



SAN FRANCISCO PLANNING DEPARTMENT

D R A F T M E M O

TO: Friends of Small Wind Generators
FROM: Craig Nikitas, Senior Planner, 415/558-6306
COPIES: Director John Rahaim, Zoning Administrator Lawrence B Badiner
DATE: October 22, 2008
SUBJECT: Permit Application and Review Process

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The Department will use the following standards for the review of applications to install small wind generators ("SWGs") on private property over which the Department has jurisdiction:

HEIGHT LIMITS:

The maximum allowable height for SWGs installed in the buildable area of a lot shall be the height mapped for the subject district plus the exemption allowed under Planning Code Section 260(b)(1)(A), generally an additional ten feet in height districts 65 feet or less, and an additional 16 feet in height districts above 65 feet. Such heights shall be measured in accord with the provisions of Section 102.12 and Article 2.5.

The Zoning Administrator may consider variances for installations of SWGs outside the buildable area of lots, but only to the mapped height, and only upon demonstration that the five required Variance findings are made, including that construction within the buildable area is infeasible, and that the proposal is in general conformity with the Priority Policies of Section 101.1(b).

PUBLIC NOTIFICATION:

For projects located in Zoning Districts where public notification of the application is required by Code or policy, the Project Sponsor shall submit the required fees, mailing labels and other materials, and shall post the project as required. Generally, in RH (Residential – House), RM (Residential – Mixed), NC (Neighborhood Commercial) and other districts, a 30-day notification is required.

Such notification may result in requests for Discretionary Review hearings before the Planning Commission, even for "as-of-right" projects.

DESIGN GUIDELINES:

The project sponsor should balance SWG placement decisions that maximize power production with consideration of visual and noise impacts from the

installation. Generally, the Department will encourage placement to minimize visibility of the installation from public rights-of-way, and minimize architectural, noise, and other impacts on the surrounding structures and neighborhood character.

HISTORIC RESOURCES:

Projects proposing addition of SWGs to structures that have been determined to be historic resources may under go additional review to ensure that the Secretary of the Interior Standards for the Treatment of Historic Properties are met.

Buildings with status under Article 10 (Landmarks and Historic Districts) and Article 11 (Structures of Importance in the Downtown) may require additional Landmarks Preservation Advisory Board and/or Planning Commission hearings.

ENVIRONMENTAL REVIEW:

In general, most small scale wind installations could be determined to be Categorically Exempt from environmental review if there were no anticipated historic, noise, or wildlife impacts.

Wind generating equipment can have some noted effects, which include the possibility of avian and bat mortality caused by collisions with moving parts. This is especially important in consideration of the siting of large, multi-turbine facilities (“wind farms”). The California Energy Commission and private contractors have produced copious research on the causes and measurement of avian fatalities, and have also published recommendations to reduce mortality to flying animals in large-scale installations.

While we have been unable to retrieve any scientific research on the effects of small-scale residential turbine installations on flying animals in urban areas, the application of basic principles outlined in the broader research on large-scale sites would provide some guidance.

Vertical axis type turbines have a solid appearance at low and high speeds. Installation to vertical axis machinery, rather than the horizontal axis type with vertical propeller blades, would reduce the risk of bat and avian mortality. It is thought that the latter types, when rotating with certain tip speeds, are not perceived as obstacles to flying animals, and result in impact and injury to them.

After further study, the Planning Department may recommend restrictions on certain wind equipment in areas with a high density of avian or bat life, where these animals are engaged in migration, nesting, foraging, or roosting activities,

unless extensive specific environmental review is conducted that demonstrates the project could have no significant negative impacts on the environment.

CONDITIONS OF APPROVAL:

The Department will develop SWG Siting and Installation Guidelines. The Guidelines may include standard conditions of approval, required to be recorded as a Notice of Special Restrictions on the property records. Those conditions would memorialize requirements regarding the control of animal mortality, off-site noise, and perhaps, requirements for data-reporting on local wind and power-generation efficacy.

