

Wind Energy Conversion Systems (WECS) – Revised Regulations (Draft 2)

Community Meeting

12-306-44 WIND ENERGY CONVERSION SYSTEMS (REVISED)



Purpose

Visit <u>www.lawrenceks.org/windregs</u> to download a copy of the regulations

Provide information to the public:

- Why the regulations are being revised
- What's been done so far
- What is to come



Those who wish to provide written comments may email <u>windregs@lawrenceks.org</u> or attend the Planning Commission meeting on October 23, 2023 at Lawrence City Hall





If someone applied for a Wind Farm right now, what would happen?

There are existing WECS Regulations which were adopted in 2016. This land-use is currently permitted in Douglas County per Section 12-306-44 of the Douglas County Zoning Regulations.

If someone wanted to develop a C-WECS Project, they would need to apply for a conditional use permit. With that application a notice would be sent to property owners within 1-mile of the project boundary. Planning staff would then review the application and give a recommendation to the Planning Commission. The Planning Commission would hold a public hearing and make a recommendation to Approve, Approve with Conditions, or Deny the application and that recommendation would be forwarded to the Board of County Commissioners. The County Commission then decides if the project can be approved or not.

The Board of County Commissioner's action on a conditional use permit is a <u>purely discretionary</u> act.



WECS definition

WECS	C- WECS Project "Wind Farm"					
A Wind Energy Conversion System is a system of wind- driven generators that convert wind energy into electrical power.	A grouping of C-WECS and accessory facilities such as roads, substations, and operation or maintenance buildings, collection lines, etc.					
Commercial scale or personal scale						
or P-WECS	<pre>Participating</pre>					

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Approach

Planning Commission voted on March 20, 2023, to form the Ad Hoc Committee to focus on revising the WECS Regulations again based on feedback from industry experts and the community. Since March the Ad Hoc Committee has met on a weekly basis

Ad Hoc Committee: Gary Rexroad, Charlie Thomas, Mike Kelso, Prasanth Duvvur.

Input was sought and received from Stakeholders in the Community, Governing bodies and Industry and Specialized review has also been provided by the City Planning Staff, County Zoning and Codes Staff, County Public Works Director, Office of Sustainability, Building Codes, and County Legal Staff.



Public Comment vs Education and Questions

- Draft #2 is now in the hands of the full planning Commission.
- The "Wind Regs" are a DRAFT, thus it is not final and is subject to change.
- Important to assure all Commissioners receive all feedback.
- The very best way to assure your comments / feedback is heard is by sending email to windregs@lawrenceks.org
- We will take <u>questions</u> on the regulations and process at the end of the meeting.
 - Please reserve comments and suggestions for written comment or in-person comment at the Planning Commission meeting, Oct 23rd





2016

The Lawrence Douglas County Planning Commission and County Commission approved the existing wind regulations through Resolution No. 17-12. The existing regulations are in Section 12-306-44 of the Douglas County Zoning and Land Use Regulations.

- 2022 Staff was directed by the Planning Commission to review the previously adopted WECS Regulations and propose updates to the regulations to provide consistency with the recommended regulations relating to Commercial/Utility Scale Solar Energy Conversion Systems (CSECS). Draft #1 was published December 2022.
- 2023 The Planning Commission voted to form an Ad Hoc Committee of 4-members to focus on revising the WECS Regulations. Ad Hoc members, Gary Rexroad, Charlie Thomas, Mike Kelso, Prasanth Duvvur worked from March through September, meeting weekly to review, refine, and revise proposed code language.
- **NOW** The Ad Hoc committee published "Draft #2" on September 26, 2023. Wea re holding a series of community meetings to educate the public on the revisions to Draft #2 of the WECS Regulations and the public process to come.
- **NEXT** A Meeting was scheduled for October 23, 2023 for the Planning Commission to hold a public hearing and review Draft #2 prior to sending to BoCC.



Regulations vs. Policy

Regulations	Policy
The Ad Hoc Committee and the Planning Commission will write and recommend regulations to the BoCC	The BoCC is the final voice on all matters of policy.
Examples of regulation scope:	Examples of policy scope?
 How will our roads be maintained? How should we limit impacts from sound, flicker, ice throw etc? How do we protect wildlife? What should setbacks be and why? Have we provided for disasters and emergencies? Have we incorporated all stakeholders feedback in the regulations? Many other categories 	 Should there be a ban or moratorium? Is our County too densely populated. Is there a health risk from this technology. What are the power demands for DGCO? Determining if CWECS are consistent with Plan 2040. BoCC is the final approver of these regulations. BoCC is the only authority able to grant a CUP.

The regulations are written with all of Douglas County in mind. Stakeholders' fall along several lines of thought or perspective.

