

Planning Commission Memo

To: Marion County Planning Commission; Emma Tajchman, County Zoning Administrator

From: David L. Yearout, AICP, CFM

Date: August 5, 2016

Re: Proposed Amendments to the Marion County Zoning Regulations – Commercial Wind Energy Systems

The language for the amendment for which the public hearing will be held, which is to consider the elimination of the “Overlay District” will require text changes to many sections of Article 27. This intent of this Memo is to identify the changes to make this Article be applicable to all of the unincorporated portion of Marion County and not be an “overlay” district. The words and phrases to be eliminated in this action are highlighted and crossed out, with the proposed language to read as follows:

ARTICLE 27 WIND ENERGY CONVERSION SYSTEMS (WECS) ~~OVERLAY~~ DISTRICT REGULATIONS

Sections:

27-101 Purpose and Intent

27-102 Applicability

27-103 ~~Overlay~~ District Established

27-104 Circumstances Requiring Application of the WECS ~~Overlay~~ District

27-105 Governing Resolution

27-106 Development Plan Submittals

27-107 Additional Required Topics to be Included in Submittals

27-108 General Construction Document Requirements

27-109 Power Purchase Agreement

27-101 Purpose and Intent: The purpose of the Wind Energy Conversion System ~~Overlay~~ District is to ensure a regulatory means of facilitating wind energy development of a commercial Wind Energy Conversion System (WECS) within ~~a designated portion of~~ Marion County by protecting the WECS developer's interest in unobstructed wind flow; and at the same time provide a regulatory response to the concerns of the general public regarding potential impacts associated with wind turbine development and operation. The ~~Overlay~~ WECS District regulations outlined herein establish ~~the area of Marion County eligible for development of a WECS;~~ and the required submittals to accompany an application for a Conditional Use Permit for a Wind Energy Conversion Systems (WECS) plan approval, including a Development Plan to be submitted with the application. These guidelines are intended to:

1. Assist the applicant and relevant authorities in identifying the issues to be addressed;
2. Provide details of the WECS for review by the Planning Commission, governing body and the public;
2. Provide information so all parties may gain an understanding of the WECS;

4. Provide a basis for public discussion and informed comment on the WECS;
5. Provide a background on which decision makers will consider the project; and,
6. Provide supplemental information regarding environmental, social, and economic issues related to the WECS project.

27-102 Applicability: All WECS development within the WECS **Overlay** District, as described herein, shall comply with the standards and procedures of this Section and those required for a Conditional Use Permit as stated in Article 19 and Development Plan as stated in Article 12. Placement of noncommercial Wind Energy Conversion Systems, as defined in these Regulations, shall be subject to the procedures and requirements contained in these Regulations.

27-103 Overlay District Established: The WECS **Overlay** District shall apply ~~to that portion~~ all of the unincorporated portion of Marion County, Kansas. ~~described beginning on the west right-of-way line of U.S. Highway 77 and its intersection with 140th Road; thence west to Pawnee Road; thence south to U.S. Highway 50 and 70th Road; thence two miles east to Remington Road; thence two miles south to 50th Road; thence east to U.S. 77 Highway; thence north to the point of beginning; except that the following sections shall be excluded:~~

1. ~~Section 1, Township 21 South, Range 4 East;~~
2. ~~Section 12, Township 21 South, Range 4 East;~~
3. ~~Section 18, Township 21 South, Range 5 East.~~

27-104 Circumstances Requiring Application of the WECS Overlay District: The following circumstances require application of **Overlay** District standards and procedures within the designated WECS **Overlay** District:

1. An application for a Conditional Use Permit for a WECS; or
2. An application for expansion of a WECS beyond the area previously approved.

27-105 Governing Resolution: Site specific land use and development restrictions shall be developed and adopted in conjunction with the approval of any Conditional Use Permit and accompanying Development Plan within the WECS **Overlay** District. The site-specific requirements shall be attached to the resolution authorizing the establishment of the Conditional Use Permit for the WECS project. The Resolution number officially designating the site or area with the WECS **Overlay** shall be noted on the county's Official Zoning Map. As such, any additional uses shall conform to the specific conditions established for the WECS **Overlay** District including, but not limited to the following:

1. Accessory building appearance.
2. Minimum and maximum square footage per use.
3. Setback requirements.

4. Safety conditions.
5. Off-street Parking (number, location).

27-106 Development Plan Submittals: In addition to complying with the applicable requirements as outlined in Article 12, the Development Plan shall be written so that sources of information are referenced and current. Close consultation with the Zoning Administrator during preparation of the Development Plan is highly recommended. These requirements specify the maps, information surveys and studies that must be submitted as part of the CUP application. Marion County may adjust the standards for future projects based on the results of monitoring avian collisions; the success or failure of remedial actions required in the decommissioning process; and with the changing technology in wind generated electricity.

The WECS Development Plan shall address the following key WECS issues:

• Land Use	• Cultural Heritage
• Noise	• Visual Impact
• Endangered Species	• Water Quality
• Soil Erosion	• Infrastructure
• Public Health & Safety	• Removal / Reclamation
• Cumulative Impact	• Bond Agreement
• Electric – Magnetic fields associated with transmission lines	• Reception Interference
• Aviation / FAA	• Native Vegetation / Weeds

27-107 Additional Required Topics to be Included in Submittals: In addition to the requirements of Article 12, applications for a WECS project shall address specific issues related with the project that include, but are not limited to the following:

1. Strict conformance to all performance standards as detailed in the Marion County Zoning Regulations.
2. No turbines shall be located closer than 500 feet from public roads or the total height of the turbine plus 50 feet, whichever is greater. No turbines shall be located closer than 500 feet from property lines of any property not included in the CUP, or the total height of the turbine plus 50 feet, whichever is greater. No turbine shall be located closer than 1,320 feet from a residential structure. Turbines shall be located no closer than the total height of the turbine plus 50 feet from a common agricultural / residential accessory structure.
3. Communication lines and power collection lines are to be installed underground in the area covered by the CUP with use of directional boring, horizontal drilling, micro-tunneling, vibrating plowing, narrow trench ditching and other techniques in the construction of facilities. Such processes are intended to result in the least amount of disruption and damage as possible to the surface soil and natural features. Said lines are to be located under or at the edge of turbine access roads. Aboveground transmission lines may be used only in public rights-of-way or easements dedicated for such purposes, or when conditions on-site are found to make installation of underground supporting lines impossible because of the presence of existing underground lines or pipelines that conflict with such type of construction.

4. Designation of the public roads to be used as transportation routes for construction and maintenance of the WECS.
5. Applicant shall construct the smallest number of turbine access roads it can. Access roads shall be low profile roads so farming equipment can cross them. Where an access road is to cross a stream or drainage way, it shall be designed and constructed so runoff from the upper portions of the watershed can readily flow to the lower portions of the watershed. Where an access road is to cross a stream or drainage way, the applicant must follow FEMA regulations pertaining to constructing a roadway structure in a floodplain zone.
6. The lowest point of the rotor blades shall be at least 100 feet above ground level at the base of each tower.
7. All lubricants and/or hazardous materials to be located on the premises in connection with the WECS facility shall be kept and transported in accordance with all state and federal regulations.
8. No lights shall be installed on the towers unless required by the Federal Aviation Administration (FAA). If lighting is required, then only the install of red lights shall be permitted. This restriction shall not apply to infrared heating devices used to protect the wind monitoring equipment.
9. Structures for wind turbines shall be self-supporting tubular towers painted a neutral color such as a white or pale gray. No lattice structure shall be used. No logos or advertisements are allowed on these structures. Each turbine shall be marked with a visible identification number located no higher than fifteen (15) feet above ground level.
10. At the end of the projects useful life, all WECS equipment shall be removed from the site and the foundation for the base of each tower shall be removed such that each location can be covered over with a minimum of 18 inches of topsoil and re-seeded with native grass. Any request greater than the minimum requirements shall be negotiated between the project manager and the landowner at the time of decommissioning. Access roads shall be removed to the landowner's satisfaction, and the ground shall be restored to a use compatible with surrounding use. The requirement to remove access roads shall not apply to roads in existence before the WECS application was filed. The landowner may choose to have access roads left intact.
11. The WECS and its associated facilities shall not be operated so as to cause microwave, television, radio, telecommunications or navigation interference contrary to Federal Communications Commission (FCC) regulations or other law. In the event the WECS and its associated facilities or its operations cause such interference, the applicant shall take timely measures necessary to correct the problem.
12. Reasonable measures shall be identified to mitigate specific adverse visual impacts such as reflections, shadow flicker, and blade glint affecting residences within or immediately adjacent to the project area such as planting trees, installing awnings, etc.
13. The applicant shall identify the potential fire risk associated with the project, including both prescribed burning and non-prescribed burning (natural or accidental). This shall include fire within the site, escape from the site, and the effects of fire originating from outside the site. Also address high angle rescue.

It is important to be aware that PRESCRIBED BURNING, or range burning is a common practice in this area. Mitigation plans are to show how the towers and equipment are protected from fire within the site and from fire originating from outside the site. PRESCRIBED BURNING is defined as the controlled application of fire to naturally occurring or naturalized vegetative fuels under specified environmental (weather) conditions in accordance with a written prescription that:

- A. Is designed to confine the fire to a predetermined area and to accomplish planned land management objectives; and,
- B. Conforms to the standards established by the Kansas State University Research and Extension Office.

The applicant shall acknowledge that an owner, lessee, or occupant of any agricultural land is not liable for property damage caused by or resulting from prescribed burning their own land on the land owned by, leased by, or occupied by the WECS if the prescribed burning is conducted the procedures stated above.

14. If the WECS project area contains riparian watershed areas, native prairie grasses, or other sensitive areas designated by the county, the applicant shall identify the manner in which the WECS project shall comply with the following requirements:

- A. The manner in which the riparian watershed areas, native prairie grass areas, or sensitive areas on any site shall be preserved, or shall be substituted for open space as approved by the County.
- B. No clearing or grading shall be permitted within 125' from the centerline of any drainage area, unless otherwise permitted by the County.
- C. Any development that is determined by the county to fall within the limits of the historical Chisholm Trail, Santa Fe Trail, or related historic natural or manmade feature shall comply with the following requirements:
 - 1. Any trees that are determined to endanger the preservation of trail ruts or diminish the visibility of a trail shall be removed under the direction of the County or the County's appointed designee.
 - 2. Interpretive signage as approved by the County shall be provided, if applicable.

15. An Overview of the existing environment issues shall be documented and filed to include information regarding:

- A. Wildlife Habitat;
- B. Bird Migration and the potential for bird strikes;
- C. Flora – vegetation species, threatened species (officially listed), critical habitat and habitat conditions for such species;

- D. Fauna – species, habitat assessment, threatened species (officially listed), migratory species, critical habitat and habitat conditions for such species;
 - E. Geoconservation – sites of geoconservation significance listed on the state/national database (All of Marion County is located in the Flint Hills);
 - F. Flood zones.
16. Soil Erosion, Sediment Control & Storm Water Runoff. Applicant shall develop a Soil Erosion, Sediment Control & Storm Water Runoff Plan. The Plan shall address what types of erosion control measures will be used during each phase of the project. Said plan shall identify plans for:
- A. Grading;
 - B. Construction and drainage of access roads and turbine pads;
 - C. Necessary soil information;
 - D. Design features to maintain down-stream water quality;
 - E. Re-vegetation to ensure slope stability;
 - F. Restoring the site after temporary project activities.

The Soil Erosion, Sediment Control & Storm Water Runoff Plan shall also include practices regarding:

- 1. Disposal or storage of excavated materials;
 - 2. Protecting exposed soil;
 - 3. Stabilizing restored material and removal of silt fences or barriers when the area is stabilized;
 - 4. Maintenance of erosion controls throughout the life of the project.
17. Other Lighting and Utility Standards. No light source greater than (1) one foot-candle shall be directed onto any public right-of-way, directed so as to cause glare onto any vehicle roadway, or cause light trespass onto any residentially used or zoned property. Security or safety lighting shall also be designed to avoid excess light trespass and glare. Lighting sources of all kinds shall be adequately shielded and positioned to avoid glare or direct visibility of the light source from adjoining property.
18. Noise. The WECS shall not exceed 55 decibels at all times measured at the property line, or other noise standards that may be promulgated by Marion County, whichever is most restrictive. Turbines shall be moved, or modified, or removed (and decommissioned) from service if necessary to comply with this condition.

27-108 Power Purchase Agreement (PPA): Evidence of negotiations for a Power Purchase Agreement (PPA) shall be submitted to the Zoning Administrator prior to turbine construction and the issuance of a construction permit. Developmental rights, and any other rights granted by the issuance of the Conditional Use Permit will continue under any extensions, reissuances, renewals or assignments of the original lease as long as the Zoning Administrator is provided with documentation that a lease for the project was continuously maintained in effect.

