



**LAND DEVELOPMENT REGULATION ADVISORY BOARD (LDRAB)
RENEWABLE ENERGY (WIND) SUB-COMMITTEE**

WEDNESDAY, MARCH 30, 2011 AGENDA

2300 NORTH JOG ROAD

CONFERENCE ROOM VC-1E-58 – 2ND FLOOR (10:30 AM – 12:00 PM)

A. CALL TO ORDER

1. Introductions
2. Additions, Substitutions and Deletions to Agenda
3. Motion to Adopt Agenda
4. Adoption of March 2, 2011 Minutes (**EXHIBIT A**)

B. REVIEW OF PROPOSED ULDC AMENDMENTS (EXHIBIT B)

C. DISCUSSION

D. PUBLIC COMMENT

E. TOPICS FOR NEXT MEETING

F. ADJOURN

EXHIBIT A

RENEWABLE ENERGY (WIND) SUBCOMMITTEE A SUBCOMMITTEE OF THE LAND DEVELOPMENT REGULATION ADVISORY BOARD (LDRAB)

MINUTES OF THE MARCH 2, 2011 SUBCOMMITTEE MEETING

Prepared by Ann Deveaux, Zoning Technician

On Wednesday **March 2, 2011**, the Renewable Energy (Wind) Subcommittee met at the Vista Center, Room VC-1E-58-59, at 2300 North Jog Road, West Palm Beach, Florida.

First meeting of the Renewable Energy (Wind) Subcommittee for Amendment Round 2011-01.

A. CALL TO ORDER

Mr. Puzzitiello, LDRAB member called the meeting to order at 10:38 a.m.

1. Introductions

Subcommittee Members: Joanne Davis, Rosa Durando*, Jim Knight, Raymond Puzzitiello, and Lori Vinikoor*.

Interested Parties: Carlos Berrocal, George Gentile, Jamie Gentile, Dodi Glas, Cliff Hertz, Pat Lentini, Chuck Millar, Robin Saiz, Ralph Butts, Cliff Hertz**, Carl Jones, III, Mary Kendall, Danny Martell, Drew Martin, Don Mathis, Annette Parchment, Joseph Verdone, and Bill Whiteford.

County Staff: Leonard Berger, William Cross, Ann DeVeaux, Joanne Koerner, Robert Kraus, Barbara P. Nau, Craig Pusey, and Bryce Van Horn.

** Cliff Hertz withdrew his request to be a subcommittee member and requested that he be listed as an interested party.

2. Select Chair and Vice Chair

The Sub-committee selected Mr. Puzzitiello as Chair and Ms. Davis as Vice Chair.

3. Additions, Substitutions and Deletions to Agenda

None

4. Motion to Adopt Agenda

The Chair and Vice Chair declined and preferred to keep meetings informal.

B. Purpose and Intent

1. Goal of Subcommittee – January 6, 2011 BCC Direction

Mr. Cross explained that per BCC direction, the purpose of the subcommittee was to review proposed Code amendments for Renewable Energy (Wind) Facilities submitted by Gentile, Mahoney, O'Mahoney & Associates, representing The Wind Capital Group. The amendments were proposed to address several issues identified as they were developing an application for a large scale commercial wind farm in the Glades Tier. It was noted that wind farms are currently permitted to apply for a Class A Conditional Use approval in this location. Mr. Cross indicated that staff had worked with Mr. Gentile's office to consolidate several redundant suggestions, and that pending issues of concern from Zoning staff were noted as comments in Exhibit B. It was pointed out that several County agencies also may have issues with the proposed changes.

The primary focus of this first meeting was to:

EXHIBIT A

- review a powerpoint presentation on large commercial wind farms presented by Mr. Gentile;
- review the proposed amendment language;
- identify key concerns associated with the proposed amendments; and
- obtain input to finalize language for submission for LDRAB approval.

2. Timeline/Schedule

A final subcommittee meeting will be scheduled in late March to include additional resolution of staff or other agency issues. The proposed amendments were anticipated to be submitted to LDRAB at the May 25, 2011 meeting. Three BCC Public Hearings are scheduled culminating with an Adoption Hearing in August 2011.

3. Overview of Existing ULDC Provisions for Renewable Energy Facilities

See below.

C. Presentation: Overview of Wind Energy (Exhibit A)

A powerpoint presentation of wind energy was given by Mr. Gentile. Discussion ensued regarding technology, environmental permitting, effects on wetlands, visual impacts, location of remote facilities placed between cities boundaries, and generation of local and tertiary jobs. The powerpoint presentation may be viewed online under the subcommittee link of the Code Revision Section under the PBC Zoning Division webpage.

** Ms. Vinikoor and Ms. Durando arrive.

D. Preliminary Review of Proposed ULDC Amendments (Exhibit B)

Mr. Cross gave a summary of the proposed amendments and cross-referenced it with provisions of the Code. Some of the provisions highlighted were:

- Wind facilities are currently permitted uses in all Tiers and most Zoning districts;
- The Supplementary Standards are applicable, whether there is one commercial wind turbine or many turbines;
- accessory uses include minor utility buildings and structures to house electrical transmission equipment used to connect to larger transmission grid systems;
- facilities and structures are subject to the district setbacks which are embedded in Art. 4, Use Regulations, meaning that variance relief cannot be applied for;
- it was also noted that turbines, towers and other structures adjacent to residential must be setback 110 percent of the height of the structure; or, for other districts increased one foot of setback for every additional foot in height of the structure above 35 feet.

E. Discussion

The subcommittee discussed various aspects of the proposed code amendments, summarized as follows:

- several suggested considering minor revisions to definition for MET towers;
- applicability of the Power Plant Siting Act (PPSA) for facilities exceeding 150 mega watts;
- impacts to farming operations, Mr. Gentile clarified that the turbines themselves have minimal footprints or impacts to farming operations;
- Mr. Hertz and Mr. Whiteford voiced concerns with requested setback exemptions from property lines within boundaries of approval/lease tracks;
- minor mention on color – white is preferred by industry, but brought up question if we should specify (in case industry decides to paint pink for example);

EXHIBIT A

- Mr. Martin – several environmental concerns, but biggest related to fear that migrating birds will circle wind turbines or weather towers with lights until they die from fatigue or get hit by blades (Ms. Davis suggested that staff look into whether or not this has been an issue with other existing cell towers or similar structures);
- Ms. Davis – suggested that we expand State/Federal Fish and Wildlife approval to include local bird/bat populations in addition to the current reference to migratory birds/bats;
- Discussion on staff objections to allowing an administrative approval to expand land area on a Conditional Use approval (indicated that such is difficult due to boundary of approval locked into Resolutions, among other reasons);
- Ms. Durando and Mr. Whiteford concurred with staff that there were issues with decommissioning language – but also concurred with staff that it was a good gesture and should be refined to address feasibility;
- general – landscape exemptions, concur for facilities in farm fields with crops – but not for accessory structures where within certain distance of other use or R-O-W;
- parking – Mr. Gentile agreed to removal of some requested changes to parking – understands that if there are “offices” parking will be required. Unmanned facilities – no.

F. Topics for Next Meeting

The proposed amendment language will be revised and brought to the next subcommittee meeting for review.

G. Public Comment

Several members of the public had comments regarding what is already noted above in item E. Discussion. Additional comments pertained to the preapplication process and the voluminous size of the Code.

H. Adjourn

The meeting adjourned at 12:45 p.m.

