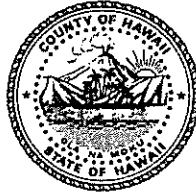


Stephen K. Yamashiro
Mayor



Virginia Goldstein
Director

Russell Kokubun
Deputy Director

County of Hawaii

PLANNING DEPARTMENT

25 Aupuni Street, Room 109 • Hilo, Hawaii 96720-4252
(808) 961-8288 • Fax (808) 961-8742

CERTIFIED MAIL
Z 095 324 290

March 8, 1999

Mr. Tony Pace
Apollo Energy Corporation
551 Pilgrim Drive, Suite D
Foster City, CA 94404

Dear Mr. Pace:

Variance Permit No. 992 (VAR 98-87)
Applicant: TONY PACE
Owners: APOLLO ENERGY CORPORATION
Request: Variance From the Minimum Yards, Pursuant
to Chapter 25, Zoning, December 7, 1996
Tax Map Key: 9-3-002:006, 024, and 025

After reviewing your application and the information submitted on behalf of it, the Planning Director certifies the approval of your variance request. Variance Permit No. 992 allows the replacement of existing 125 feet high wind turbine generator towers (WTGT) with new 161 feet high wind turbine generator towers (WTGT) with a minimum 125 feet building setback in lieu of the minimum 161 feet required from the respective and existing property lines as required by the Zoning Code, Chapter 25, Article 4, Division 2, Section 25-4-22, Exemptions from height limitations, (e).

FINDINGS AND RECOMMENDATION

The Planning Director has concluded that the variance request from the minimum yard requirement to replace the existing WTGT units on Row A and Row C within the existing wind farm located on the subject TMK parcels should be approved based on the following findings:

SPECIAL AND UNUSUAL CIRCUMSTANCES

1. The affected property containing 96 + acres, are Lots 56, 57, 60, and 61 being

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a Portion of Kamaoa Homesteads, Kau, Hawaii. The Kamaoa Wind Farm's address is 93-1373 South Point Road, Kau, Hawaii, 96772.

2. It appears that the existing wind farm was constructed on the subject TMK parcels between 1983 and 1985 under Building Permits issued by the Department of Public Works (DPW), Building Division.
3. It appears the original site plan and building construction plans submitted with the approved building permits in the 1980s to construct and establish the existing wind farm uses on the respective TMK parcels were reviewed and approved by the Planning Department and other affected government agencies. The required building inspections were conducted by DPW building inspectors and other affected government agencies.
4. The site plan submitted with the variance application, drawn to scale and dated September 9, 1986, by Krochina Engineering, identifies the location of the existing wind power turbine generator towers on the respective TMK parcels. The site plan, drawn to scale, denotes the location of the existing WTGT units "AS BUILT" and identifies the existing setbacks from the affected front property line along the South Point Road and other boundary lines.
5. The Applicants Reasons for Variance, dated December 21, 1998 states:

"We are requesting a variance from the existing setback of 125 feet from the property lines to allow us to replace and modify 14 of our Wind Turbine Generators on row "A" and 3 of our Wind Generators on row "C". Please see the attached Kamaoa Site Plan for additional detail.

At the present time there are 14 units on "A" row, including 12 on TMK 9-3-002-006, fee land owned by Apollo Energy Corporation and 2 on TMK 9-3-002-024, land leased by Apollo Energy Corporation. All the 14 units on "A" row are set back 125 feet from South Point Road.

There are 10 units on "C" row, 7 of which are on TMK 9-3-002-006, Apollo fee land, and 2 on TMK 9-3-002-025, land leased by Apollo. The 2 units on TMK 9-3-002-025 are set back 125 feet from the adjacent property and the 1 unit on TMK 9-3-002-025 are set back 125 feet from the adjacent property and the 1 unit on TMK 9-3-002-006 is set back about 150 feet from the rear

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property line. The remaining 7 units on TMK 9-3-002-006 are set back more than 175 feet from the rear property line and do not require a variance.