27-109 Requirements for Construction Permit: The following requirements shall be met in order to obtain a construction permit from the County:

1. No construction permit application shall be accepted by the County until a road agreement has been approved by the County and other public entities having jurisdiction. The WECS owner and the County and any other public governing body having jurisdiction over said roads shall enter into a road agreement for maintenance and repair of roads subject to the extra wear and tear due to transportation of equipment and turbine components. The WECS owner shall be held liable for any damage to county or township roads or rights-of-way resulting from tower construction, deconstruction, and/or maintenance activity. The WECS owner shall not be held responsible to maintain or repair a road to a condition better than what existed before said owner began using the public road for WECS purposes.
2. A construction permit shall be required for the construction of each turbine within the approved WECS, accompanied by the payment of all fees associated therewith as established by the County. Construction shall be allowed to begin only after approval by the County following review of all submittals for the permit outlined herein. The County shall have a maximum of 20 working days to review all submitted materials in order to either approve the construction permit or notify the applicant of any deficiencies associated therewith.
3. Construction plans showing the general description of major components and onsite facilities of the WECS including, but not limited to, wind turbine specifications; transmission line and accessory facilities such as control rooms, transformers, substations, maintenance facilities; underground infrastructure; and interior access roads plans shall be provided with the application for the construction permit. This shall include the designation of the number, location, capacity, and dimensions of the turbines for the WECS project and shall include the following:
 - A. A description and general schedule of major construction activities for the turbines, transmission lines, and common accessory structures related to WECS.
 - B. An outline of any proposed site preparation involving removal of vegetation, and restoration of the site due to construction.
 - C. The volume and designated route for traffic generated during the construction phase, including oversized and heavy equipment.
 - D. The WECS owner shall inform all employees, contractors and others involved in the construction of the WECS project of the terms and conditions of the approved Conditional Use Permit.

4. A certified structural engineer or certified structural engineering firm shall conduct all necessary inspections on each turbine. Inspections shall include, but not be limited to; foundation, structural assembly, mechanical, and electrical. For the purposes of the inspections regarding the WECS, the most current building and construction code published by the International Code Council and the most current electrical code published by the National Fire Protection Association. Documentation regarding each approved inspection shall be filed with the Zoning Administrator. All costs associated with the inspections shall be paid by the WECS owner.
5. Construction (On-site). Prior to the start of, and continuously throughout construction and site restoration, the WECS owner shall designate a field representative responsible for overseeing compliance with the conditions of the CUP. Said representative shall be accessible by telephone during normal business hours. The designated field representative shall provide an address, phone number and emergency phone number to the Zoning Administrator and 911 Emergency services officials of the County. Said information shall be available to residents, officials, and other interested persons by the County. The WECS owner shall notify the Zoning Department and 911 Emergency services should a change be made in the designated field representative. If environmental conditions not previously identified are discovered during construction, the applicant shall have the right to move or relocate a turbine site, only if the discovery would, by law, prevent such use.
6. Construction (Off-site). Any new infrastructure or off site accessory structures required for the project to progress shall be described, including the following:
 - A. Requirements for new transportation infrastructure and/or upgraded, realigned, or new road.
 - B. Changes to electrical sub-stations.
 - C. Changes to existing power transmission systems, including any upgrades to existing transmission lines.
 - D. Requirements for the realignment of other utilities affected by the project.
7. The WECS owner, or his construction company, shall disturb or clear the site only to the extent necessary to assure suitable access for construction, safe operation, and maintenance of the WECS. The contractor shall minimize the removal of trees and shall not remove groves of trees or hedgerows (shelter belts) without approval of the affected landowner. The contractor shall separate and protect topsoil from subsoil. On cultivated land, the contractor shall minimize compaction of the land during all phases of the WECS life. Compaction shall be confined to as small an area as practical. During site clearance and construction, silt fences and other temporary erosion controls shall be installed and left in place until new native vegetation covers the bare ground around the turbines.
8. Cleanup. The WECS owner or his contractor shall remove all waste and scrap that is the product of construction, operation, restoration, and maintenance from the site and properly dispose of it upon completion of each task. Bottles, paper, and other litter deposited by site personnel shall be removed on a daily basis.

9. Operation & Maintenance. The WECS owner shall be filed with the Zoning Administrator information concerning the following:
- A. Operation and maintenance requirements (including frequency of maintenance activities) for the turbines and transmission lines.
 - B. Width of transmission line easements required, and, any restrictions necessary on land use, development, and access within said easement.
10. If the WECS is to be transferred from one party to a different party, the first party shall inform the second party of the surety bond and all other requirements of the Conditional Use Permit. The second party, or new holder of Conditional Use Permit shall meet the surety bond requirements and all other requirements of the Conditional Use Permit and evidence of such compliance shall be provided to the Zoning Administrator prior to completion of the transfer. A transfer fee of \$100 per turbine shall be paid to the County if this provision is exercised.

