Mayor

James Kallander

Council Members

Keith van den Broek

James Kacsh

David Allison

Bret Bradford

EJ Cheshier

David Reggiani

Robert Beedle

City Manager

Mark Lynch

City Clerk

Susan Bourgeois

Deputy Clerk

Erika Empey Robyn Kincaid

Stu. Co. Rep.

Jessica Smyke

CITY COUNCIL PUBLIC HEARING DECEMBER 15, 2010 @ 7:15 PM LIBRARY MEETING ROOM

AGENDA

A. CALL TO ORDER

B. ROLL CALL

Mayor James Kallander, Council members Keith van den Broek, James Kacsh, David Allison, Bret Bradford, EJ Cheshier, David Reggiani, and Robert Beedle

C. PUBLIC HEARING

1. Ordinance1077..... (page 1) An ordinance of the City of Cordova enacting Chapter 18.46 of the

Cordova Municipal Code to establish standards for the siting, construction, and operation of wind energy systems (wind

turbines)

D. ADJOURNMENT

Planning Department

Memorandum

To:

City Council

From:

Samantha Greenwood, City Planner

Date:

11/15/2010

RE:

Planning Commission Recommendation

At the Planning Commission meeting on November 9, 2010 the following motion was made

M/Srb S/Padawer made a motion to adopt the Wind Energy Ordinance 1075 as revised

Motion passed 4-0

Background

The Wind energy code was discussed at 3 Planning and Zoning meetings from 5/11/2010 through 7/13/2010. The ordinance was review by local experts and the city lawyer comments were incorporated. The proposed code was approved at the 11/9/2010 Planning and Zoning meeting.

MOTION

I <u>move</u> to adopt Ordinance 1077 an ordinance of the City of Cordova enacting chapter 18.46 of the Cordova Municipal Code to establish standards for the siting, construction, and operation of wind energy systems (wind turbines).

CITY OF CORDOVA, ALASKA ORDINANCE 1077

AN ORDINANCE OF THE CITY OF CORDOVA ENACTING CHAPTER 18.46 OF THE CORDOVA MUNICIPAL CODE TO ESTABLISH STANDARDS FOR THE SITING, CONSTRUCTION, AND OPERATION OF WIND ENERGY SYSTEMS (WIND TURBINES).

WHEREAS, the use of wind energy systems is not addressed in the Cordova Municipal Code; and,

WHEREAS, the City recognizes that wind energy can be an alternative, clean source of energy; and

WHEREAS, the City desires to permit wind energy systems in the City that are primarily used to provide energy to the property on which the system is located; and,

WHEREAS, the intent of this ordinance is to establish a process for locating and constructing wind energy systems, along with standards for the construction and operation of such systems, where the systems are accessory uses to principal uses on the parcel.

BE IT ORDAINED by the City Council of the City of Cordova, Alaska, that:

Section 1: Cordova Municipal Code Chapter 18.46, Wind Energy Systems, is enacted to read as follows:

<u>Chapter 18.46</u> Wind Energy Systems

Sections:

18.46.010 Definitions.

18.46.020 Zoning requirements.

18.46.030 Design and construction requirements.

18.46.040 Nuisances and removal.

18.46.010 Definitions. As used in this chapter:

"Guyed Tower" means a tower that is supported, in whole or in part, by wires and ground anchors.

"Hub height" means the vertical distance between the grade and the center of the wind turbine hub.

"Lattice Tower" means a tower that is self-supporting and that consists of multiple legs and cross bracing of structural metal.

"Monopole" means a tower that is self-supporting and that consists of a single vertical shaft usually constructed of wood, metal, or concrete.

"Roof" means the uppermost surface of any part of a building.

"Total height" means the vertical distance from the grade to the highest point on a wind energy system structure, including any moving part at the highest point in the course of its movement.

"Vertical access wind turbine" means a wind energy system in which the main rotor shaft is arranged vertically.

"Wind energy system" means a wind turbine and its supporting wind energy system tower.

"Wind turbine" means a blade or other type of rotating mechanism that converts wind energy into electric energy.

