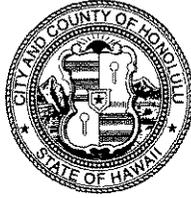


DEPARTMENT OF PLANNING AND PERMITTING  
**CITY AND COUNTY OF HONOLULU**

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MUFI HANNEMANN  
MAYOR



HENRY ENG, FAICP  
DIRECTOR

DAVID K. TANOUE  
DEPUTY DIRECTOR

December 9, 2008

The Honorable Todd K. Apo, Chair  
and Members  
Honolulu City Council  
530 South King Street, Room 202  
Honolulu, Hawaii 96813

RECEIVED

DEC 9 3 42 PM '08

CITY CLERK  
HONOLULU, HAWAII

Dear Chair Apo and Councilmembers:

Subject: Request for Additional Accompanying Documentation Required  
For Processing the Proposed Land Use Ordinance Amendment  
of Resolution No. 08-254 Relating to Wind Machines

Ordinance 08-8, Section 2-24.3, specifies that "Upon introduction of the resolution for a council proposal, the city clerk shall transmit a copy of the resolution to the director." The resolution was time-stamped by the DPP on November 10, 2008, at 1:39 p.m.

In addition, Ordinance 08-8, Section 2-24.3, specifies that, "prior to adoption of the resolution," the Director must assist the Council by:

- Advising the Council of any documentation "needed to satisfy the director's usual requirements" for processing the amendments within thirty (30) days of receiving the City Clerk's notice of introduction of the resolution;
- Providing maps, documents and information in the possession of the Department within thirty (30) days of receiving a written request from any Councilmember; and
- Advising the Council of the sufficiency of any documentation prepared to accompany the proposal within thirty (30) days of submission of the documentation to the Director.

As required by Ordinance 08-08, we are submitting comments on the submission requirements.

The proposed bill (attached to Resolution No. 08-254) will allow wind machines in additional zoning districts. More specifically, the existing zoning ordinance allows wind machines in the agricultural, country, residential, business, industrial-commercial mixed use, and certain industrial zoning districts. The proposed bill will allow wind machines in the

apartment, apartment mixed use, business mixed use, resort, I-3 Waterfront Industrial, and P-2 General Preservation zoning districts, and the Waikiki Special District. It will also allow for a greater allowable rated capacity, for example, an increase from one (1) kilowatt to ten (10) kilowatts in residential districts.

The DPP typically prepares a report and recommendation for LUO amendments which follows a “standard” format. Supporting documentation from an “applicant” for an LUO amendment should provide the DPP with information adequate to complete its report, and should address the following with regard to the specific proposal:

### **Problem Statement**

State what is the main problem that the proposed amendment is intended to solve. For example, have the existing regulations prevented a significant number of residential or commercial buildings from installing wind machines in certain zoning districts? Or, are the existing regulations pertaining to rated capacity inadequate to serve intended users?

The resolution identifies three (3) general reasons justifying the proposal:

- 1) Wind energy is an abundant, renewable, and nonpolluting energy resource that, when converted to electricity, reduces dependence on nonrenewable energy resources and decreases carbon emissions.
- 2) Wind energy systems also enhance the reliability and power quality of the power grid, reduce peak power demands and help diversify the State’s energy supply portfolio.
- 3) The City’s existing zoning ordinances do not allow wind machines in the apartment, apartment mixed use, business mixed use, resort, I-3 Waterfront Industrial, and P-2 General Preservation zoning districts, and the Waikiki Special District.

Is there empirical evidence which supports these statements and/or conclusions? What is the projected economic impact on residential buildings or commercial establishments that are not allowed to have wind machines?

Further, provide a brief explanation of why the proposed increase in allowable rated capacities (kilowatts) in certain zoning districts is the minimum or maximum that should be allowed. Explain why the proposed capacities are essential to practical function or for other reasons.

## **Background**

Describe the applicable background behind the proposal:

Explain why the present LUO regulations pertaining to wind machines are inadequate to address the problem, and why the regulations that do not permit wind machines in certain zoning districts should be lifted.

Is the proposal in reaction to an observable, widespread problem which is affecting many residential buildings or commercial buildings? For example, has a large number of dwelling owners reported that the existing (lower) maximum rated capacity is inadequate to serve their building needs?

