

1 A-147 (Sub 2/22/11)

Presented by the Administration
Upon Recommendation of the Planning Commission

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5 CITY OF CUYAHOGA FALLS, OHIO

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7 ORDINANCE NO. // - 2011

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9 AN ORDINANCE AMENDING SECTION 1131.05 OF
10 CHAPTER 1131, AND SECTIONS 1133.03 AND
11 1133.04 OF CHAPTER 1133, TITLE 3, PART 11 OF
12 THE CODIFIED ORDINANCES OF THE CITY OF
13 CUYAHOGA FALLS (GENERAL DEVELOPMENT
14 CODE), ENACTING NEW CHAPTER 1137 OF TITLE
15 3, PART 11 OF THE CODIFIED ORDINANCES,
16 RELATING TO REGULATION OF WIND TURBINE
17 FACILITIES, AND DECLARING AN EMERGENCY.

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19 WHEREAS, on December 7, 2010 the Cuyahoga Falls Planning Commission
20 recommended approval of Wind Facilities regulatory text amendment to the
21 Cuyahoga Falls General Development Code as outlined in File P-18-10-RA,

22
23 NOW, THEREFORE, BE IT ORDAINED by the Council of the City of
24 Cuyahoga Falls, County of Summit, and State of Ohio, that:

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26 Section 1. Section 1131.05, Chapter 1131, Title 3, Part 11 of the
27 Codified Ordinances of the City of Cuyahoga Falls, as amended by Ord. 62-
28 2009, passed July 27, 2009, is hereby amended to read as follows (new text
29 underlined; deleted text in ~~strikethrough~~):

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31 **1131.05 Zoning District and Use Table**

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33 *Table 1131-1: Zoning District and Use Table* establishes the uses allowed within
34 the zoning districts. All uses are only allowed subject to the standards in
35 Chapter 1132, Specific Zoning District Standards, any applicable specific use
36 standards in Chapter 1133, any applicable supplemental provisions of Chapter
37 1134, and the design standards in Title 4, Design Standards. Uses in the table
38 are identified as:

- 39 = Allowed in Planning Area
40 = ALLOWED USE SUBJECT TO GENERAL ZONING DISTRICT STANDARDS
41 (CHAPTER 1132) AND DESIGN STANDARDS (TITLE 4)
42 = LIMITED USE ONLY ALLOWED SUBJECT TO ADDITIONAL SPECIFIC USE
43 STANDARDS (CHAPTER 1133)
44 = Conditional Use only allowed subject to Conditional Zoning
45 Certificate criteria (Chapter 1133)
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21 Sexually Oriented Business
22 Wind Facilities

Section 3. Subsection B of Section 1133.04, Chapter 1133, Title 3, Part 11 of the Codified Ordinances of the City of Cuyahoga Falls, as amended by Ord. 62-2009, passed July 27, 2009, is hereby amended to read as follows (new text underlined; deleted text in ~~strikethrough~~):

B. Height Limitations for appurtenances

1. Roof structures for the housing of elevators, stairways, tanks, ventilating fans, fire or parapet walls, skylights, towers, antennas, steeples, stage lofts and screens, or similar structures may be erected to exceed the building height in any Zoning District by no more than 10 feet provided that structures comply with the building code.
2. Non-commercial radio, television, and wireless aerials, masts and flagpoles for display of governmental flags may be erected to a maximum height of fifty feet in any residential district.
- ~~3. Monopole wind turbines are permitted in RR and NP-1 districts and on publically owned properties. Maximum height, to top of turbine blade, is 120 feet with setback equal to total height.~~

Section 4. New Chapter 1137, Title 3, Part 11 of the Codified Ordinances of the City of Cuyahoga Falls is hereby enacted to read in full as follows:

CHAPTER 1137 WIND FACILITIES

1137.01 PURPOSE.

The purpose of this section is to provide standards for the placement, design, construction, operation, monitoring, modification and removal of wind facilities that address public safety, minimize impacts on scenic, natural and historic resources and to provide adequate financial assurance for the eventual decommissioning of such facilities.

1137.02 APPLICABILITY.

This section applies to all utility-scale and on-site wind facilities proposed to be constructed. This section also pertains to physical modifications to existing wind facilities that materially alter the type, configuration, or size of such facilities or related equipment.