- I live in a city and might not have a turbine close to me. I may be for or against a CWECS project
- I am either for or against renewable energy.
- I am either for or against CWECS specifically

Stakeholders in these demographics are important and have voice but may not live close to where land use impacts will be realized. Important to policy but maybe not personally impacted by land use.

- County Standards and Staff who must incorporate these regulations into our code
- A future developer who might apply to build here
- I have leased my land for a future turbine placement. Participating Landowner (P)
- I live near a potential project and have not leased my land for a turbine placement. Non-Participating (NP)
- I live in unincorporated DGCO and may someday be near a CWECS development

Stakeholders in these demographics typically have a direct physical proximity to a potential project and its impacts

ind. Stakeholder

Draft 2 differentiates between Participating (P) and Nonparticipating (NP) landowners. More protection for NP balanced by less restrictions for P



Meetings and input

- Greenbush Public meeting
- Douglas County Rural Preservation Association on various on three occasions
- Acoustic Engineer and Environmental consultant
- Kansas Department Of Wildlife and Parks
- Numerous County planning departments
- Numerous reviews of other Counties Code
- County infrastructure
- Black and Veatch
- Engineering and operations
- Participating Landowners in Marion Township and other Counties
- Visits to the Prairie Queen and Dimond Vista
- Wind Farms
- Zoning and Codes
- Legal Reviews
- Planning Staff
- County Staff
- Industry

Along with County and Planning Dept Staff, we reviewed Draft 1 line by line, We gathered feedback and information needed to assure an educated and defensible position for every recommendation. Facts over fear, we worked for consensus but not compromise.

Feedback to the code was received from many sources. Dozens of meetings, hundreds of emails and many lines of comments placed in the draft as we reviewed.



ion of units within the project perimet



Existing Code

Douglas County Zoning and Land Use Regulations

Section 12-304-3: Permitted Use Table

AG- 1: Agricultural District GB: General Business District LI: Light Industrial District GI: General Industrial District BSC: Big Springs Community District

 A = Accessory use P = Permitted use C = Requires Conditional Use Permit PG-Parking Group *=Specific Use Standards 	AG-1	AG-2	с	rs	B	RT	GB	٦	G	٨	BSC	USE STDS
General Service and Repair Establishment	-	-	-	-	-	-	Ρ	Р	Р	С	Р	PG 14
Mining, Excavation and/or Extraction of Natural Resources	C*	C*	-	-	C*	C*	C*	C*	C*	-	C*	306-27 PG 4
Salvage Yards	-	-	-	-	-	-		-	C*	-	•	306-37 PG 14
Wholesale Storage & Distribution/ Warehousing	-	-	-	-	-	-	P*	Р	Р	-	Ρ	306-43 PG 4
Research Facility, Ag Related	P/C	P/C	-	-	-	-	Ρ	Р	Р	-	Ρ	PG 4
Medical												
Medical or Dental Clinics or Offices	-	-	-	-	-	-	Р	-	•	С	Р	PG 7
Extended Care Facility	-	-	-	-	-	-	C*	-	-	C*	C*	306-29 PG 16
Utilities												
Major Utilities	С	С	С	-	-	-	•	Р	Р	С	-	PG 4
Minor Utilities	Р	Р	P	Р	P	Р	Р	Р	Р	Ρ	Р	PG 14
Wind Turbine/Residential or Accessory	A*	A*	A*	A*	A*	A*	A*	A*	A*	A*	A*	
Wind Energy Conversion System/ Commercial	C*	-	-	-	-	-	C*	C*	C*	-	C*	306-44 PG 14
Commercial/Utility Scale Solar Energy Conversion System	С	С	С	-	-	-	-	с	С	С	-	306-49
Limited Scale Solar Energy Conversion System	С	С	С	С	С	С	С	С	С	С	С	306-49

WECS



Existing Code

What is a Conditional Use Permit or CUP?

A conditional use permit provides a public hearing process for the establishment of land uses which may be desired in the community but which, by the nature or scale of the use, have the potential to negatively impact surrounding land uses, the character of the area, the road network, or other features in the area.

The Board of County Commissioner's action on a conditional use permit is a purely discretionary act that will be decided based upon the facts and circumstances discovered in the review of each application. There is no implied "right" for any person or landowner to obtain a conditional use permit for any use on any property.