## **Alternatives**

One concern expressed about wind machines has been the potential visual impact. Will the proposal to allow greater rated capacity wind machines create greater visual impacts? Are the proposed capacities within the range typically required to meet the energy needs of a building and with current technology? What measures might be necessary to mitigate potential impacts, such as visual or noise impacts?

What types of wind machines were considered in arriving at the greater capacity ratings? What were identified as the disadvantages of the alternatives, or why were they determined to be unsuitable? Is there any need to limit the type of wind machines allowed in certain districts?

## **Other Issues**

The LUO, Section 21-5.700(a), requires all wind machines to be set back from all property lines a minimum distance equal to the height of the system. What are the typical heights and/or dimensions of 10- or 50-kilowatt wind machines and/or what is the minimum height they must be to function effectively? Given the typical machine dimensions and/or heights, would the required height setback prevent their installation on average sized residential lots? If not, does this problem need to be addressed? Have other potential impacts associated with larger wind machines, such as noise or impact on migratory birds, been considered?

The proposed amendment would allow wind machines in the Waikiki Special District. Are wind machines and their potential additional height compatible with the Waikiki Special District objectives in the LUO, Section 21-9.80-1? Are additional provisions necessary to ensure that any type of wind machine that is incompatible with the Waikiki Special District guidelines shall not be permitted?

The Honorable Todd K. Apo, Chair  
and Members  
Page 4

Please note that the DPP cannot assist the Council in gathering and preparing the necessary documentation sufficient to satisfy the usual requirements for the processing of LUO amendments, as provided by Section 6-1513, RCH. Unfortunately, the DPP lacks the staff resources to perform additional tasks. It appears we might not be able to fill the staff vacancies that we have been trying to fill for the past several years, due to a lack of qualified applicants, and, now the current hiring freeze. Thank you for your understanding.

If you should have any questions, please contact me at 768-8000.

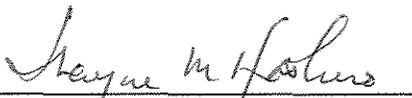
Very truly yours,



Henry Eng, FAICP, Director  
Department of Planning and Permitting

HE:fm

APPROVED:



Wayne M. Hashiro, P.E.  
Managing Director



## RESOLUTION

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PROPOSING AN AMENDMENT TO CHAPTER 21, REVISED ORDINANCES OF HONOLULU 1990 (THE LAND USE ORDINANCE), AS AMENDED, RELATING TO WIND MACHINES.

WHEREAS, wind energy is an abundant, renewable, and nonpolluting energy resource that, when converted to electricity, reduces dependence on nonrenewable energy resources and decreases carbon emissions; and

WHEREAS, wind energy systems also enhance the reliability and power quality of the power grid, reduce peak power demands and help diversify the state's energy supply portfolio; and

WHEREAS, the city's existing zoning ordinances allow wind machines in the agricultural, country, residential, business, industrial-commercial mixed use, and certain industrial zoning districts, but not in the apartment, apartment mixed use, business mixed use, resort, I-3 Waterfront Industrial, and P-2 General Preservation zoning districts and the Waikiki Special District; and

WHEREAS, the council believes it appropriate to amend the zoning ordinance to facilitate wind machine use; and

WHEREAS, Section 6-1513 of the Revised Charter of the City and County of Honolulu 1973, as amended (RCH), provides that "[a]ny revision of or amendment to the zoning ordinances may be proposed by the council and shall be processed in the same manner as if proposed by the director [of planning and permitting]"; and

WHEREAS, Section 6-1513, RCH, further provides that "[a]ny such revision or amendment shall be referred to the director and the planning commission by resolution, which resolution shall be accompanied by supporting documentation sufficient to satisfy the director's usual requirements for the commencement of processing"; and

WHEREAS, the director of planning and permitting has not established standards for the submittal of such supporting documentation; now, therefore,

BE IT RESOLVED by the Council of the City and County of Honolulu that the director of planning and permitting is directed, pursuant to Section 6-1513 of the Revised Charter of the City and County of Honolulu 1973, as amended, to process the proposed amendment to Chapter 21, ROH 1990 (the Land Use Ordinance), attached hereto as Exhibit "A," in the same manner as if the proposal had been proposed by the director; and