1137.03 DEFINITIONS.

- A. Rated Nameplate Capacity. The maximum rated output of electric power production equipment. The manufacturer typically specifies this output with a "nameplate" on the equipment.
- B. Planning Commission. Refers to the body of local government designated by the municipality to review site plans.

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- C Utility-Scale Wind Energy Facility. A commercial wind energy facility, where the primary use of the facility is electrical generation to be sold to the wholesale electricity markets.
- D Wind Energy Facility. All of the equipment, machinery and structures together utilized to convert wind to electricity. This includes, but is not limited to, transmission, storage, collection and supply equipment, substations, transformers, service and access roads, and one or more wind turbines.
- E Wind Monitoring or Meteorological Tower. A temporary tower equipped with devices to measure wind speed and direction, to determine how much electricity a wind energy facility can be expected to generate.
- F Wind Turbine. A device that converts kinetic wind energy into rotational energy to drive an electrical generator. A wind turbine typically consists of a tower, nacelle body, and a rotor with two or more blades.
- G. Height. The height of a wind turbine measured from natural grade to the tip of the rotor blade at its highest point, or blade-tip height.
- H. Shadow/Flicker. Shadow/flicker caused by wind turbines is defined as alternating changes in light intensity caused by the moving blade casting shadows on the ground and stationary objects, such as a window at a dwelling. No flicker shadow will be cast when the sun is obscured by clouds/fog or when the turbine is not rotating. Shadow flicker is not the sun seen through a rotating wind turbine rotor nor what an individual might view moving through the shadows of a wind turbine.

1137.04 GENERAL REQUIREMENTS.

The following requirements are common to all wind energy facilities to be sited in designated locations:

- A. Compliance with Laws, Ordinances and Regulations. The construction and operation of all such proposed wind energy facilities shall be consistent with all applicable local, state and federal requirements, including but not limited to all applicable safety, construction, environmental, electrical, communications and aviation requirements.
- B. Building Permit and Building Inspection. No wind energy system shall be erected, constructed, installed or modified as provided in this section without first obtaining a Summit County building permit.

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- C. Fees. The fee required for a conditional use permit must accompany conditional use permit application and the fees required for a building permit must accompany the application for a building permit.
- D. Conditional Use/Site Plan Review. No wind energy facility shall be erected, constructed, installed or modified as provided in this section without conditional use permit. A wind turbine shall be allowed by conditional use permit only in NP-1, R-R, E-1 and M-1 Zoning Districts. Wind Turbines shall also be permitted on publicly owned property by conditional use permit. Notwithstanding the requirements of Chapter 1132, the minimum acreage required per each Wind Turbine shall be eight (8) acres in NP-1 and R-R Districts, two (2) acres in E-1 and M-1 Districts and three (3) acres on publicly owned property.
- E. Plans and Maps. Plans and maps shall be prepared, stamped and signed by a professional engineer licensed to practice in Ohio.
- F. Site Plan will include:
1. Property lines and physical dimensions of the site parcel and adjacent parcels within 300 feet of the site parcel;
 2. Outline of all existing buildings, including purpose (e.g. residence, garage, etc.) on site parcel and all adjacent parcels within 500 feet of the site parcel, including distances from the wind facility to each building shown;
 3. Location of the proposed tower, foundations, guy anchors, access roads, and associated equipment;
 4. Location of all existing and proposed roads, both public and private, and including temporary roads or driveways, on the site parcel and adjacent parcels within 500 feet of the site parcel;
 5. Any existing overhead utility lines;
 6. Existing areas of tree cover, including average height of trees, on the site parcel and any adjacent parcels within a distance, measured from the wind turbine foundation, of 1.2 times the height of the wind turbine;
 7. Proposed changes to the landscape of the site, grading, vegetation clearing and planting, exterior lighting (other than FAA lights), screening vegetation or structures;
 8. Tower foundation blueprints or drawings signed by a Professional Engineer licensed to practice in the State of Ohio;
 9. Tower blueprints or drawings signed by a Professional Engineer licensed to practice in the State of Ohio;
 10. One or three line electrical diagram detailing wind turbine, associated components, and electrical interconnection

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methods, with all National Electrical Code compliant disconnects and overcurrent devices;

11. Documentation of the wind energy facility's manufacturer and model, rotor diameter, tower height, tower type (freestanding or guyed), and foundation type/dimensions;
12. Name, address, phone number and signature of the applicant, as well as all co-applicants or property owners, if any;
13. The name, contact information and signature of any agents representing the applicant; and
14. A maintenance plan for the wind energy facility;
15. Documentation of actual or prospective access and control of the project site;
16. An operation and maintenance plan;
17. A location map consisting of a copy of a portion of the most recent USGS Quadrangle Map, at a scale of 1:25,000, showing the proposed facility site, including turbine sites, and the area within at least two miles from the facility. Zoning district designation for the subject parcel should be included; submission of a copy of a zoning map with the parcel identified is suitable for this purpose;
18. Proof of liability insurance;
19. Certification of height approval from the FAA if required;
20. A listing existing ambient sound levels at the site and maximum projected sound levels from the wind energy facility; and
21. Description of financial surety that satisfies Section 3.12.3.
22. The Planning Staff may waive documentary requirements, as it deems appropriate.

G. Site Control. The applicant shall submit documentation of actual or prospective access and control of the project site sufficient to allow for installation and operation of the proposed wind energy facility. Control shall include the legal authority to prevent the use or construction of any structure for human habitation within the setback areas.

H. Operation & Maintenance Plan. The applicant shall submit a plan for maintenance of access roads and storm water controls, as well as general procedures for operational maintenance of the wind facility.

I. Utility Notification. No wind energy facility shall be installed until evidence has been given that the utility company that operates the electrical grid where the facility is to be located has been informed of the customer's intent to install an interconnected customer-owned generator. Off-grid systems shall be exempt from this requirement.

- 347 J. Temporary Meteorological Towers (Met Towers). A building permit
348 shall be required for stand-alone temporary met towers. No site
349 plan review shall be required for met towers.
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- 351 K. Visual Impact Analysis. The applicant shall furnish a visual
352 impact assessment, which shall include:
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- 354 1. A “ Zone of Visibility Map”
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 - 356 2. Pictorial representations of “before and after” views from
357 key viewpoints both inside and outside of the City as may
358 be appropriate, including but not limited to state highways
359 and other major roads; state and local parks; other public
360 lands; historic districts; preserves and historic sites
361 normally open to the public; and from any other location
362 where the site is visible to a large number of visitors,
363 travelers or residents.
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 - 365 3. An assessment of the visual impact of the tower base, guy
366 wires and accessory buildings from abutting and adjacent
367 properties and streets as relates to the need or
368 appropriateness of screening.
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 - 370 4. The applicant may be required, for the purpose of visibility,
371 prior to the public hearing on the application, hold a
372 “balloon test”. The applicant shall arrange to fly, or rise
373 upon a temporary mast, a minimum of a three- (3) foot in
374 diameter brightly colored balloon at the maximum height of
375 the proposed new wind turbine. The applicant shall inform
376 the City, in writing, of the date and time of the test, at least
377 10 days in advance. The balloon shall be flown between
378 7:00 am and 4:00 PM on the date chosen.
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380 **1137.05 DESIGN STANDARDS.**

- 381 A. Appearance. Appearance, Color and Finish shall comply with
382 Federal Aviation Administration (FAA) safety requirements.
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- 384 B. Lighting. Wind turbines shall be lighted only if required by the
385 FAA. Lighting of other parts of the wind energy facility, such as
386 appurtenant structures, shall be limited to that required for safety
387 and operational purposes, and shall be reasonably shielded from
388 abutting properties. Except as required by the FAA, lighting of the
389 wind energy facility shall be directed downward and shall
390 incorporate full cut-off fixtures to reduce light pollution.
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- 392 C. Signage. Signage on wind energy facilities shall comply with
393 Chapter 1146 Sign Design. The following signs shall be required:
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- 395 1. Those necessary to identify the owner, provide a 24-hour
396 emergency contact phone number, and warn of any danger.

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2. Educational signs providing information about the facility and the benefits of renewable energy.
3. Wind turbines shall not be used for displaying any advertising except for reasonable identification of the manufacturer or operator of the wind energy facility.

1137.06 UTILITY CONNECTIONS.

Reasonable efforts, as determined by the Planning Commission and Electric Department, shall be made to place all utility connections from the wind energy facility underground, depending on appropriate soil conditions, shape, and topography of the site and any requirements of the utility provider. Electrical transformers for utility interconnections may be above ground if required by the utility provider.

1137.07 APPURTENANT STRUCTURES.

All wind energy facilities appurtenant structures shall be subject to regulations described in Chapter 1132 Zoning District Standards (bulk and height of structures, lot area, setbacks, open space, parking and building coverage requirements). All such appurtenant structures, including but not limited to, equipment shelters, storage facilities, transformers, and substations, shall be architecturally compatible with each other and contained within the turbine tower whenever technically and economically feasible. Whenever reasonable, structures should be shaded from view by vegetation and/or located in an underground vault and joined or clustered to avoid adverse visual impacts. In addition, the specific wind turbine is subject to the following additional requirements:

- A. Height. The height of wind turbine shall not exceed 150 feet in height in E-1 and M-1 Districts and 200 feet in R-R and NP-1 Districts.
- B. Setbacks. A wind turbine may not be sited within: (a) a distance equal to the height of the wind turbine from buildings, critical infrastructure, or private or public ways that are not part of the wind energy facility; (b) Two times (2x) the height of the turbine from the nearest existing residential structure; or (c) one point five times (1.5x) the height of the turbine from the nearest property line.
 1. Setback Increase. The Planning Commission may increase any minimum setback based on site-specific ecological, topographic, soil, wildlife habitat or built environment conditions.
 2. Setback Waiver. The Planning Commission may reduce the minimum setback distance as appropriate based on site-specific considerations, or written consent of the affected abutter(s), if the project satisfies all other criteria for the

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granting of a building permit under the provisions of this section.

3. In any application for a conditional use permit submitted under this Chapter, compliance with minimum lot sizes established in Section 1137.04 and/or setback or separation requirements established in this Section may be obtained by submission of a joint application by owners of abutting parcels defining a tract of land that meets the applicable requirements, provided that easements or other irrevocable commitments are in place to guarantee that the defined tract will continue to comply with the lot size and separation requirements for such time as the wind turbine is in place.

1137.08 SAFETY AND ENVIRONMENTAL STANDARDS.

- A. Emergency Services. The applicant shall provide a copy of the project summary, electrical schematic, and site plan to the police and fire departments, and/or the local emergency services entity designated by the local government. Upon request the applicant shall cooperate with local emergency services in developing an emergency response plan. All means of disconnecting the wind energy facility shall be clearly marked. The applicant or facility owner shall identify a responsible person for public inquiries or complaints throughout the life of the project.
- B. Unauthorized Access. Wind energy facilities shall be designed to prevent unauthorized access. For instance, the towers of wind turbines shall be designed and installed so that step bolts or other climbing features are not readily accessible to the public and so that step bolts or other climbing features are not installed below the level of 8 feet above the ground. Electrical equipment shall be locked where possible.

1137.09 SHADOW/FLICKER.

Wind energy facilities shall be sited in a manner that minimizes shadowing or flicker impacts. The applicant has the burden of proving that this effect does not have significant adverse impact on neighboring or adjacent uses.

1137.10 NOISE.

A wind energy facility shall not exceed the following dB(A) noise standards as measured at the closest neighboring inhabited dwelling:

Type	Daytime Limits	Evening Limits (7-11pm)	Nighttime (11pm-7am)
NP-1, R-R	35dB(A)	30dB(A)	25dB(A)
E-1, M-1	40-45dB(A)	35-40dB(A)	30-35dB(A)
Publicly Owned	40dB(A)	35dB(A)	30dB(A)

cpn

490 The level, however, may be exceeded during short-term events such as utility
491 outages and/or severe windstorms.

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493 **1137.11 LAND CLEARING, SOIL EROSION AND HABITAT**
494 **IMPACTS.**

495 Clearing of natural vegetation shall be limited to that which is necessary
496 for the construction.

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498 **1137.12 MONITORING AND MAINTENANCE.**

499 A. Wind Energy Facility Conditions. The applicant shall maintain the
500 wind energy facility in good condition. Maintenance shall include,
501 but not be limited to, painting, structural repairs, and integrity of
502 security measures. Site access shall be maintained to a level
503 acceptable to the Cuyahoga Falls Fire Department. The project
504 owner shall be responsible for the cost of maintaining the wind
505 energy facility and any access road(s), unless accepted as a public
506 way.

