

Date June 14, 2010

WHEREAS, the City Plan and Zoning Commission has advised that at a public hearing held on May 20, 2010, its members voted 13-0 in support of a motion to recommend **APPROVAL** of a request to amend the Zoning Ordinance Text Chapter 134 of the City Code to make revisions allowing consideration of Wind Energy Conversion Systems (WECS) as a Conditional Use by the Zoning Board of Adjustment.; and

WHEREAS, the proposed text amendment is on file in the office of the City Clerk.

NOW THEREFORE, BE IT RESOLVED, by the City Council of the City of Des Moines, Iowa, as follows:

1. That the meeting of the City Council at which the proposed text amendment is to be considered shall be held in the Council Chambers, City Hall, Des Moines, Iowa at 5:00 p.m. on June 28, 2010, at which time the City Council will hear both those who oppose and those who favor the proposal.
2. That the City Clerk is hereby authorized and directed to cause notice of said proposal in the accompanying form to be given by publication once, not less than seven (7) days and not more than twenty (20) days before the date of hearing, all as specified in Section 362.3 and Section 414.4 of the Iowa Code.

MOVED by \_\_\_\_\_ to adopt.

FORM APPROVED:

  
 \_\_\_\_\_  
 Michael F. Kelley  
 Assistant City Attorney

(10-2010-5.02)

COUNCIL ACTION	YEAS	NAYS	PASS	ABSENT
COWNIE				
COLEMAN				
GRIESS				
HENSLEY				
MAHAFFEY				
MEYER				
MOORE				
TOTAL				
MOTION CARRIED			APPROVED	

**CERTIFICATE**

I, DIANE RAUH, City Clerk of said City hereby certify that at a meeting of the City Council of said City of Des Moines, held on the above date, among other proceedings the above was adopted.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal the day and year first above written.

\_\_\_\_\_ Mayor

\_\_\_\_\_ City Clerk

June 11, 2010

Date \_\_\_\_\_

Agenda Item 30

Roll Call # \_\_\_\_\_

Honorable Mayor and City Council  
City of Des Moines, Iowa

Members:

Communication from the City Plan and Zoning Commission advising that at their meeting held May 20, 2010, the following action was taken:

**COMMISSION RECOMMENDATION:**

After public hearing, the members voted 13-0 as follows:

Commission Action:	Yes	Nays	Pass	Absent
Leisha Barcus	X			
JoAnne Corigliano	X			
Shirley Daniels	X			
Jacqueline Easley	X			
Dann Flaherty	X			
Joel Huston	X			
Ted Irvine				X
Jeffrey Johannsen	X			
Greg Jones	X			
Jim Martin	X			
Brian Millard	X			
William Page	X			
Mike Simonson	X			
Kent Sovern	X			

**APPROVAL** to amend the Zoning Ordinance Text Chapter 134 of the City Code to make revisions allowing consideration of Wind Energy Conversion Systems (WECS) as a Conditional Use by the Zoning Board of Adjustment.  
(10-2010-5.02)

**STAFF RECOMMENDATION TO THE P&Z COMMISSION**

Staff recommends approval of the proposed amendments to the Zoning Ordinance regarding Small Wind Energy Conversion Systems.

**STAFF REPORT**

**I. GENERAL INFORMATION**

The Metro Advisory Council was formed in 2001. The MAC is comprised of two Supervisors from the following counties and the Mayor and a Council member from each from the following cities: Dallas County, Polk County,



CITY PLAN AND ZONING COMMISSION  
ARMORY BUILDING  
602 ROBERT D. RAY DRIVE  
DES MOINES, IOWA 50309-1881  
(515) 283-4182

ALL-AMERICA CITY  
1949, 1976, 1981  
2003

Warren County, Altoona, Ankeny, Bondurant, Carlisle, Clive, DeSoto, Des Moines, Grimes, Indianola, Johnston, Mitchellville, Norwalk, Pleasant Hill, Polk City, Waukee, West Des Moines and Windsor Heights.

On August 11 and September 8, 2009 the MAC formed a Wind Energy Systems Technical Committee to receive input and information from MAC entities and to consider and make a recommendation regarding an ordinance that would provide some consistency and fairness in wind energy conversion system rules and regulations metro-wide.

Representatives of the City of Des Moines Community Development Department and Legal Department were asked to join staff from other metro jurisdictions on the Technical Committee.

The Technical Committee researched and presented a final draft of a Small Wind Energy Conversion Systems Model Ordinance to the MAC on January 12, 2010. The MAC forwarded the draft ordinance to each jurisdiction for consideration.

The Regulation and Ordinance subcommittee of the P&Z reviewed the MAC Model Ordinance on February 24, 2010.

A presentation regarding the Small Wind Energy Conversion Systems Model Ordinance was made at the Des Moines City Council Workshop on April 12, 2010. The Council directed staff to prepare the ordinance for review and recommendation by the Plan and Zoning Commission and consideration by the Council at its earliest convenience.

