

CERTIFIED MAIL

December 22, 1981

Kamuela Vacuum Cooling Cooperative
P. O. Box 514
Kamuela, Hawaii 96743

Gentlemen:

Variance Application (V81-36)
Supplementary Height Regulations
TMK: 6-6-05:28, South Kohala

After reviewing your application and the information submitted in behalf of it, the Planning Director by this letter hereby certifies the approval of your variance request to construct a wind energy unit (windmill) eighty(80) feet high in lieu of the maximum allowable fifty-five (55) foot height in an Agricultural (A-1a and A-5a) zone district.

The approval is based on the following:

1. A special circumstance exists on the subject property not generally applying to surrounding properties in conjunction with the request for a height exception. The level 3.6 acre lot contains stands of trees up to 70-feet in height providing both an aesthetic addition plus serving as a practical and needed windbreak for the property. These trees along with the existing 30+ foot high buildings (and their proposed future buildings) cause a disruption in wind flow patterns resulting in the necessity of having the proposed windmill blades placed substantially above them in order to be effective energy generators (reference - "A Siting Handbook for Small Wind Energy Conversion Systems, U.S. Department of Energy, March 1980"). The request is therefore completely dependent on the flow and speed of the wind in order to function satisfactorily. A "clear" zone up to approximately 30 feet above the highest "obstruction" is therefore required for the wind energy system.

The applicant intends to use the power generated by the windmill to be the main supply source for their electrical demands. The facility must be sited in the proposed location to accommodate future expansion plans and for efficiency purposes. Accordingly, alternate locations throughout the subject property are limited. If the subject terrain were "unobstructed" by the existing trees and buildings, the necessary height calculation would have determined that the present Zoning Code maximum 55-foot height would suffice.

2. This set of circumstances (buildings, trees and localized wind patterns) exist to a degree which would not permit the establishing of an alternate energy system (the windmill) on the subject property without exceeding the district height limit of 55 feet. With the continuing local and national emphasis on utilizing alternate energy sources, the denial of this request would thus interfere with the most efficient manner of developing the subject property.
3. Due to the special circumstances involved with this request, approval of the Variance will not constitute a grant of special privilege inconsistent with limitations upon other properties under identical district classifications.
4. Approval of the Variance request would be consistent with the County General Plan and with local and national goals which encourage the development and use of alternate energy sources. Its approval will also be consistent with the district purposes which allow for agricultural and very low density residential use. In this particular case, the height request would not unreasonably infringe upon existing or potential development rights of surrounding properties, which are currently agricultural uses.

This Variance request is approved, subject to the following conditions:

1. Placement of the windmill towers shall be consistent with the site plan submitted with the Variance application.
2. Plans and construction of each total structure must be approved by a structural engineer or architect registered in the State of Hawaii.

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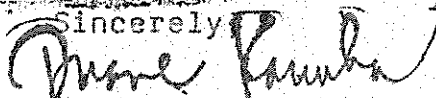
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3. The applicant shall comply with Part 77 of the Federal Aviation Regulations pursuant to Section 1101 of the Federal Aviation Act of 1958 as amended, and obtain clearance from the Airports Division, State Department of Transportation prior to obtaining a building permit.
4. The applicant shall submit plans for the proposed development and obtain a building permit for the structure within one year of the date of this letter.
5. Granting of this Variance request does not construe or imply the County's preserving for the applicant any upwindeasement by restricting in whole or in part, future development on other properties in the vicinity.
6. The applicant shall comply with all other applicable Federal, State and County rules, regulations and requirements, including the following from the State Department of Agriculture:
 - a. The wind energy equipment must be the property of the Cooperative and must be used to supply energy for vacuum cooling plant purposes only. The sale of excess energy generated, if any, must be used to further decrease the cost of energy to the Cooperative or to amortize the capital investment by the Cooperative.
 - b. All legal requirements of Revocable Permit No. S-3871-A and Executive Order No. 2413 must be met.
 - c. The tower of the wind energy equipment must not be located in such manner as to interfere with existing operations of the vacuum cooling plant, its planned expansions, or other potential future agricultural use of contiguous State lands.
 - d. The tower must not be objectionable to adjacent land owners nor should it interfere with operations at the Waimea-Kohala Airport.

Should any of the foregoing conditions not be met, the Variance Approval may be deemed null and void.

If you have any questions on this matter, please feel free to contact us.

Sincerely



SIDNEY FUKU
Planning Director

DT:lgv

cc: Department of Public Works
Department of Agriculture
Department of Land & Natural Resources

bcc: Masa Onuma