- 18.46.020 Zoning requirements. (a) In the LDR, MDR, HDR, URB and CB zoning districts, vertical access wind turbines, or wind energy systems mounted on a roof or monopole, are permitted as follows:
- (1) One wind energy system with a hub height not exceeding eighty feet (80') is permitted as an accessory use on a lot that has a minimum area of twenty thousand (20,000) square feet.
- (2) Except as provided in D of this section, one or more wind energy systems of any height may be permitted on any lot as a conditional use.
- (b) In the in the POS, PLI, WID, WHD, WCP and C zoning districts, vertical access wind turbines, or wind energy systems mounted on a roof, monopole, guyed tower or lattice tower, are permitted as follows:
- (1) No more than two wind energy systems with a hub height not exceeding one hundred fifty feet (150') are permitted as an accessory use on a lot that has a minimum area of twenty thousand (20,000) square feet.
- (2) Except as provided in D of this section, one or more wind energy systems of any height may be permitted on any lot as a conditional use.
- (c) In the I zoning district, wind energy systems with a hub height not exceeding three hundred feet (300') are permitted as an accessory use on a lot that has a minimum area of twenty thousand (20,000) square feet. Except as provided in D of this section, one or more wind energy systems of any height may be permitted on any lot as a conditional use.
- (d) The maximum total height of a wind energy system in an aircraft-approach zone and within eight thousand feet (8,000') of the main runway shall not exceed the maximum height that is determined on the basis of obstruction criteria shown on the current FAA-approved Cordova Airport Master Plan drawings which are on file at Cordova*City Hall.
- (e) No part of a wind energy system, including guy wires and other anchors, may be located within an area that is described in the minimum yard requirements for the applicable zoning district. No part of any wind energy system may be located in an access or utility easement.
- 18.46.030 Design and construction requirements. (a) A wind energy system shall conform to the applicable code requirements that are adopted by reference in Section 16.05.010 and amended in Title 16 of this Code, and to the requirements in this section.
- (b) The foundation for a ground-supported wind energy system shall be designed for the installation site by a professional engineer registered in Alaska, and the building permit application for the wind energy system shall include plans for the foundation stamped by the engineer. The building permit application for a roof-mounted wind energy system shall include a certification by

a professional engineer registered in Alaska that the roof structure will support the wind energy system.

- (c) The building permit application a wind energy system shall include documentation that the wind energy system meets the requirements of this chapter, or an approved conditional use permit authorizing any deviations from those requirements. In addition to review under Title 16 of this Code, the building permit application shall be reviewed by the Planning Department for compliance with the requirements of this chapter and any approved conditional use permit. Before a permit is issued it must be signed by the Planning Department.
- (d) Each wind turbine that is a component of a wind energy system must be approved by the Small Wind Certification Program recognized by the American Wind Energy Association (AWEA) or another accredited organization such as the Small Wind Certification Council, National Wind Technology Certification Center, or the U.S. Department of Energy, National Renewable Energy Laboratory, or must be certified by a professional mechanical engineer registered in Alaska as a system that meets or exceeds industry safety standards for wind energy systems.
- (e) No wind energy system may be installed until the owner of the lot where the wind energy system will be installed submits to the Planning Department the written approval from the Cordova Electric Cooperative of the wind energy system as an interconnected customer-owned generator, or certifies in writing that the wind energy system will not be interconnected with Cordova Electric Cooperative transmission or distribution system.
- (f) No wind energy system may be installed in a manner that allows less than fifteen feet (15') of vertical distance from the grade to any moving wind turbine component at the lowest point in the course of its movement.
- (g) All exposed surfaces of a wind energy system shall be a non-reflective, neutral, unobtrusive color approved by the City Planner, and shall be maintained throughout the life of the wind energy system in accordance with Small Wind Certification Program recognized by the American Wind Energy Association (AWEA) or another accredited organization such as the Small Wind Certification Council, National Wind Technology Certification Center, or the U.S. Department of Energy, National Renewable Energy Laboratory, or must be certified by a professional mechanical engineer registered in Alaska as a system that meets or exceeds industry performance standards for wind energy systems. The Turbines shall be maintained as per the manufacturer's requirements.
- (h) No sign, flag or pennant may be attached to a wind energy system, except to identify the manufacturer or the installer of the wind energy system, or to warn of danger.
- (i) No wind energy system may be artificially illuminated except as required by law or a state or federal agency.
- (j) A wind energy system that is not roof-mounted shall be designed and constructed so no part that is less than fifteen feet (15') above the grade can be climbed, or completely enclosed by a fence that is not less than six feet (6') high.
- (k) All electric transmission wires connected to a wind energy system must be underground, or within the building on which the wind energy system is mounted, except near substations or points of interconnection to the electric grid.
- (1) A wind energy system shall be designed, installed and operated so that the noise generated by the wind energy system does not exceed fifty decibels (50 dB), measured five feet

- (5') above the grade at the property line closest to the wind energy system, except during short-term events such as utility outages and severe wind storms.
- 18.46.040 Nuisances and removal. (a) A wind energy system shall be erected and maintained plumb, level, and true and shall be repaired, painted, and maintained in accordance with this chapter, any manufacturer's recommendations and instructions, and with industry standards for wind energy systems.
- (b) A demolition permit is required to remove a wind energy system. The permit shall require the removal of the entire wind energy system, including foundations to below natural grade, collection, connection, and transmission equipment, at the owner's sole expense.
- (c) The City Planner or designee may order the repair or removal of a wind energy system that is not maintained in accordance with this section. A wind energy system that that is not maintained in accordance with this section, or is not operated for a period of one hundred eighty (180) consecutive days, is a public nuisance subject to abatement under Chapter 8.16 of this Code.
- <u>Section 2</u>: This ordinance shall be effective thirty (30) days after its passage and publication. This ordinance shall be enacted in accordance with Section 2.13 of the Charter of the City of Cordova, Alaska and published in the Cordova Times, a newspaper of general circulation, within ten (10) days of its passage.

1st reading: December 1, 2010

2nd reading and public hearing: December 15, 2010

PASSED AND APPROVED THIS 15th DAY OF DECEMBER 2010

ATTEST: