

**A BILL FOR AN ORDINANCE TO ESTABLISH
A NEW ARTICLE 28, CHAPTER 8, KAUAI COUNTY CODE 1987,
RELATING TO SMALL WIND ENERGY CONVERSION SYSTEMS**

BE IT ORDAINED BY THE COUNCIL OF THE COUNTY OF KAUAI,
STATE OF HAWAII:

SECTION 1. Findings and purpose. The purpose of this ordinance is to promote the effective and efficient use of small wind energy conversion systems (S.W.E.C.S.). The Council finds the following:

(a) Wind energy is an abundant, renewable, and non-polluting resource of the County and that its conversion to electricity will reduce our dependence on non-renewable energy sources and decrease the air and water pollution that results from the use of conventional energy sources;

(b) S.W.E.C.S. reduce peak power demand and help diversify the County's energy supply portfolio;

(c) S.W.E.C.S. that convert wind energy to electricity are currently available on a commercial basis from many manufacturers;

(d) Regulation of the placement and installation of wind turbines is necessary for the purpose of protecting the health and safety of neighboring property owners and the general public;

(e) It is the policy of the County to promote and encourage the use of S.W.E.C.S. and to limit obstacles to their installation and use;

(f) This ordinance is concerned solely with the regulations and requirements for the issuing of those permits established under Chapter 8 of the Kauai County Code, including but not limited to Zoning Permits and Use Permits. Approval of said permits does not constitute an approval of other permits or imply the meeting of other standards that may be required by County, State, or Federal agencies and the electrical utility.

SECTION 2. Chapter 8 of the Kauai County Code 1987, as amended, is hereby amended by adding a new article to be appropriately designated and to read as follows:

"ARTICLE 28. SMALL WIND ENERGY CONVERSION SYSTEMS

Sec. 8-28.1 Applicability. The requirements of this chapter shall apply to small wind energy conversion systems (S.W.E.C.S.) when they are allowed as a generally permitted use or permitted with a Use Permit under the County Zoning Ordinance. Notwithstanding Article 2 of Chapter 10 of the Kaua'i County Code 1987, as amended, or any other law to the contrary, the design standards for S.W.E.C.S., including but not limited to the maximum allowable heights and setbacks, shall be as established in this Article.

Sec. 8-28.2 Definitions. When used in this Article, the following words or phrases shall have the meaning given in this Section unless it shall be apparent from the context that a different meaning is intended:

“Blade” means an extension from the hub of the S.W.E.C.S. that is designed, in conjunction with other extensions, to catch the wind and turn the rotor to generate electricity.

“F.A.A.” means Federal Aviation Administration.

“Horizontal axis wind energy conversion system” means a wind energy conversion system that employs a horizontal rotor shaft.

“Hub” means the center of the rotor to which the blades are attached.

“S.W.E.C.S.” means a small wind energy conversion system which is an apparatus for converting kinetic energy from wind to mechanical energy in order to produce electrical energy of no more than twelve (12) kilowatts in the residential district and no more than one-hundred (100) kilowatts in all other districts. The term S.W.E.C.S. applies to tower- and roof-mounted small wind energy conversion systems as well as horizontal and vertical axis small wind energy conversion systems. The term also applies to wind monitoring or meteorological towers used for supporting anemometers, wind vanes, and other equipment to assess the wind resource at a predetermined height above the ground.

“Total Height” means the combined height as measured from the existing grade at the base of the tower or structure to which the S.W.E.C.S. is mounted to the tip of the rotor blade when extended vertically ninety (90) degrees from the horizontal plane of the ground.

“Tower” means the upright portion of a wind energy system to which the primary generator systems are attached, either at the top (i.e. generally for horizontal axis wind energy conversion systems) or the bottom (i.e. generally for vertical axis wind energy conversion systems).

“Vertical axis wind energy conversion system” means a wind energy conversion system that employs a vertical rotor shaft.

Sec. 8-28.3 Generally Permitted S.W.E.C.S.

(a) Tower-mounted S.W.E.C.S. shall be permitted in the following zoning districts subject to the limits set forth below:

(1) In the Residential (R-1 through R-20) and Neighborhood Commercial (C-N) Districts, tower-mounted S.W.E.C.S. shall be generally permitted on lots at least one (1) acre in size, and shall be restricted to one (1) per every one (1) acre of the respective Residential or Neighborhood Commercial lot.

(2) In the General Commercial District(C-G), tower-mounted S.W.E.C.S shall be generally permitted on lots at least 20,000 square feet in size, and shall be restricted to one (1) per every 20,000 square feet of the respective General Commercial lot.

(3) In the Industrial District (I-G and I-L), tower-mounted S.W.E.C.S. shall be generally permitted.

(4) In the Agriculture District, tower-mounted S.W.E.C.S. may be constructed and operated, and shall be restricted to the following densities:

(A) One (1) tower-mounted S.W.E.C.S. for each lot one (1) acre or larger.

(B) One additional tower-mounted S.W.E.C.S. for each additional three (3) acres in the same lot, provided that no more than five (5) tower-mounted S.W.E.C.S. may be constructed or operated on any one (1) lot.

(C) A lot in common ownership of record existing prior to or on September 1, 1972, which is smaller than one (1) acre, may construct and/or operate one (1) tower mounted S.W.E.C.S.