EXHIBIT B

RENEWABLE ENERGY (WIND)
DRAFT – SUMMARY OF AMENDMENTS
(Updated 03-24-11)

1
2 Part 1. ULDC, Art. 1.1.2, Definitions [Related to Electric Power Facilities and Renewable
3 Energy] (pages 34, 54, 72, 96 and 105 of 114), is hereby amended as follows:
4

Reason for amendments: []

5 CHAPTER I DEFINITIONS & ACRONYMS

6 Section 2 Definitions

7
8 E. Terms defined herein or referenced in this Article shall have the following meanings:
9

10
11 12. **Electric Power Facilities** - Any electric generating facility that uses any process or fuel and
12 includes any associated facility that directly supports the operation of the electrical power
13 facility. [Ord. 2006-004] [2009-040] [Ord. 2010-005]

14
15 M. Terms defined herein or referenced in this Article shall have the following meanings:
16

17 35. Meteorological Tower (MET) – A tower erected to measure atmospheric weather conditions.
18 [Renumber Accordingly]

19 R. Terms defined herein or referenced in this Article shall have the following meanings:
20

21 23. **Renewable Energy Facility, Wind** – A facility that uses one or more wind turbines, MET
22 Towers or other systems with a principal use of producing electrical or mechanical power
23 from the wind. [Ord. 2010-005]
24 [Renumber Accordingly]

25 S. Terms defined herein or referenced in this Article shall have the following meanings:
26

27 71. Specific Purpose Survey – A survey performed for a purpose other than the purposes
28 detailed in paragraphs 5J-17.050 (10)(a)-(i) or (k), F.A.C.
29 [Renumber Accordingly]

30 T. Terms defined herein or referenced in this Article shall have the following meanings:
31

32 74. **Turbine, Wind** – A rotary engine assembly with attached blades utilized in the process to
33 convert wind into energy. [Ord. 2010-005]
34

35
36 Part 2. ULDC, Art. 2.D.1.g.1, Amendments to BCC/ZC Approvals (pages 36-37 of 80), is hereby
37 amended as follows:
38

Reason for amendments: []

39 CHAPTER D ADMINISTRATIVE PROCESS

40 Section 1 Development Review Officer

41 G. Administrative Review
42 1. Amendments to BCC/ZC Approvals

43
44 1. Change in number or relocation of Wind Turbines or MET Towers located in a
45 Renewable Energy Facility (Wind) located on parcels with an AP FLU designation and
46 Zoning.
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EXHIBIT B

RENEWABLE ENERGY (WIND)
DRAFT – SUMMARY OF AMENDMENTS
(Updated 03-24-11)

1
2 Part 3. ULDC, Art. 4.B.1.A.106.2, Renewable Energy Facility (Wind) (page 79-81 of 166), is
3 hereby amended as follows:
4

Reason for amendments: []

5 CHAPTER B SUPPLEMENTARY USE STANDARDS

6 Section 1 Uses

7 A. Definitions and Supplementary Standards for Specific Uses

8 106-2. Renewable Energy Facility, Wind

9 A facility that uses one or more wind turbines, MET Towers or other systems with a principal
10 use of producing electric or mechanical power from the wind. [Ord. 2010-005]
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Figure: 4.B.1.A – Typical Renewable Wind Turbines Structure



[Ord. 2010-005] [2011-...]

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(Updated 03-24-11)

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Figure: 4.B.1.A-11-Typical Renewable Wind Energy Facility



[Ord. 2011-...]

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a. **Environmental Permitting Pre-Submittal Requirements**

~~Concurrent with~~ ~~Prior to submitting~~ an application for DRO certification for Public Hearing, or Final DRO approval if a Public Hearing is not required zoning approval, the applicant shall provide a letter of engagement, or other similar documentation, from all applicable environmental permitting agencies, including but not limited to: the Florida Fish and Wildlife Conservation Commission, or US Fish and Wildlife Service, Florida Department of Environmental Protection, or other applicable regulatory agency. Letters of engagement, or similar documentation, shall indicate ~~indicating~~ that the proposed facility ~~is under review for~~ ~~complies with their~~ applicable permitting or siting requirements for endangered, threatened or species of special concern, migratory birds or bats, natural ecosystem or wetlands, or other local wildlife bat and bird migration patterns. The documentation shall be submitted to the Zoning Division, with the zoning application, and reviewed by ERM. [Ord. 2010-005]

