(see derjet Pernet also)

PLANNING COMMISSION

Planning Department County of Hawaii Hilo, Hawaii

APPLICATION FOR SPECIAL PERMIT

by

FRED ALBRIGHT

for

DEVELOPING, TESTING, AND IMPLE-MENTING A WIND TURBINE SYSTEM WHICH PROVIDES ELECTRICITY TO A SINGLE FAMILY RESIDENCE AS WELL AS TO HELCO

> in KEALAHEWA 2ND, NORTH KOHALA, HAWAII

SPECIAL PERMIT NO. 446

SPECIAL PERMIT

The County Planning Commission at duly held public hearings on January 14, 1980, February 13, 1980 and March 12, 1980, considered the application of FRED ALBRIGHT for a Special Permit in accordance with Chapter 205, Section 205-6, Hawaii Revised Statutes, as amended, and Rule No. 6 of the Planning Commission relating to Special Permit to allow the development, testing, and implementation of a wind turbine system which provides electricity to a single family residence as well as to HELCO within the State Land Use Agricultural District. The area involved is located approximately 1320 feet east of the Upolu Airport Road-Hawi-Mahukona Road intersection on the makai side of the highway, Kealahewa 2nd, North Kohala, Hawaii, Tax Map Key 5-5-06:24.

The Commission has found the following:

That the proposed use will not be contrary to the objectives sought to be accomplised by the State Land Use Law and Regulations. The purpose of the Land Use Law and Regulations is to protect, preserve and encourage the development of lands in the State for the public health and welfare of the people of the State of Hawaii. The area under consideration is classified as Agricultural by the State Land Use Commission. The "power control" building and the wind turbine system are permitted within the State Land Use Agricultural District as "accessory uses" as long as they are used to provide electricity exclusively for the dwelling on the property. The petitioner is requesting that he be allowed to provide excess power, not required by the residence on the property, to HELCO. Therefore, the petitioner's request does not alter the primary purpose of the accessory structures. Home consumption needs are to be met first and this requirement will not be compromised. In this sense, the proposed use will not be contrary to the objectives sought to be accomplised by the State Land Use Law and Regulations.

That the proposed use will not adversely affect surrounding property. The proposed use will not require any external changes to improvements already planned on the property. No additional negative impacts are anticipated above and beyond those that can be expected from uses already permitted within the State Land Use Agricultural District. Therefore, no adverse impacts to surrounding properties are anticipated.

That the proposed use will not unreasonably burden public agencies to provide roads and streets, sewers, water, drainage and school improvements, and police and fire protection. All of the necessary infra-structure are available to the project site. No additional services will have to be provided.

That unusual conditions, trends and needs have arisen since the district boundaries and regulations were established. Rising fossil fuel costs and the recent realization that supplies are not unlimited have accelerated the search for renewable, alternative energy resources. As stated by the applicant, "It is probably not an overstatement to say that when the district boundaries and regulations were established, the present energy situation...and the efforts and resources needed to address it... was not anticipated." Therefore, provisions for wind driven equipment to generate power were not provided in any of the four land use districts. These factors combine to justify the Planning Commission's favorable consideration for granting a Special Permit to allow the applicant to provide excess power to HELCO.

Therefore, the Commission hereby grants to the petitioner a Special Permit to allow the development, testing, and implementation of a wind turbine system which provides electricity to a single family residence as well as to HELCO within the State Land Use Agricultural District at Kealahewa 2nd, North Kohala, Hawaii, pursuant to the authority vested in it by Chapter 205, Section 205-6, Hawaii Revised Statutes, as amended, and Rule No. 6 of the Planning Commission.

Approval of the Special Permit is subject to the following conditions:

- That establishment of the proposed facilities shall be completed within two (2) years from the effective date of the Special Permit.
- 2. That no signs be erected on the site advertising any commercial product.
- 3. That the petitioner shall submit a progress report to the Planning Director within thirty (30) days of the anniversary date of the effective date of the Special Permit. The progress report shall include but not limited to, the status of the developmental and testing phase of the project, additional research or educational programs planned or being conducted on the property, and a general account of the findings accumulated to date.
- 4. That all applicable rules and regulations, including those pertaining to the Public Utilities Commission, shall be complied with.

Should the foregoing conditions not be met, the Special Permit may be deemed null and void by the Planning Commission.

The effective date of the Special Permit shall be March 12, 1980.