We have experienced relatively poor energy production at the existing tower elevations of about 80 feet. Because of this, we need to repower with improved, newer technology with new nacelles that require higher towers. We need to extend the towers on "A" and "C" row to a height of about 112 feet. The present foundations are structurally sound and suitable for reuse with the higher towers and new nacelles. The blades on the existing towers, when operating, are extended vertically and are about 121 feet above ground level. The blades, on the proposed higher towers, when operating would extend vertically about 161 feet from ground level.

The cost to relocate the existing 14 foundations, infrastructure, and towers on A row and the 3 foundations, infrastructure and towers on C row to provide for 161 foot setback is economically infeasible and would defeat the objective to provide a viable, alternative, renewable resource to the people of Hawaii County. There are no reasonable alternatives that would resolve the problem.

We have observed that South Point Road, an improved paved road, has very little daytime, local vehicular traffic and virtually no traffic after dark. The nearest dwellings are about 1 mile to the south and about 1 mile to the north of our site; total of two dwellings. The surrounding lands, within a 5 mile radius from our site, are agriculturally zoned (A-20-a), marginally productive and used primarily for cattle grazing.

The proposed tower heights (without blade extension) will be about 112 feet. In the unlikely event that a tower should fall, the tower will fall into the present setback of 125 feet from the property line. Therefore in the unlikely event of a tower collapse, no part of the tower will fall onto or impact South Point Road or fall on any surrounding properties.

The blades of the proposed wind turbine generators, when in operation, extend about 59 feet about the tower. At the maximum, the total height of a blade would be 161 from ground level when rotated or extended vertically. Ninety percent of the time, because the wind is from the east, the blades operate in position that is parallel to South Point Road. Assuming that 10% of the time the blades operate perpendicular to South Point Road, in the unlikely event that a tower should fall, there is a remote possibility that a small portion of a blade,

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at most 36 feet (161 feet less existing 125 foot setback), might possibly fall onto South Point Road. The outer 36 feet of the blade, is relatively light and would in the unlikely event of falling to the ground, be broken into smaller pieces that could be easily removed by one person. Such a remote occurrence would require no more effort than that required to clear fallen tree limbs.

In over eleven years of the present wind farm operation, there has not been a catastrophic tower failure.

We believe the variance is reasonable, and will not be materially detrimental to the public welfare or cause substantial, adverse impact to the area's character or to adjoining properties. We do not have any reasonable economic alternative that would resolve the difficulty. We believe there are special circumstances that apply to this situation. All the people of Hawaii County have benefited and will continue to benefit from the clean, renewable energy production from this facility. Because of this clean, renewable resource there is considerable reduction in the level of air pollution in Hawaii County caused by fossil fuel diesel/gas/steam electric generators."

6. The Department of Finance-Real Property Tax memorandum dated February 2, 1999, in variance file states in part:

"There are no comments at this time

Real Property taxes are paid through December 31, 1998."

7. The State Department of Health (DOH) memorandum dated January 28, 1999, in the variance file states:

"The Health Department found no environmental health concerns with regulatory implications in the submittals."

8. The Department of Public Works (DPW) memorandum dated February 12, 1999 states:

"We have reviewed the subject application and our comment is as follows:

All new building construction shall conform to current code requirements."

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9. The applicant submitted proof of first and second mailing to the surrounding property owners. No oral or written objections to the variance application were received from the surrounding property owners.

The present owners/applicants submitted a site plan which identifies the location of the existing wind turbine generators. The site plan submitted identifies the distances between the existing WTGT's and the affected boundary lines established on the subject TMKs in 1986.

Therefore, considering the foregoing facts, it is felt there are special or unusual circumstances applying to the subject property which exist either to a degree which deprive the owner/applicant of substantial property rights that would otherwise be available, or to a degree which obviously interferes with the best use or manner of development of the subject property.

ALTERNATIVES

There are no reasonable alternatives in resolving the difficulty of the owners/applicants. Alternatives available to the applicant include the following: Removing and relocating the existing WTGT units within building envelope prescribed by the Zoning Code dated December 7, 1996, and other similar design alternatives, etc. The re-sitting, redesign, and remodeling, etc. of the existing wind farm would be economically unreasonable and may disrupt other existing site improvements.

