



May 13, 2024
Agenda Item #2

STAFF REPORT SHAWNEE COUNTY PLANNING DEPARTMENT

PROPOSAL:

An amendment to the Shawnee County Zoning Regulations **prohibiting** Limited (Community Scale) and Commercial (Utility Scale) Wind Energy Conversion System(s) and Project(s) in all Zoning District Classifications within the unincorporated portion of Shawnee County.

DEFINITIONS:

Wind Energy Conversion System – a wind driven machine that converts kinetic energy from wind (wind movement) into another form of energy. Also referred to as a tower or turbine. May also include the supporting structures and facilities associated with or related to a wind energy conversion system, including, but not limited to, ancillary operational meteorological towers, collector or feeder lines, transformers, substations, roads, administrative and operations buildings, data acquisition facilities and / or storage facilities.

Personal (Small Scale or Accessory Scale) Wind Energy Conversion Project – a wind energy conversion system, and/or the combination of mechanical and structural elements thereof, where the primary purpose of the electricity generated, created, or collected is for the consumption by the individual residence or business located on the same site as the wind energy conversion system, and not for transfer or sale to a third party. Net metering may be permitted.

Limited (Community Scale) Wind Energy Conversion Project – a group of people or entities that have collectively joined together to create, collect, and/or use one or more wind energy conversion systems, and/or the combination of mechanical and structural elements thereof, where the primary purpose of the electricity generated, created, or collected is for consumption of members of the group, and not for transfer or sale to a third party. These projects may include appurtenant facilities such as private roads, substations, maintenance buildings, battery storage facilities, the rotor or turbine apparatus, tower and support structures; the system may be connected to transmission, collector or feeder lines. Groups may include, but are not limited to, developers, schools, hospitals, farms, or individuals who become investors or shareholders to form independent power producer groups; it may also include a rural electric cooperative or municipal utility developing its own project to diversify electricity supplies. Net metering may be permitted.

Commercial (Utility Scale) Wind Energy Conversion Project – a facility of one or more wind energy conversion systems, and/or the combination of mechanical and structural elements thereof, where the primary purpose of the electricity generated, created, or collected is for use in a larger electrical network exclusive of individual use; for sale, resale, or off-site use. These projects may include appurtenant facilities such as private roads, substations, maintenance buildings, battery storage facilities, the rotor or turbine apparatus, tower and support structures; the system is connected to transmission, collector or feeder lines.

Net Metering – a process where surplus power is transferred onto the grid, allowing customers to offset the cost of power drawn from the utility.

PRESENT USE:

Presently, if the County received an application for a wind energy conversion system, it would be processed the same as any other private or public utility structure which facilitates a transmission,

distribution, and/or collection system. Said private or public utility structure would generally require the applicant to first obtain a conditional use permit.

According to Shawnee County Zoning Regulations, there are *height restrictions* in each zone. For instance, in the RA-1 (Rural Agriculture) and RR-1 (Residential Reserve) district, the building height limitation is 42 feet. In the I-1 and I-2 (Light and Heavy Industrial) district, there is no height limitation, except when it is subject to the airport hazard zoning regulations. There are exceptions to height limitations. For instance, in all districts, poles, towers, amateur radio, flagpoles, etc, *for noncommercial purposes* shall not exceed 62 feet in height. In no circumstance can the height conflict with the provisions of the airport hazard zones of Forbes Field and Phillip Billard Airport as set by the Federal Aviation Administration.

Regulations specific to a wind energy conversion system or project do not exist in Shawnee County. As such, Shawnee County does not have specific guidelines for requirements such as setback from property lines; setback from a residence; limitations on the type, size, height, rotor size, lighting; density of towers; noise decibels; allowable zones; location in comparison to homes, businesses, floodplain, other features; designated truck routes; decommissioning of towers and tower sites; PILOT (payment in lieu of taxes). Without specific regulations, these considerations would be handled on a case-by-case basis for each application.

The Shawnee County Comprehensive Plan does not specifically address Wind Energy Conversion Systems, other than identifying that in a public survey conducted as a part of the Comprehensive Plan research, renewable energy was not a priority for the community. Further discussion regarding the Comprehensive Plan can be found below.

BACKGROUND:

In early 2022, the topic of Wind Energy Conversion Systems was presented to the Board of County Commissioners for input and guidance on the County's desire to consider regulations. At that time, the BCC indicated Planning staff should move forward in drafting or considering wind regulation options for consideration by the Planning Commission.