Dated at Hilo, Hawaii, this 26th day of August 1980.

WILLIAM J. PARIS, JR. Chairman, Planning Commission

APPROVED AS TO FORM AND LEGALITY:

DEPUTY CORPORATION COUNSEL

COUNTY OF HAWA (A

Date: 18 August 80

(See Menter)

PLANNING COMMISSION OF THE PLANNING DEPARTMENT COUNTY OF HAWAII

In the Matter of the Appeal)
of)
FRED ALBRIGHT)
Tax Map Key 7-3-18:33)

SPECIAL PERMIT NO. 446

FINDINGS OF FACT
CONCLUSIONS OF LAW
AND
DECISION AND ORDER

The above-entitled matter was brought on for public hearings on January 14, 1980, February 13, 1980, and March 12, 1980, before the Planning Commission of the Planning Department, County of Hawaii. These hearings were held in the Kealakehe School Cafetorium, Kealakehe, North Kona, the Kohala Multipurpose Senior Center, Kapaau, North Kohala, and the Civic Center Conference Room, Waimea, South Kohala, Hawaii, respectively.

The Planning Commission having heard the testimony and having examined the exhibits does hereby declare its Findings of Fact, Conclusions of Law, and Decision and Order.

FINDINGS OF FACT

- 1. A Special Permit request to allow a "power control" building (for a wind turbine generating system) to be used for display, testing, and demonstration for commercial sales purposes on approximately 15,016 square feet of land situated within the State Land Use Agricultural District was received on November 27, 1979.
- 2. The property involved is located approximately 1,320 feet east of the Upolu Airport Road-Hawi-Mahukona Road intersection on the makai side of the highway, Kealahewa 2nd, North Kohala, Hawaii, Tax Map Key: 5-5-06:24.

3. The petitioner intends to use a "power control" building for a wind turbine generating system) for display as a demonstration unit for commercial sales purposes. The power control building will be 12' x 20' or 240 square feet. The wind turbine will sit on top of the power control building. The wind turbine and the other components of the system are described by the applicant as follows:

WIND TURBINE: Eight feet in diameter, with overall height of approximately 9 feet or 11 feet, depending upon how it is to be mounted. It consists of vertical axis rotor shrouded by a system of fixed blades. Rotor and shroud are adequately reinforced by means of rod and cables. All are suspended within a framework of square tubing. Square footings of four inch diameter are provided at bottom of framework for mounting on tower or platform. All painted highly weather resistant brown.

ALTERNATOR: Kenyon-Kruse 30" diameter permanent magnet pancake type alternator mounted with gear drive below rotor of wind turbine.

INVERTER: To conform the alternator current to standard line voltage and frequency. If less power is available than is required by load then the difference is provided by the power from the battery pack. When more power is being produced than is being used the battery pack is storing the excess. Capacity of the Inverter is four Kilowatt.

BATTERIES: It is recommended that deep discharge batteries of the marine type be obtained. The number required for 110 Volt systems is fourteen. For 220 Volt systems, however, obtain twenty batteries.

The component parts described above are specifications for model 8B914 produced by Solar World of Los Angeles, California. The petitioner has a dealership agreement with Solar World and intends to market the wind turbine system if a suitable product can be developed during the developmental and testing phase of this project. If this can be accomplished, the Power House will become a demonstration unit and new units will be assembled somewhere in Kapaau.

4. In requesting the Special Permit, the petitioner has stated, in part, the following:

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The use I have requested is not contrary to the objectives of the land use law and regulations in that it is consistent with installations in the surrounding and adjacent areas. The proposed facility is compatible with a residential site, contains no unsightly or extraordinary equipment and poses no hazardous or disturbing properties that would disrupt the uniformity of structure and/or use sought by the Land Use Law and Regulations. Surrounding properties contain T.V. antennas, water storage tanks, etc., and the proposed facility will be no more, if not less, intrusive than such items. It is not anticipated that the facility will have any affect whatsoever upon surrounding properties.

Not only will it not be a burden on public agencies it will support them by making limited emergency power available during emergency conditions such as high winds (in theory this unit will operate satisfactorily in winds up to and beyond 140 miles per hour) or other conditions which may lead to power outages. No additional streets, water, sewers, drainage, school improvements and police or fire protection will be required. The facility will be open to the schools, under proper supervision, and a program will be developed to assist in showing practical application of some scientific developments.