(5) In the Open District, tower-mounted S.W.E.C.S. shall be generally permitted on lots at least five (5) acres in size, and shall be restricted to one (1) per every five (5) acres of the respective Open lot, provided that no more than five (5) tower-mounted S.W.E.C.S. may be constructed or operated on any one (1) lot.

(b) Roof-mounted S.W.E.C.S. shall be permitted in the Residential (R-1 through R-20), Industrial (General Industrial and Limited Industrial), Commercial (General Commercial and Neighborhood Commercial), Agriculture, and Open Zoning Districts.

Sec. 8-28.4 S.W.E.C.S. that require a Use Permit.

(a) Tower-mounted S.W.E.C.S. shall require a Use Permit in the following use and overlay districts:

- (1) Resort District (RR).
- (2) Special Treatment District, Public Facilities (ST-P).
- (3) Special Treatment District, Cultural/Historic (ST-C).
- (4) Special Treatment District, Scenic/Ecological Resources (STR).
- (5) Kapa'a Special Planning Areas A, B, and C.
- (6) Residential District (R-1 – R-20), when the lot is less than one (1) acre in size.
- (7) Neighborhood Commercial District (C-N), when the lot is less than one (1) acre in size.
- (8) General Commercial District (C-G), when the lot is less than 20,000 square feet in size.
- (9) Open District, when the lot is less than five (5) acres in size.
- (10) Agriculture District, when the density of tower-mounted S.W.E.C.S. proposed exceeds the density of tower-mounted S.W.E.C.S. permitted under Section 8-28.3(a)(4).

(b) Roof-mounted S.W.E.C.S. shall require a Use Permit in the following use and overlay districts:

- (1) Resort District (RR).
- (2) Special Treatment District, Public Facilities (ST-P).
- (3) Special Treatment District, Cultural/Historic (ST-C).
- (4) Special Treatment District, Scenic/Ecological Resources (ST-R).
- (5) Kapa'a Special Planning Areas A, B, and C.

Sec. 8-28.5 Additional Standards for S.W.E.C.S.

(a) Allowable heights for tower-mounted S.W.E.C.S. The maximum allowable total height for a tower-mounted S.W.E.C.S. shall be twenty (20) feet above the maximum building height allowed in the respective zoning district in which it is proposed to be constructed and/or operated.

(b) Allowable heights for roof-mounted S.W.E.C.S. The maximum allowable total height for a roof-mounted S.W.E.C.S. shall be ten (10) feet above the maximum building height allowed in the respective zoning district in which it is proposed to be constructed and/or operated.

(c) Set back. Tower-mounted S.W.E.C.S. shall be set back from all property lines and overhead utility lines at least 1.1 times its total height. Roof-mounted S.W.E.C.S. shall be considered as part of the structure atop which they are mounted, and the setback standards established for each respective zoning district shall be applied to all roof-mounted S.W.E.C.S.

(d) All S.W.E.C.S. shall comply with all other County of Kaua'i, State of Hawai'i, and Federal regulations.

(e) Signs. At least one (1) sign shall be posted at the base of the tower warning of electrical shock or high voltage. Advertising on any part of the S.W.E.C.S., including but not limited to the tower, rotor, generator or tail vane shall be prohibited.

(f) Color. S.W.E.C.S. shall be painted a non-reflective color to be reviewed and approved by the Planning Director prior to Building Permit approval.

(g) Lighting. Exterior lighting of any form of the S.W.E.C.S. shall be prohibited, unless required by the F.A.A.

(h) All applicants proposing to construct and/or operate a S.W.E.C.S. shall notify the Department of Land and Natural Resources, Division of Forestry and Wildlife and the United States Department of the Interior, Fish and Wildlife Service of their intention to construct and operate a S.W.E.C.S. on the island of Kaua'i. The applicant shall inform these two (2) agencies via certified mail of the proposed S.W.E.C.S. location and the respective property's tax map key(s) as well as design information, including but not limited to the proposed S.W.E.C.S. total height, blade length, pole or tower type (e.g. solid metal pole or latticed), and whether or not guyed wires will be used. The Planning Director or his designee shall not deem an application for a

S.W.E.C.S. complete until the applicant submits to the Department a copy of the return receipt of the certified mail demonstrating that such notification took place.

(i) Discontinuance of S.W.E.C.S. Should the use of a S.W.E.C.S. be discontinued for a period of one (1) year, the respective land owner shall inform the Planning Department and remove the S.W.E.C.S. and any associated equipment and/or structures from the subject property.

(j) All applicants proposing to construct and/or operate a S.W.E.C.S. in parallel with the utility shall have an executed Interconnection Agreement with Kaua'i Island Utility Cooperative (KIUC) prior to operation of a S.W.E.C.S.”

SECTION 3. Severability. If any provision of this ordinance or the application thereof to any person, persons, or circumstances is held invalid, the invalidity does not affect the other provisions or applications of this ordinance which can be given effect without the invalid provision or application, and to this end, the provisions of this ordinance are severable.

SECTION 4. Effective date. This ordinance shall take effect upon its approval.

Introduced by: /s/ Tim Bynum
(By Request)

DATE OF INTRODUCTION

June 3, 2009

Līhu'e, Kaua'i, Hawai'i