The Planning Department acknowledges there may be other design or building alternatives available to the owner/applicant recited above. However, these design and building alternatives are deemed to be unreasonable at this time and would place excessive demands on the present owners or applicants when a more reasonable alternative is available by the granting of the subject variance request.

INTENT AND PURPOSE

The intent and purpose of requiring building setbacks within a subdivision are to assure that adequate air and light circulation is available between permitted structure(s) and property lines. The existing wind farm met all Zoning Code in 1983 and was constructed under previous building permits issued in the 1980s to the previous wind farm owners.

The circumstances which permitted the wind farm to be built on the TMK parcels are unique. The existing location and height of the WTGT units complied with all Zoning Code requirements. The existing locations of the WTGT units are not physically and visually obtrusive from the Hawaii Belt Highway and other existing rights-of-way. It appears the

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existing wind farm does not depreciate or detract from the character of the surrounding farming and ranching uses, public uses, and the existing and surrounding land patterns. For the record, the surrounding large pastoral parcels are owned by the Bishop and Damon estates. It appears, the existing wind farm development has not visually, physically or adversely affected the rights of the property owners of the adjacent or surrounding properties. Therefore, it is felt the variance request to replace the existing WTGT units and continue the wind farm operation will not detract from the character of the immediate neighborhood or the subdivision.

The subject variance application was acknowledged by certified letter dated January 25, 1999. Pursuant to a recent December 1998 ruling and court decision, additional time to consider the processing requirements of variance applications from the Zoning Code was necessary.

Based on the foregoing findings, this variance request would be consistent with the general purpose of the zoning district and the intents and purposes of the Zoning Code, Subdivision Code and the County General Plan. Furthermore, the variance request will not be materially detrimental to the public's welfare and will not cause substantial adverse impact to the area's character and to adjoining properties.

This variance request is approved subject to the following conditions:

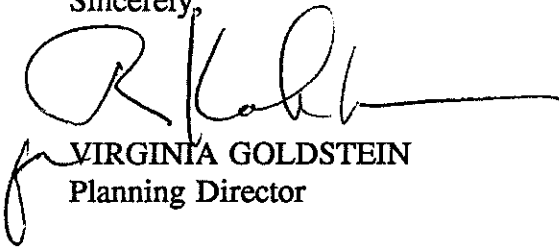
1. The applicant/owner, their assigns or successors shall be responsible for complying with all stated conditions of approval. The effective date of this permit is March 5, 1999.
2. The approval of this variance is only from the Zoning Code. The applicant/owner, successors or assigns shall indemnify and hold the County of Hawaii harmless from and against any loss, liability, claim, or demand for the property damage, personal injury, or death arising out of any act or omission of the applicants/owners, their successors or assigns, officers, employees, contractors, or agents under this variance or relating to or connected with the granting of this variance.
3. The location of the proposed wind turbine generators on the subject TMK parcels. will not meet Chapter 25, the Zoning Code's, minimum yards. The approval of this variance allows the existing wind turbine generators identified on the plot or site plan to be replaced with the proposed 161 feet high wind turbine generators and remain on the subject property.

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4. Future building improvements and permitted uses shall be subject to review under Plan Approval of the Zoning Code. The applicant shall complete, sign, and submit a APPLICATION FOR PLAN APPROVAL and detailed building plans to replace the specific WTGT units and secure Final Plan Approval from the Planning Director of the Planning Department prior to applying for a county building permit(s). The existing wind farm operation and future building improvements shall comply with State law and County ordinances and regulations pertaining to building construction and building occupancy.

Should any of the foregoing conditions not be complied with, the Planning Director may proceed to declare this Variance Permit null and void.

Sincerely,



VIRGINIA GOLDSTEIN
Planning Director

WRY/RK:gp
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Enc: APPLICATION FOR PLAN APPROVAL

c: Real Property Tax Office