Per Exhibit "A" (see attached), Small Wind Energy Conversion Systems have a nameplate rated capacity of up to fifteen (15) kilowatts for residential uses and districts and up to one hundred (100) kilowatts for commercial and industrial districts where the system is incidental or subordinate to a principal use on the same site.

Small Wind Energy Conversion Systems would be subject to issuance of a Conditional Use Permit by the Zoning Board of Adjustment. The Board of Adjustment would review all applications for compliance with Section 134-1280 (new).

Under Section 134-1280[C], the Zoning Board of Adjustment shall consider color, maintenance, safety, noise, shadow flicker, electromagnetic interference, existing easements, accessory use and feasibility when considering all proposed systems.

In addition, Section 134-1280[D] provides general regulations for the following:

- Maximum number of systems per lot
- Requirement of monopole installation for freestanding systems
- Prohibition of lighting unless required by FAA regulations
- Prohibition of signage
- Requirement for climbing prevention features
- Prohibition on the reduction of required parking
- Requirement for utility notification
- Compliance with interconnection and operation requirements set by the Iowa Utilities Board
- Provision of safety controls (i.e. automatic and manual braking, governing or feathering system)

- Provision of a shut off
- Requirement of engineering certification by an Iowa licensed professional engineer; and
- Requirement for installation according to manufacturer's specifications and compliance with applicable building and electric codes.

Finally, Section 134-1280[E] provides bulk regulations for Small Wind Energy Conversion Systems including minimum setback, maximum height, minimum lot size, clearance of blade, location, responsibility of the owner/operator to obtain any covenants, easements or similar documentation to assure or protect access to sufficient wind, and requirements for removal of inoperative SWECS.

## **II. ADDITIONAL INFORMATION**

The proposed Small Wind Energy Conversion Systems Ordinance for the City of Des Moines Ordinance includes the following revisions to the model ordinance that was recommended by the MAC:

- Sections 134-1280 [C][3] and [10] prohibit the use of a SWECS for advertising purposes. This modification was made in response to an example cited by another metro jurisdiction where a row of red, white and blue windmills were proposed to attract attention for advertising purposes.
- Sections 134-1280[C][5] and [E][1][b] were modified to address the problem created by the requirement for some building mounted SWECS to overhang the exterior walls of the building. In the downtown area that will place the system within the airspace over the right-of-way. Staff believes the Des Moines City Council will want to accommodate such systems, provided the building has an awning or other means to protect the pedestrians on the sidewalks below from any falling ice.
- Section 134-1280[C][7] was modified to limit the prohibition against Shadow Flicker. At sunrise and sunset, any tall structure will cast an extremely long shadow. There are very few sites in any urban area where the shadow of a tall structure will never fall upon a residential building. The prohibition has been converted to a guideline by making it a "should" for consideration by the Board of Adjustment. The scope has also been narrowed to only consider Shadow Flicker cast on the windows on existing dwellings.
- Section 134-1280[C][6] was modified to reference the City's Noise Control Ordinance; and
- A requirement the owner/operator to provide liability insurance was eliminated. The City does not require insurance for any other structures or uses under the zoning ordinance, including uses far more dangerous than a SWECS. (racetracks, rodeos, etc.) The City does not have the resources to monitor and administer such a requirement.
- A provision authorizing the City to remove abandoned wind turbines was replaced with standard language regarding abatement of nuisances.

Existing Section 134-64[4][a] of the City Code authorizes the Board of Adjustment to permit Exceptions to any setback, area, length, width, height, yard, size or projection limitation provided that the relief that does not exceed 50% of a particular limitation. Staff will advise that a conservative approach be taken with any request for exceptions to such provisions in the Small Wind Energy Conversion Systems Ordinance.

Should the City of Des Moines wish to consider a "wind farm" application within the City limits, staff recommends that such application be subject to the provisions of the PUD Planned Unit Development District contained in Chapter 134, Division 13 of the City Code.

### **SUMMARY OF DISCUSSION**

Mike Ludwig gave a brief summary and pointed out should the City of Des Moines wish to consider a "wind farm" application within the City limits; that such application should be subject to the provisions of the PUD Planned Unit Development District contained in Chapter 134, Division 13 of the City Code.

Brian Millard stated that he is happy with everything he saw and read. The biggest thing is going to be enforcement.

Mike Ludwig passed around the list of wind turbine manufacturers that were sent meeting notification for tonight's meeting.

### **CHAIRPERSON OPENED THE PUBLIC HEARING**

*There was no one to speak in opposition of the application*

### **CHAIRPERSON CLOSED THE PUBLIC HEARING**

### **COMMISSION ACTION**

Mike Simonson moved staff recommendation to approve the proposed amendments to the Zoning Ordinance regarding Small Wind Energy Conversion Systems.

Motion passed 13-0.

Respectfully submitted,



Michael Ludwig, AICP  
Planning Administrator

MGL:clw

cc: File