In 2023, Planning Department staff had been introducing various topics related to wind farms and solar farms at monthly Planning Commission meetings. Speakers included Senator Mike Thompson, Jeremy Goodwin (Chief Meteorologist, WIBW), Joshua Svaty (Kansas Power Alliance), Chris Carey (ppB enviro-solutions), Kyle Edelman (Shawnee County Assistant County Counselor). In September-October 2023, Planning Department staff, in conjunction with the Planning Commission, released a Community Survey to gauge interest in wind and solar in Shawnee County; 894 people responded to the survey.

A motion was made, and approved 6-0, at the December 11, 2023, Planning Commission meeting, to move forward with a consideration to ban (prohibit) commercial wind farms in Shawnee County. The intent of the motion and vote was to give the Planning Department staff direction on how to move forward in its research and writing of regulations for wind farms. As such, the focus of this staff report and presentation is why wind farms are not suitable for Shawnee County. Factors in favor of and against wind farms have been taken into consideration.

No applications have been received to date from any wind farm company for a wind energy conversion system or project. Shortly after the December 2023 Planning Commission meeting, contact was made by one company with leases in southern Shawnee County regarding a possible MET (meteorological evaluation) Tower. A MET tower is used to gather information on wind conditions for future wind tower sites. The company indicated they have no intent on placing a wind farm in Shawnee County, but instead have interest in Osage County. No applications have been received for that MET tower.

METHOD OF CONSIDERATION AND APPROVAL:

Pursuant to KSA 19-2960, after the adoption of a zoning resolution approving zoning regulations, said resolution (regulations, boundaries, or classifications) may from time to time be **supplemented, changed or generally revised by amendment**. A proposal for an amendment may be initiated by the Board of County Commissioners, the Planning Commission, any zoning board, or upon application of the owner of property affected.

All such proposed amendments shall first be submitted to the Planning Commission for recommendation regarding the amendments. All notice, hearing and voting procedures for consideration of proposed amendments shall be the same as that required for amendments, extensions or additions to the Comprehensive Plan as provided by KSA 19-2958.

Notice must be published in the official county newspaper at least 20 days prior to the date fixed for hearing. (*Note*, only notice of amendments that concern a specific property/boundary line, which can be designated by a legal description and general street location, must be sent to those owners of record located within 1,000 feet of the affected property).

Voting requirements: a quorum of the Planning Commission is more than ½ of all its members. For action on amendments, a vote for or against by a *majority of the members of the commission present* constitutes a recommendation of approval or disapproval; a vote by less than a majority of the members present constitutes a failure to recommend.

The Board of County Commissioners shall consider the recommendation of the Planning Commission, whether it is for approval or disapproval, and may adopt such recommendation in whole or in part, or take no further action thereon. In the event the Planning Commission submits a “failure to recommend,” the Board of County Commissioners may take action as it deems appropriate. If the Board of County Commissioners disapproves a recommendation of the Planning Commission, it shall return such recommendation to the Planning Commission for further consideration along with a written statement of reasons for disapproving the same or with suggested modifications. The Planning Commission shall reconsider such returned recommendation, and within 30 days (or lessor or greater as directed by the Board of County Commissioners) submit a new recommendation or resubmit its original recommendation. No additional public hearing is required unless directed by the Board of County Commissioners. If the Planning Commission fails to deliver its recommendation within such time period, the Board of County Commissioners shall consider such course of inaction as a resubmission of the original recommendation; shall consider such matter, and by resolution, adopt in whole or in part, or revise or amend and adopt, or take no further action thereon, as it deems appropriate.

In Shawnee County, Zoning Regulations have been in place at least since 1956. The most recent Zoning Regulations were approved, as a whole, by Home Rule Resolution 2006-8 in August 2006, with minor amendments made to the text thereafter.

Proper legal notice of this public hearing was published in the Topeka Metro News on **Monday April 22, 2024**. Because this is a Zoning Regulation (textual) amendment only, no specific owners of record must be notified.

STAFF CONSIDERATIONS AND CONCERNS:

Roads / Bridges / Infrastructure – During the construction phase of a wind turbine / wind farm, large-scale trucks would haul in equipment and piece of the wind turbine. Regular heavy load truck traffic would lead to damage to roads, bridges, and infrastructure. Said damage leads to an increase in cost to the county and townships to maintain the infrastructure. To mitigate the impact, pre-development studies would need to occur of truck routes to determine the condition of infrastructure; then during development and after, review would need to occur to determine the impact an increase of traffic had on infrastructure. Staff has concerns regarding who pays for the cost of such damage and necessary improvements.