Planning Commission Memo

To: Marion County Planning Commission; Emma Tajchman, County Zoning Administrator

From: David L. Yearout, AICP, CFM

Date: August 25, 2016

Re: Proposed Amendments to the Marion County Zoning Regulations – Commercial Wind Energy Systems

The purpose of this memo is to discuss what might be done with the two issues facing the Planning Commission regarding the Commercial Wind Energy Systems, namely adjustments to or elimination of the Overlay District, and potential changes to the submittal requirements for a proposed WECS.

Alternatives for the Overlay District –

The current language in the Marion County Zoning Regulations concerning the Overlay District reads as follows:

27-103 Overlay District Established: The WECS Overlay District shall apply to that portion of Marion County, Kansas, described beginning on the west right-of-way line of U.S. Highway 77 and its intersection with 140th Road; thence west to Pawnee Road; thence south to U.S. Highway 50 and 70th Road; thence two miles east to Remington Road; thence two miles south to 50th Road; thence east to U.S. 77 Highway; thence north to the point of beginning; except that the following sections shall be excluded:

1. Section 1, Township 21 South, Range 4 East;
2. Section 12, Township 21 South, Range 4 East;
3. Section 18, Township 21 South, Range 5 East.

In my opinion, there are three basic alternatives for this issue...leave the Overlay District as described; eliminate the Overlay District completely and allow the WECS to apply to the entire County; or change the description of where the Overlay District applies.

Given the previous discussions on how and why the Overlay District was established; especially concerning the Flint Hills and the other beliefs regarding the State's "preferred protection area"; it might be best to simply add the remainder of the County north of the existing described area to the Overlay District and let that portion of the southern part of the County remain outside the area where a WECS could be approved.

There will need to perhaps be some modification to this because the last approval of for the WECS project that Rex Savage presented, if my memory is correct, does encroach further south than the original restricted area. That will need to be discussed going forward.

Modification of Wind Energy Conversion Systems Submittal Requirements and Standards–

As I stated last month, the current language in Article 27 requires extensive submittals on issues beyond land use regulations. The County may have believed these “environmental studies” were necessary to help justify the location proposed for a Commercial Wind Energy System facility, but the County does not have the staff or expertise to evaluate these “studies” to determine whether the findings provided truly meet any kind of standard or requirement established locally.

In my opinion, the only real issue in each application is the “land use question” that is applicable to all requests for a Conditional Use Permit for any use. There are basic "land use related" facts that must be submitted with the application which detail the extent of the proposal so an evaluation can be made regarding the impacts on surrounding land uses and public infrastructure. The closest most of those come to any kind of an "environmental" issue would be concerns associated with drainage and flood impacts.

Also as I discussed last month, I believe everyone understands that all these “environmental studies” are necessary in order for any developer of a Commercial Wind Energy System to obtain financial support, as well as all other “state and federal” permitting that will be required for the project to be built. These can, and perhaps should, be required to be placed on file with the County if the project is built...but to require this level of investment before the local decision of whether the proposed project will obtain the “land use” approval, seems to be out of order and unnecessary.

Given all that, I would recommend changes be made to what has to be submitted with an application for a WECS.

PROPOSAL FROM TRADEWIND - DIAMOND VISTA

The people from Tradewind have submitted written suggestions concerning modifications to the language within the Marion County Zoning Regulations, dated July 27, 2016. Of those, I would suggest we include the following:

- Change the definition Wind Energy Conversion System as suggested. (3a)
- Change the definition of Wind Energy Conversion System Height. (3b)
- Clarify the methodology to measure the setbacks. (3c)
- Modify the Noise Standards. (3f)
- Clarify Language on Start of Construction. (3g)
- Clarify Non-Use. (4)

All the other "suggestions" listed in that memo should be discussed further. Some may need to be incorporated in some fashion, depending upon what the County develops as its policy.

OTHER MODIFCATIONS TO THE REGULATIONS

I believe significant changes to Article 27 need to be made concerning all the "items" listed that are expected to be addressed. Especially all those that deal with "environmental" issues. As noted above, I believe all those items will be addressed ONCE a project receives local zoning approval. A copy of that information should be maintained within the appropriate office of the County, but I don't believe it makes sense to require that information before the zoning decision is made.

Rather than list the specific modifications in this Memo, I want to have the Planning Commission discuss this issue and provide direction on what it would like to see. I provided examples of what some other Kansas counties have done last month and we can start from there.