b. **Minimum Lot Size**

Lots shall comply with the minimum lot dimension requirements pursuant to Table 3.D.1.A, Property Development Regulations, or the applicable PDD requirements. A Renewable Energy Facility comprised of multiple parcels shall be considered in compliance with Minimum Lot Size if the overall site meets minimum required PDRs, provided all parcels are legal lots of record. [Ord. 2010-005]

c. **Minimum Setback Requirements**

Accessory electric poles, distribution and transmission lines shall be exempt from the minimum setback requirements indicated below. [Ord. 2010-005]

1) **All Lots**

Facilities shall comply with the minimum setback requirements of the applicable zoning district. [Ord. 2010-005]

2) **Additional Setback**

One additional foot of setback shall be required in addition to the minimum setback indicated above for each one foot of height, or fraction thereof, over 35 feet. [Ord. 2010-005]

3) **Lots Adjacent to Existing Residential Uses**

Facilities located on lots adjacent to existing residential uses, Zoning or FLU designation, shall be setback a minimum of 110 percent of the height of the structure. The height shall be measured from finished grade to the top of the turbine blade. The setback shall be measured from the residential property line. [Ord. 2010-005]

3) **Additional Setback**

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~~One additional foot of setback shall be required in addition to the minimum setback indicated above for each one foot of height, or fraction thereof, over 35 feet. [Ord. 2010-005]~~

4) AP District Exemptions

Wind Turbines, MET Towers or accessory structures on parcels with an AP FLU designation and Zoning, may be exempt from Minimum Setback Requirements for parcel boundaries located within a Renewable Energy Facility (Wind) approval, subject to the following:

- a) The owner or operator of the Renewable Energy Facility obtains a waiver from participating property owner(s) for the parcel where the structure is located, and any other affected parcels, in a form approved by the County Attorney, to waive setback requirements for property lines;
- b) The written waiver shall notify applicable property owner(s) of required setbacks, describe how a Wind Turbine, MET tower, or accessory structures are not in compliance, and state that consent is granted to waive the setback as required by this ordinance;
- c) No habitable structures are located within the setback area of the structure; and,
- d) Any such waiver shall be signed by the applicant, the participating land owner(s) and recorded.

d. Perimeter Buffers and Interior Tree Requirements

- 1) A Type I incompatibility buffer shall be required when the subject site is adjacent to or visible from any street or parcels with a conservation (when open to the public), commercial, public and civic, or residential use. In addition, a Type II incompatibility buffer shall be required around the perimeter of all ground mounted equipment or accessory buildings. Palms may be substituted for 50 percent of the required canopy trees. These buffers may be modified pursuant to Article 7.B.3, Alternative Landscape Plan. [Ord. 2010-005]
- 2) Wind Turbines or MET Towers located on parcels with an AP FLU designation and Zoning shall be exempt from the landscaping requirements above, as follows: structures are not within 1,320 feet of a public R-O-W; or, upon submittal of a line of sight analysis documenting that the land area between the structures and public R-O-W provides visual screening similar to the landscaping required above, due to the placement of structures or the cultivation of crops, trees or other similar screening, that will provide screening for the majority an annual period. Any screening documented in the line of sight analysis shall be continued in perpetuity or amended to reflect any changes. Exceptions may be permitted for any damages caused by natural disasters such as hurricanes or winter freezes.