Neighboring Properties – Non-participating landowners (individuals or groups of individuals, trusts, or other entities) owning real property who (or which) have not signed a lease agreement for a wind project which surrounds, butts up against, or in a close region to a participating landowner's property. These neighboring properties could be affected by property value, traffic, noise, and interrupted site lines, among other considerations. While a participating landowner may receive compensation for a wind farm land lease, a neighboring property owner likely does not, and could suffer consequences.

Radar / Weather Alerts – A presentation was made by a local chief weather meteorologist regarding the impact of wind farms on radar and the ability for safe weather alerts. While no definitive evidence exists at this time, the concern of meteorologists is how a wind turbine or a wind farm might impact their ability to see severe weather and tornados in the path of a storm. The wind turbines create circulation on radar that can be confused with wind circulation caused by storms. Mitigating actions may be needed to eliminate the interference, including additional weather cameras and radar on top of turbines; ceasing circulation during severe weather events.

Floodplain – Shawnee County has a large floodplain presence that affects parcels throughout the entire county. The intent of the Shawnee County Floodplain Management Regulations are to protect the health, safety, and general welfare of the public. Special flood hazard areas exist in Shawnee County. Changes to land in these areas can effect floodwater direction, height and velocity. By restricting or prohibiting development within flood zones, we help protect and maintain the goal of the Floodplain Regulations - public health, safety and general welfare of the public from loss of property, life, personal goods.

Public Input –

Survey results: A community survey was available for input during September-October 2023 to gauge community interest in wind and solar farms in Shawnee County. A total of 894 responses were received from that survey. Of those responses, 30.67% responded they “strongly agree” wind farms should be allowed in Shawnee County, and another 13.37% responded they “agree.” In the alternative, 45.84% “strongly disagree” and 6.4% “disagree” that wind farms should be allowed.

Emails and phone calls from constituents: The Planning Department has occasionally received phone calls and emails from constituents who are opposed to wind farms. One or two emails or calls have been received in support of wind farms (in particular, one union who might receive the benefit of work on such projects). After publishing legal notice of the public hearing of the proposed ban, media releases, and various announcements at Board of County Commission meetings, numerous emails in opposition to and in favor of have been received.

Planning staff participated in a meeting with the Women League of Voters to answer questions and give guidance on the current proposal. The Women League of Voters has indicated it will be submitting testimony in support of wind farms.

Attendees at meetings: At two (2) Planning Commission meetings attendees appeared wearing red to signal opposition to wind farms. At one of those two meetings, public comments were made in opposition to wind farms. At an earlier meeting public comment was made in support of wind.

Petitions in opposition to wind and solar farms: over 1,100 petitions in opposition to wind farms were signed by residents and landowners in Shawnee County, and delivered to the Planning Department office on April 30, 2024. The group leading efforts to obtain signatures announced at a recent Board of County Commissioners meeting that they continue to circulate the petition and gather additional signatures.

Comprehensive Plan - In preparing for the Shawnee County Comprehensive Plan, and surveying community members, there was a lack of support for wind energy and renewable energy in general. Meaning, renewable energy was not a priority for the community in looking at the future of development and goals of unincorporated Shawnee County.

Shawnee County has natural environmental constraints: floodplain, steep slopes, prime farmland, rocky terrain. Added to this is Shawnee County's close proximity to the Flint Hills, native prairie lands, and scenic

routes. The goal of the Comprehensive Plan was to discourage development on the fragile lands; encourage protection of land with positive environmental features; and to coordinate environmental effects. Or, to take these environmental constraints and natural scenery into consideration prior to attempting development. New development can cause issues with drainage and water retention, which then can have an impact on surrounding parcels. Instead, the focus should be on parks and recreation, scenic overlooks, wildlife, and protecting agricultural land.

As documented in Figure 4.5 of the Comprehensive Plan, as of 2016, Shawnee County encompasses a total of 556 square miles of land, or approximately 356,000 acres. In the unincorporated area, there is approximately 290,500 acres of developed land (agricultural, parks and rec, residential, commercial, industrial). Of that, approximately 231,500 acres is agricultural, and 42,750 acres of land dedicated to residential use.

While Shawnee County is still largely agricultural, it does contain many residential parcels in an exurban, residential-sprawl type setting throughout the county. At the writing of the Comprehensive Plan, if unincorporated Shawnee County were a city, it would be the 11th largest city in the state of Kansas in terms of population. While agriculture is the dominant land use in Shawnee County by total land area, residential development is the second largest land use by total land area. At the writing of this report, there are 13,915 parcels in unincorporated Shawnee County that are less than three acres in size. In comparison, there are only 31 parcels that are larger than 320 acres in size and an additional 74 parcels that are 200 to 320 acres in size. The average size of single-family residential parcel throughout unincorporated Shawnee County is 2.7 acres. While in the 1990s platted subdivisions were common, in more-modern times, subdivisions in the unincorporated area have declined, yet the population has continued to grow. Instead, larger agricultural parcels are being divided into smaller lots, and homes are found lining section-line roads.