**RESOLUTION**

BE IT FURTHER RESOLVED that the council requests the director of planning and permitting to assist the council in gathering and preparing the necessary documentation sufficient to satisfy the usual requirements for the commencement of processing of LUO amendments as provided by Section 6-1513, RCH; and

BE IT FURTHER RESOLVED that the director of planning and permitting is directed to inform the council upon the transmittal of the director's report and the proposed Land Use Ordinance amendment to the Planning Commission; and

BE IT FURTHER RESOLVED that if the director of planning and permitting submits an alternative proposal to the Planning Commission, that the Planning Commission is requested to make separate recommendations on the attached proposed Land Use Ordinance amendment and on any administration-proposed alternative; and

BE IT FINALLY RESOLVED that copies of this Resolution and the Exhibit attached hereto be transmitted to the director of planning and permitting and the Planning Commission of the City and County of Honolulu.

INTRODUCED BY

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\_\_\_\_\_

DATE OF INTRODUCTION:

NOV - 5 2008

Honolulu, Hawaii

Councilmembers

EXHIBIT A



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A BILL FOR AN ORDINANCE

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RELATING TO WIND MACHINES.

BE IT ORDAINED by the People of the City and County of Honolulu:

SECTION 1. The purpose of this ordinance is to allow wind machine use in zoning districts where such use is currently prohibited and increase wind machine allowable rated capacities in certain zoning districts.

SECTION 2. Table 21-3 of Chapter 21, Revised Ordinances of Honolulu 1990, as amended ("Master Use Table"), is amended by amending "Wind machines" use entry in the "Utilities and Communications" category to read as follows:

## "TABLE 21-3 MASTER USE TABLE

In the event of any conflict between the text of this Chapter and the following table, the text of the Chapter shall control.  
The following table is not intended to cover the Waikiki Special District; please refer to Table 21-9.6(A)

- KEY:**
- Ac = Special accessory use subject to standards in Article 5
  - Cm = Conditional Use Permit-minor subject to standards in Article 5; no public hearing required (see Article 2 for exceptions)
  - C = Conditional Use Permit-major subject to standards in Article 5; public hearing required
  - P = Permitted use
  - P/c = Permitted use subject to standards in Article 5
  - PRU = Plan Review Use

ZONING DISTRICTS																					
USES (Note: Certain uses are defined in Article 10.)	P-2	AG-1	AG-2	Country	R-2C, R-10	R-1.5, R-5, R-3.5	A-1	A-2	A-3	AMX-1	AMX-2	AMX-3	Resort	B-1	B-2	BMX-3	BMX-4	I-1	I-2	I-3	IMX-1
UTILITIES AND COMMUNICATIONS																					
Wind machines	<u>Cm</u> <u>Ac</u>	Cm Ac	Cm Ac	Cm Ac	Cm	Cm	<u>Cm</u>	Cm	Cm	<u>Cm</u>	<u>Cm</u>	Cm	Cm	<u>Cm</u>	Cm						



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## A BILL FOR AN ORDINANCE

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SECTION 3. Section 21-5.700, Revised Ordinances of Honolulu 1990, is amended to read as follows:

**"Sec. 21-5.700 Wind machines.**

- (a) All wind machines shall be set back from all property lines a minimum distance equal to the height of the system. Height shall include the height of the tower and the farthest vertical extension of the wind machine.
- (b) In residential zoning districts, in addition to the above, the following shall be applicable:
  - (1) Tower climbing apparatus and blade tips of the wind machine shall be no lower than 15 feet from ground level, unless enclosed by a six-foot-high fence and shall not be within seven feet of any roof or structure unless the blades are completely enclosed by a protective screen or fence.
  - (2) A public safety sign shall be posted at the base of the tower warning of high voltage and dangerous moving blades.
  - (3) The system base and rotor blade shall be a minimum of 15 feet from any overhead electrical transmission or distribution lines.
  - (4) Anchor points for guy wires for the wind machine shall be located within property lines and not on or across any overhead electrical transmission or distribution lines. Guy wires shall be equipped with devices that will, in a safe manner, prevent them from being climbed and shall be securely fastened.
  - (5) The applicant shall provide manufacturer's specifications which certify the safety of the machine; provided, that the appropriate tower was used and proper installation procedures followed, as outlined in the manual.
  - (6) The wind machine shall be operated so that no disruptive electromagnetic interference is caused. If it can be demonstrated to the director that the system is causing harmful interference, the operator shall promptly mitigate the interference.
  - (7) The system shall be kept in good repair.



## A BILL FOR AN ORDINANCE

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- (8) The system shall be deemed abandoned if not in continuous use for at least one year. Upon determination that the use is abandoned, the structure shall be dismantled and removed within 30 days upon written notice.
- (9) The system shall be restricted to a rated capacity of no more than [one kilowatt] 10 kilowatts.
- (c) In the preservation, agricultural and country zoning districts, accessory wind machines shall have a rated capacity of no more than 100 kilowatts. Wind machines with a rated capacity of more than 100 kilowatts shall require a conditional use permit (minor).
- (d) In the apartment, apartment mixed use, business, business mixed use, industrial, industrial-commercial mixed use, and resort zoning districts, wind machines shall have a rated capacity of no more than [10] 50 kilowatts."

SECTION 4. Section 21-9.80-5, Revised Ordinances of Honolulu 1990, is amended to read as follows:

**"Sec. 21-9.80-5 Apartment precinct.**

- (a) Permitted Uses. Within the apartment precinct, including the apartment mixed use subprecinct, permitted uses and structures shall be as enumerated in Table 21-9.6(A).
- (b) Development Standards. Uses and structures within the apartment precinct and the apartment mixed use subprecinct shall conform to the development standards enumerated in Table 21-9.6(B).
- (c) Additional Development Standards.
  - (1) Commercial Use Location Within the Apartment Mixed Use Subprecinct. Any of the permitted uses designated in Table 21-9.6(A) as a principal use only within the apartment mixed use subprecinct, either occurring as a single use on a zoning lot or in combination with other uses, shall be limited to the basement, ground floor or second floor of a building.
  - (2) Transitional Height Setbacks. For any portion of a structure above 40 feet in height, additional front, side and rear height setbacks equal to one foot for each 10 feet in height, or fraction thereof, shall be provided. Within the



**A BILL FOR AN ORDINANCE**

height setback, buildings with graduated, stepped forms shall be encouraged (see Figure 21-9.2).

(d) Additional Use Standards.

- (1) Utility installations, Type A, when involving transmitting antennas, shall be fenced or otherwise restrict public access within the area exposed to a power density of 0.1 milliwatt/cm<sup>2</sup>.
- (2) Wind machines shall have a rated capacity of no more than 50 kilowatts.

SECTION 5. Section 21-9.80-6, Revised Ordinances of Honolulu 1990, is amended to read as follows:

**"Sec. 21-9.80-6 Resort mixed use precinct.**

- (a) Permitted Uses. Within the resort mixed use precinct, permitted uses and structures shall be as enumerated in Table 21-9.6(A).
- (b) Development Standards. Uses and structures within the resort mixed use precinct shall conform to the development standards enumerated in Table 21-9.6(B).
- (c) Additional Development Standards.
  - (1) Minimum Open Space Requirements. A minimum percentage of the zoning lot shall be devoted to open space for all developments in the resort mixed use precinct. Minimum open space for a zoning lot shall be as provided below, except that when required yards exceed this standard, the minimum standard for required yards shall be considered the minimum open space requirement for the zoning lot.

FAR	Percent of zoning lot
Less than 1.0	10
1.0 - 1.25	25
1.26 - 1.5	35
Greater than 1.5	50



**A BILL FOR AN ORDINANCE**

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- (2) Transitional Height Setbacks. For any portion of a structure above 40 feet in height, additional front, side and rear height setbacks equal to one foot for each 10 feet in height, or fraction thereof, shall be provided. Within the height setback, buildings with graduated, stepped forms shall be encouraged (see Figure 21-9.2).
- (d) Additional Use Standards.
  - (1) Utility installations, Type A, when involving transmitting antennas, shall be fenced or otherwise restrict public access within the area exposed to a power density of 0.1 milliwatt/cm<sup>2</sup>.
  - (2) Wind machines shall have a rated capacity of no more than 10 kilowatts.

SECTION 6. Section 21-9.80-7, Revised Ordinances of Honolulu 1990, is amended to read as follows:

**"Sec. 21-9.80-7 Resort commercial precinct.**

- (a) Permitted Uses. Within the resort commercial precinct, permitted uses and structures shall be as enumerated in Table 21-9.6(A).
- (b) Development Standards. Uses and structures within the resort commercial precinct shall conform to the development standards enumerated in Table 21-9.6(B).
- (c) Additional Development Standards.
  - (1) Open Space Bonus.
    - (A) For each square foot of public open space provided, 10 square feet of floor area may be added, exclusive of required yards;
    - (B) For each square foot of open space devoted to pedestrian use and landscape area at ground level provided, five square feet of floor area may be added; and
    - (C) For each square foot of arcade area provided, three square feet of floor area may be added, exclusive of required yards.



**A BILL FOR AN ORDINANCE**

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(2) Transitional Height Setbacks. For any portion of a structure above 40 feet in height, an additional front height setback equal to one foot for each 10 feet in height, or fraction thereof, shall be provided. When a zoning lot adjoins a zoning lot in the apartment precinct, the same additional side and rear height setbacks shall also be provided. Within the height setback, buildings with graduated, stepped forms shall be encouraged (see Figure 21-9.2).

(d) Additional Use Standards.

(1) Utility installations, Type A, when involving transmitting antennas, shall be fenced or otherwise restrict public access within the area exposed to a power density of 0.1 milliwatt/cm<sup>2</sup>.

(2) Wind machines shall have a rated capacity of no more than 10 kilowatts.

SECTION 7. Section 21-9.80-8, Revised Ordinances of Honolulu 1990, is amended to read as follows:

**"Sec. 21-9.80-8 Public precinct.**

(a) Permitted Uses. Within the public precinct, permitted uses and structures shall be as enumerated in Table 21-9.6(A). Additionally:

(1) In the public precinct, public uses and structures may include accessory activities operated by private lessees under supervision of a public agency purely to fulfill a governmental function, activity or service for public benefit and in accordance with public policy; and

(2) All structures within the public precinct shall comply with the guidelines established by the urban design controls marked Exhibit 21-9.15, set out at the end of this article.

(b) Development Standards. Uses and structures within the public precinct shall conform to the development standards enumerated in Table 21-9.6(B). The FAR, height and yard requirements for structures shall be approved by the director.

(c) Signs shall be approved by the director and shall not exceed a total of 24 square feet in area.



**A BILL FOR AN ORDINANCE**

(d) Additional Use Standards.

(1) Utility installations, Type A, when involving transmitting antennas, shall be fenced or otherwise restrict public access within the area exposed to a power density of 0.1 milliwatt/cm<sup>2</sup>.

(2) Wind machines shall have a rated capacity of no more than 10 kilowatts."

SECTION 8. Table 21-9.6(A) of Chapter 21, Revised Ordinances of Honolulu 1990, as amended ("Waikiki Special District Precinct Permitted Uses and Structures"), is amended by adding a new "Wind machines" use entry to read as follows:

"Table 21-9.6(A) Waikiki Special District Precinct Permitted Uses and Structures				
Use or Structure	Precinct			
	Apartment	Resort Mixed Use	Resort- Commercial	Public
<u>Wind machines</u>	<u>Cm</u>	<u>Cm</u>	<u>Cm</u>	<u>Cm</u>

SECTION 9. New ordinance material is underscored. When revising, compiling or printing this ordinance for inclusion in the Revised Ordinances of Honolulu, the revisor of ordinances need not include the underscoring.



CITY COUNCIL  
CITY AND COUNTY OF HONOLULU  
HONOLULU, HAWAII

ORDINANCE \_\_\_\_\_

BILL \_\_\_\_\_

A BILL FOR AN ORDINANCE

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SECTION 10. This ordinance shall take effect upon its approval.

INTRODUCED BY:

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DATE OF INTRODUCTION:

\_\_\_\_\_  
Honolulu, Hawaii

\_\_\_\_\_  
Councilmembers

APPROVED AS TO FORM AND LEGALITY:

\_\_\_\_\_  
Deputy Corporation Counsel

APPROVED this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_  
MUFI HANNEMANN, Mayor  
City and County of Honolulu