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508 B. Modifications. All material modifications to a wind energy facility
509 made after issuance of the required building permit shall require
510 approval by the Planning Commission.

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512 **1137.13 ABANDONMENT OR DECOMMISSIONING.**

513 A. Removal Requirements. Any wind energy facility, which has
514 reached the end of its useful life or has been abandoned, shall be
515 removed. The owner/operator shall physically remove the facility
516 no more than 150 days after the date of discontinued operations.
517 The applicant shall notify the Planning Commission by certified
518 mail of the proposed date of discontinued operations and plans for
519 removal. Decommissioning shall consist of:

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521 1. Physical removal of all wind turbines, structures,
522 equipment, security barriers and transmission lines from
523 the site.

524 2. Disposal of all solid and hazardous waste in accordance
525 with local, state, and federal waste disposal regulations.

526 3. Stabilization or re-vegetation of the site as necessary to
527 minimize erosion. The Planning Commission may allow the
528 owner to leave landscaping or designated below-grade
529 foundations in order to minimize erosion and disruption to
530 vegetation.

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532 B. Abandonment. Absent notice of a proposed date of
533 decommissioning or written note of extenuating circumstances,
534 the wind energy facility shall be considered abandoned when the
535 facility fails to operate for more than one year without the written
536 consent of the Planning Commission. If the applicant fails to
537 remove the facility in accordance with the requirements of this
538 section within 150 days of abandonment or the proposed date of

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decommissioning, the City of Cuyahoga Falls may enter the property and physically remove the facility.

1137.14 Financial Surety.

Applicants for utility-scale wind energy facilities shall provide a form of surety, either through escrow account, bond or if such guarantee does not exist, the City could remove and such cost will be added to tax duplicate, to cover the cost of removal in the event the City of Cuyahoga Falls must remove the facility and remediate the landscape, in an amount and form determined to be reasonable by the Planning Commission, but in no event to exceed more than 125 percent of the cost of removal and compliance with the additional requirements set forth herein, as determined by the applicant. Such surety will not be required for municipally or state-owned facilities. The applicant shall submit a fully inclusive estimate of the costs associated with removal, prepared by a qualified engineer. The amount shall include a mechanism for calculating increased removal costs due to inflation.

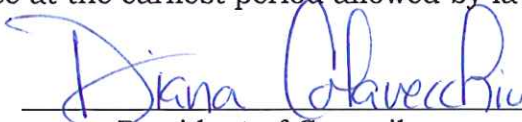
Section 5. Existing Section 1131.05 of Chapter 1131, existing section 1133.03 of Chapter 1133, and existing Subsection B of Section 1133.04 of Chapter 1133, Title 3, Part 11 of the Codified Ordinances of the City of Cuyahoga Falls, as enacted by Ord. 62-2009, are hereby repealed.

Section 6. Any other ordinances or resolutions or portions of ordinances and resolutions inconsistent herewith be and the same are hereby repealed, but any ordinances and resolutions not inconsistent herewith and which have not previously been repealed are hereby ratified and confirmed.

Section 7. It is found and determined that all formal actions of this Council concerning and relating to the adoption of this ordinance were adopted in an open meeting of this Council, and that all deliberations of this Council and of any of its committees that resulted in such formal action, were in meetings open to the public, in compliance with all legal requirements including, to the extent applicable, Chapter 107 of the Codified Ordinances.

Section 8. This ordinance is hereby declared to be an emergency measure necessary for the preservation of the public peace, health, safety, convenience and welfare of the City of Cuyahoga Falls and the inhabitants thereof, for the reason that it is immediately necessary to permit timely and appropriate development of this property, and provided it receives the affirmative vote of two thirds of the members elected or appointed to Council, it shall take effect and be in force immediately upon its passage and approval by the Mayor; otherwise it shall take effect and be in force at the earliest period allowed by law.

Passed: 2-28-11



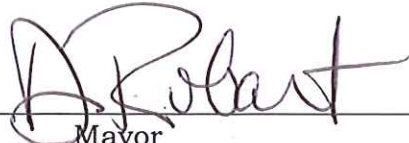
President of Council



Clerk of Council

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Approved: 3/3/11



Mayor

12/13/10
2101Ords/Dev Code Amendment - wind turbines