~~3) These facilities shall be exempt from interior landscape requirements for the developable area pursuant to Table 7.C.3, Minimum Tier Requirements. [Ord. 2010-005]~~

e. Substation

Substations associated with the facility shall be subject to the requirements of Article 4.1.A.134, Utility Minor. [Ord. 2010-005]

f. Collocation with Existing Electric Power Facilities

Wind facilities located on a site with an existing electric power facility shall be approved pursuant to the approval process indicated in the appropriate use matrix, and shall not be subject to a legislative development order amendment, pursuant to Article 2.B.2.H, Development Order Amendment. [Ord. 2010-005]

g. Decommissioning or Abandonment

If no electricity is generated for 18 consecutive months, the facility or turbine owner or property owner shall have three months to remedy any safety issues/concerns or complete the decommissioning of the facility or turbine to the satisfaction of the Building Official.

- 1) The Zoning Director may grant extensions of time for repair or maintenance, for good cause, such as the need to back-order parts that are not currently available from the manufacturer or supplier, or the need to repair multiple turbines damaged or inoperative subsequent to a storm event or other unforeseeable natural disaster;
- 2) Decommissioning shall include removal of Wind Turbines, MET Towers and accessory structures, down to 36 inches below grade, where applicable; and,
- 3) Disturbed earth shall be graded, and reseeded, unless the landowner notices the Zoning Director in writing otherwise.

h. Exceptions to Survey Submittal Requirements

For facilities located on parcels with an AP FLU designation and AP Zoning, a Specific Purpose Survey may be submitted in lieu of an abstracted survey per the submittal requirements of the Technical Manual.

i. Wind Turbine/MET Tower Placement - Timing of Certificate of Completion

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DRAFT – SUMMARY OF AMENDMENTS
(Updated 03-24-11)

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Wind Turbines or MET towers located on parcels with an AP FLU designation and AP Zoning may be field adjusted to avoid conflicts with farming operations or as needed based on: meteorological data, environmental permit requirements, or analysis of County microwave communication systems. All field adjustments will be recorded by an as-built survey and amended on the FSP, prior to issuance of a final Certificate of Completion.

i. MET Tower Approval Process Exceptions

MET Towers shall be considered a permitted accessory structure to a Renewable Energy Facility (Wind).

1) DRO Approval

A temporary MET Tower located on a parcel with AP FLU Designation and Zoning, to be erected for a period of not more than two years, may be approved by the DRO.

2) Permitted by Right

A temporary MET Tower located on a parcel with AP FLU Designation and Zoning, to be erected for a period of not more than two years, where located a mile or more from a public R-O-W, or parcels with a conservation (when open to the public), commercial, public, civic, or residential use, shall be permitted by right.



[Ord. 2010-...]

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EXHIBIT B

**RENEWABLE ENERGY (WIND)
DRAFT – SUMMARY OF AMENDMENTS
(Updated 03-24-11)**

1
2 **Part 4. ULDC, Table. 6.A.1.B, Minimum Off-Street Parking and Loading Requirements [Related**
3 **to Electric Power Facilities and Renewable Energy] (page 73 of 155), is hereby**
4 **amended as follows:**
5

Table 6.A.1.B - Minimum Off-Street Parking and Loading Requirements – Cont'd

Use Type: Utilities and Excavation	Parking ¹	Loading ²
....		
Renewable Energy Facility, Wind	1 space per site; and 1 space per 200 sq. ft. of office space Exempt from parking requirements for Wind Turbines and MET Towers, unless otherwise required by the Zoning Director	N/A
....		
[Ord. 2005-002] [Ord. 2009-040] [Ord. 2010-005]		
Loading Key:		
Standard "A" - One space for the first 5,000 square feet of GFA, plus one for each additional 30,000 square feet of GFA.		
Standard "B" - One space for the first 10,000 square feet of GFA, plus one for each additional 15,000 square feet of GFA.		
Standard "C" - One space for the first 10,000 square feet of GFA, plus one for each additional 100,000 square feet of GFA.		
Standard "D" - One space for each 50 beds for all facilities containing 20 or more beds.		
Standard "E" - One space for the first 10,000 square feet of GFA, plus one for each additional 20,000 square feet of GFA. The space shall be a minimum of 12 feet in width and 18.5 feet in length for uses that require limited loading.		

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