When the district boundaries and regulations were established, the present energy situation...and the efforts and resources needed to address it...was not anticipated. Thus it seems unlikely that the commission would foresee the need to allow the installation of wind generating facilities within any district (as might be the case for water storage facilities). This would be particularly true with regard to a small residential unit, whether in a developmental or fully operational mode. And, of course, it must be kept in mind that a wind generating facility must go where the wind is available and it would be most unusual if the Commission had considered the wind conditions in a particular district in defining districts and their regulations.

Only because this is an developmental facility is there any question of the permitted use. In other words, it is not a question of the land being unsuited for a permitted use, but rather a question of whether the land may be more fully utilized within existing regulations as a community resource addressed to a serious problem of local, national and international proportions.

It has been shown that this development will support public agencies and both local and national interests, and it will do so without altering the essential characteristics of the present land uses; it can be concluded that this is the best and highest use of the land for the public welfare.

5. The subject parcel is situated within the Agricultural-20 acre (A-20a) zoned district.

The General Plan Land Use Pattern Allocation Guide Map designates the area for Intensive Agriculture. This designation applies to those land which will support sugar, orchard, diversified agriculture, and floriculture activities. 7. The Soil Conservation Service lists the site's soils as Hawi silty clay (HaC) and provides the following description of the soil's characteristics: In a representative profile the surface layer is very dark grayish-brown silty clay about 15" thick. The subsoil is very dark grayish brown to dark yellowish-brown stony silty clay about 53" thick. The substratus is soft, weathered igneous rock. The surface layer is slightly acid, and the subsoil is neutral. Runoff is medium, and the erosion hazard is moderate. These soils have a Land Capability Class Rating of IIIe which require special conservation practices because of erosion problems. The Land Study Bureau overall productivity rating for the area is Bi, or good with irrigation. This is the highest rating given to any soil type on the island of Hawaii. 9. The subject area is listed in the Agricultural Lands of Importance to the State of Hawaii classification system of the Department of Agriculture as Prime Agricultural Land. Agricultural Land is defined as "Land which has the soil quality, growing season and moisture supply needed to produce sustained high yields of crops economically when treated and managed according to modern farming methods. The property is rectangular in shape and generally flat. Construction of the residence and the "power control" building is already underway. The building permits issued for the proposed structures were conditioned for single family residential use only. The Special Permit is being required - 4 -

because the applicant proposes to develop a system that will provide excess electricity to HELCO and to display the wind turbine for commercial sales purposes. The subject property is part of a 26 lot subdivision by the Kohala Sugar Co., granted on February 20, 1961. Although this subdivision created residential sized lots, none of the parcels have been used for residential purposes until just recently. This subdivision was created prior to the enactment of the State Land Use Law and the County Zoning Code; and, therefore, it exists as a non-conforming subdivision under the "grandfather" clause. Access to the property is off of the Hawi-Mahukona State Highway which has a 22' pavement and 40' right-of-way. The Hawaii Electric Light Company commented that, "We have discussed this installation with Mr. Albright. promised to keep us informed on the progress of this project." The Fire Department noted that: "Area has no 24-hour fire protection. Kohala has volunteer fire fighters and fire apparatus to respond to fire emergencies in the North Kohala area. Closest 24-hour fire service located at Waimea, South Kohala. Fire hydrants are available. The Department of Health commented that, "If use is designated for public gatherings sanitary facilities may need to be provided. The Department of Water Supply, stated, "We have no objections to the subject request. Water is available from an 8-inch waterline along the highway." 17. None of the other cooperating agencies, including the Department of Agriculture, had any comments on or objections to the subject request. 5 -

18. A letter dated January 5, 1980, was received from Mr. and Mr. Harry K. Ching, objecting to the Special Permit request.

19. The Special Permit request was first brought before the Planning Commission for a public hearing on January 14, 1980. Presentations on the matter were made by the staff and the petitioner.

20. Two (2) members of the public spoke in opposition to the request.

- 21. One (1) member of the public spoke in favor of the request.
- 22. At that meeting, the staff recommended that a portion of the request be given favorable consideration; however, the staff also recommended that a portion of the request be denied. The following is the staff's reason for the denial portion of the recommendation:

That the granting of this request will be contrary to the objectives sought to be accomplished by the State Land Use Law and Regulations. The State Land Use Law and Regulations are intended to preserve, protect, and encourage the development of land in the State for those uses to which they are best suited in the interest of the public health and welfare of the people of the State of Hawaii.

The "power control" building and the wind turbine system are permitted within the State Land Use Agricultural District as "accessory uses" to the residential unit. However, the use of the "power control" building and wind turbine system as a demonstration unit for commercial sales purposes changes the purpose of the structure. The "power control" building is no longer intended to be used as an "accessory structure" because the primary use is as a demonstration unit for commercial sales.

That the granting of this request will be contrary to the goals and objectives of the General Plan document. The Commercial element of the General Plan discourages "strip" commercial development. In addition, one of the courses of action for the North Kohala district is to encourage the development of a commercial core. The establishment of a

commercial use on the subject property will be detrimental towards this end because it is located approximately one mile from the Hawi Village commercial core. Furthermore, the establishment of a commercial use on the subject property has the potential to create a "strip" development of commercial facilities, by setting a precedent for future Special Permit requests in the immediate vicinity. Therefore, it is determined that commercial activities should be concentrated and accommodated within and immediately adjacent to the established village core. From a planning and land use perspective, it is more logical to concentrate the commercial activities in a given area. 23. No action was taken at the January 14, 1980, public hearing. The public hearing was continued to the next meeting in Kohala and a field trip to the site was also planned for the same day. The public hearing on the matter was continued on Feburary 13, 1980. Presentations on the matter were made by the staff and the petitioner. Three (3) members of the public spoke in opposition to the request. One (1) member of the public spoke in favor of the request. The public hearing was closed at this meeting but action on the matter was deferred to a later date.

28. The matter was discussed once again on March 12, 1980. The Planning Commission voted to approve the portion of the request relating to the development and testing of the system which could provide excess power to HELCO; however, the Planning Commission voted to deny the request to use the power control building as a demonstration unit for commercial sales. The action taken was based on the recommendation and findings outlined by the staff. The motion for approval was carried with seven (7) aye votes versus two (2) no votes. The motion to deny was carried with seven (7) aye votes

CONCLUSIONS OF LAW Pursuant to Part IX of the State of Hawaii Land Use Commission Rules of Practice and Procedure, the County Planning Commission has jurisdiction to hear and determine appeals regarding special permits from the State Land Use Agricultural and Rural Districts regulations. Under Chapter 8, Article 7, Section 3, of the Hawaii County Code, as amended, certain uses are permitted within the County's Agricultural zoned district. 3. All procedural requirements as prescribed by law have been complied with. Pursuant to Part V, Sub-Part 5.2 of the State Land Use District Regulations and Section 6.1(3) of the Planning Commission's Rule No. 6, certain "unusual and reasonable" uses within Agricultural and Rural Districts other than those for which the District is classified may be permitted. The following guidelines are established in determining an "unusual and reasonable use": Such use shall not be contrary to the objectives sought a. to be accomplished by the Land Use Law and Regulations; The desired use shall not adversely affect surrounding b. properties; c. Such use shall not unreasonably burden public agencies to provide roads and streets, sewers, water, drainage, school improvements, and police and fire protection; đ. Unusual conditions, trends, and needs have arisen since the district boundaries and regulations were established; The land upon which the proposed use is sought is unsuited e. for the uses permitted within the district; - 8 -

- f. The proposed use shall not substantially alter or change the essential character of the land and its present use; and
- The request will not be contrary to the General Plan g. and official Community Development Plan and other documents such as Design Plans.
- 5. It has been found that, while the portion of the Special Permit application relating to development and testing of the power system meets the guidelines listed under Conclusions of Law, Item No. 4, the portion relating to the use of the power control building as a demonstration model for commercial sales, does not meet those guidelines for the reasons which have been documented under Findings of Fact, Item No. 22.

DECISION AND ORDER

Based on the testimony and exhibits introduced at the hearing and the foregoing Findings of Fact and Conclusions of Law, it is the decision of the Planning Commission and it is hereby ordered that the Special Permit request to develop and test the power system be granted and that the request to use the power control building as a demonstration unit for commercial sales within the State Land Use Agricultural District, of Tax Map Key 5-5-06:24 located at Kealahewa 2nd, North Kohala, Hawaii, be and is hereby denied.

Dated at Hilo, Hawaii, this 26th day of August

Chairman, Flanning Commission

APPROVED AS TO FORM AND LEGALITY:

Deputy Corporation Counsel County of Hawaii