and Z11 above. **Z-14** The County has a grading/watercourse regulations that address this issue. Most earthwork activities require a discretionary grading permit (all County

		grading permits are discretionary). Division7 of the County's Regulatory Code has the provisions for "Excavation and Grading, Clearing and Watercourses". Section 87.202 of this code describes the type of earthwork that does not require a grading permit; however, the caveat at the beginning says that this activity is only exempt from needing a permit if it does not affect a watercourse. Watercourse is defined in Section 87.803 as: "any surface water body (including any arroyo, canal, channel, conduit, creek, culvert, ditch, drain, gully, ravine, reservoir, river, stream, wash, waterway or wetland), in which waters from a tributary drainage area of 100 acres or larger flow in a definite direction or course, either continuously or intermittently, and any area adjacent thereto which is subject to inundation from a 100-year flood." In addition, Section 87.603 reinforces the rules that any alteration of a watercourse requires a grading permit. Therefore, access or cable routes would be subject to these regulatory provisions.
	Z-15	While the County agrees that education and outreach related to soil erosion and effects on carbon sequestration is important, the County does not agree that such efforts must be included as part of the proposed project. The DEIR for the proposed Wind Energy Ordinance determined that impacts related to soil erosion and greenhouse gas emissions will be less than significant.

	Z-16	The County does not agree that an analysis of fire and soil damage should be included in the analysis for biological resources. The County closely followed the questions presented in CEQA Guidelines Appendix G for all environmental subject areas. For issues related to soil, the County determined that potential impacts would be less than significant. For biological resources, it was determined that small wind turbines allowed under the project would have potentially significant effects on special status species, sensitive natural communities, and wildlife movement corridors. For hazards, it was determined that the project could potentially expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. The County does not agree that these analyses also needed to be evaluated together for additional potential impacts. The County is not aware of any EIRs that take such an approach. Since all environmental topic areas are interrelated to some degree, a methodology that involves analyzing how one issue/topic affects another would result in an ever expanding analysis that would be unwieldy for the public and decision makers to review.

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