Existing (2016) Regulations

These existing regulations at a glance include:

- Five definitions including all regulations on "Small" Personal WECS
 - Small Wind Energy Conversion System (SWECS)
 - Large Wind Energy Conversion System (CWECS)
 - Prescribed Burning
 - Road agreement for maintenance
 - Extraordinary Events
- Identify a CUP as being the process to establish the WECS Project
 - Notice sent to those 1,000 ft from project boundary
 - Application contents includes concept plan, map of residences within 1000', inventory of existing wildlife/wetland/flora/fauna in project area, transportation plan, safety plan, extraordinary event response plan, noise impact (not described), maintenance plan.
- Design Standards include:
 - Setback of 110% of the height of tower plus length of blade, and 1500' from dwellings.
 - No maximum height standards minimum clearance 100', lighting shall minimize adverse impacts, neutral colored monopole with no logos, access roads designed in compliance with County Public Works Director.
- A decommissioning plan to take place within 18 months of abandonment
 - Abandoned once non-producing electricity for 1 year, foundation excavated to 4', identified landowner and operator as jointly responsible for removal. Does not define \$\$ amount to be secured BoCC to specify.



Draft #2 Regulations

These existing regulations include, but are not limited to:

- 21 definitions
- Personal Wind Energy Conversion System (P-WECS)
 - Treated as an accessory structure, requires building permit approval + site planning if in industrial or business zoning districts.
 - Maximum permitted height: 75 feet
 - Setback 150% height to property lines.
 - Regulate maximum power rating on site, does allow "net metering" i.e. providing leftover power back to the grid.
- Commercial Wind Energy Conversion System (C-WECS)
 - Identify a CUP as being the process to establish the WECS Project.
 - A thorough, comprehensive application which would include assessments of the proposed impacts to the environment, noise conditions, and viewshed amongst many other required documentation.
 - Notice sent to those 2 miles from project boundary.
 - Turbines setback 1,500 feet from the Participating Landowner's dwelling and from the property line of Non-Participating property owners. Turbines shall be set back from public roads and rights-of-way 110% of the total height of the turbine.
 - Permitted height regulated, 600'
 - Ongoing performance standards including noise, shadow flicker, lighting, and environmental impact, and infrastructure impact including mitigation techniques.
- A decommissioning plan to take place within 90 days of abandonment
 - Abandonment defined differently for individual turbines versus entire project, foundation excavated to 4', identified landowner and operator as jointly responsible for removal. Amount of security equal to 100% cost of reclamation + includes additional cost based on inflation.



Attributes and Rationale

Attribute	2016 Code	Draft #2	Rationale						
Tower Height & Clearance	No limit on height 100' clearance	600' to blade tip 75' clearance	Changed to English measurements instead of metric and moved to overall height for clarity.						
Sound	No limit	 50 DBA at NP property line 45 DBA at OS No Pure Tone No limits for P 	 45 DBA is considered near or below ambient for most settings. Pure tone is a classification of sound that is more annoying than common broad spectrum sounds. It is acknowledged that sounds can travel great distances depending or conditions (The sneeze) 						
Flicker	Best effort to reduce	 15 hours / yr max 15 minutes / day max at NP OS. No limit at P structure 	30/30 is the most commonly found regulation and is consistent with industry best practice. We know that through siting, technology and operating practice, shadow flicker can be mitigated.						
Setbacks	1500' to dwelling 110% height to property line	 1500' from NP property lines 1500' from P OS Setback to roads 	Using property line as the setback point protects NP landowner's future use. 1500' from property line supports sound and flicker attenuation and is consistent with all other DGCO regulations and request from Fire and Safety / Environmental groups.						
	Pl • •	Increasing setbacks to gre	ve specific consideration to: eater than 1500' and churches to setback table						



Next Steps

Community Meetings in the 4-quadrants of Douglas County

Monday, October 9, 2023 7:30PM – 9:30PM
@ Baldwin City Public Library
Sunday, October 15, 2023 1:00PM – 3:00PM
@ Douglas County Fairgrounds – Flory Hall
Tuesday, October 17, 2023 6:30PM – 8:30PM
@ Greenbush Resource Center;
Thursday, October 19, 2023 6:30PM – 8:30PM
@ Lecompton Historic High School



Public Hearing scheduled for October 23, 2023 6:30PM @ City Commission Chambers at Lawrence City Hall



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Planning Process - Regulations

Planning Staff



- Revise existing WECS regulations as directed by Planning Commission
- Create opportunities for public comment on the draft regulations
- Collect public comment and provide it to Planning Commission
- Answer questions regarding the Planning Process



- Ad Hoc Committee formed
 - Review code, meet with experts and community members
- Host public hearings
 - Receive public comment (in-person and written)
- Ask staff for further research when needed
- Make recommendation to the Board of County Commissioners

Board of County Commission

- Host public hearing(s)
 - Receive public comment (in-person and written)
- Approve, Approve with changes, or Deny the regulations as recommended from Planning Commission