Urbanization – Shawnee County is deemed an “urban” county. As set forth in KSA 12-354, Shawnee County is designated as an urban area as authorized by the Kansas constitution. Furthermore, in 2004, Shawnee County chartered itself out of general planning and zoning laws (KSA 12-741, et seq). Instead, Shawnee County operates under the planning and zoning laws for counties designated as urban areas (KSA 19-2956, et seq).

Airports - There are two airports located in Shawnee County under the Metropolitan Topeka Airport Authority – Topeka Regional Airport (home to Forbes Field) and Philip Billard Municipal Airport. There are an unknown number of privately owned airstrips.

City of Topeka Municipal Code set the Forbes Field and Philip Billard Airports Hazard Zoning by ordinance, setting limits to the location of structures or objects within certain vicinities of the public airport(s), which obstructs the airspace required for the flight of aircraft in landing or taking off at such airport.

Airport staff was contacted for a specific response to wind farms; initial comments indicated that their greatest concern involves the hazard zone airspace areas and height of turbines.

Tallgrass Moratorium – Shawnee County is on the eastern gateway to the Flint Hills; as such, a portion of Shawnee County is located in the Tallgrass Heartland Wind Moratorium. The Tallgrass Moratorium includes all or some of twelve (12) Kansas counties. In 2004, former Governor Kathleen Sebelius declared a moratorium on parts of the Flint Hills. In 2011, former Governor Sam Brownback expanded the protection area and named it the Tallgrass Heartland. Then in 2020, Governor Laura Kelly reaffirmed the moratorium, proclaiming the moratorium helps to conserve Kansas’ unique prairie ecosystem.

Native Stone Scenic By-Way - The Native Stone Scenic By-way runs, in part, along K-4 and K-99 highways along the Mission and Mill Creek valleys in Shawnee and Wabaunsee Counties. In Shawnee County, it runs from Dover east to Auburn Road. It is an area known for its immense beauty and history, historic native limestone buildings, natural rock formations, landmarks, and the Flint Hills.

Historical Locations - Shawnee County has more than 75 entries on the National Register of Historic Places. While many fall within the city limits, other landmarks fall within Auburn, Berryton, Dover, Silver Lake, Tecumseh, Wakarusa, Willard, and other unincorporated areas.

Financial Support to Farmers / Landowners – those landowners who might enter a lease with a wind farm company would like receive compensation from that company for the lease of their land, and even a percentage of production from the turbine(s) on their land. To many, that potential income is an investment in their future that may not otherwise be realized with farming the land “as is.” One question raised, is whether the farmer/landowner lives on the land where the potential turbine would be located. Many farmers have a multitude of acreage away from their homes; some may live in town; and others may live in another county or state.

Decommissioning – Additional research is needed to identify key topics on decommissioning. Should wind farms be allowed, individual projects would need to identify a specific plan for decommissioning: when would equipment be removed, where would it be taken for disposal, what would restoring the landowners’ property entail? Would the original decommissioning plan need to be reviewed and updated over the course of the permit? How much does decommissioning cost and who is responsible for paying those costs? A bond should be required to provide assurance that decommissioning will occur, and not cost the landowner or county. Should there be a requirement that if the wind farm is not producing a certain amount of output, or has not been operating for a specified period of time, they must be forced to decommission?

Bond – bonds could be required for not only future damage, equipment failure, or decommissioning. A few questions that must be answered: How is the value of the equipment determined? What about the cost of depreciation or inflation? Should the bond be reissued every five (5) years? Would there be requirements for proof of payment? What if the original applicant sells to another company or utility company?

Payment in Lieu of Taxes – Kansas statute (KSA 79-201 *Eleventh*) grants a ten-year exemption from property taxes after construction or installation of such property. Companies are typically willing to make annual or one-time lump sum payments to the county “in lieu of taxes” due to the loss of taxation because of such exemption. How much those payments should be is determined on a case-by-case basis. However, does the land on which a wind farm (turbine) sit still get taxed, while the equipment itself receives a waiver of taxes? Can the land be reclassified to commercial for the production of electricity?

There are many other arguments that one can make for or against Wind Farms, however those are not addressed in this report as they were not a specific topic or reason utilized to formulate the recommendations contained within.

STAFF RECOMMENDATION:

Based on the facts detailed in this report, and generally recognized planning practices, staff finds as follows:

1. That a comprehensive review of existing conditions, characteristics of the county, and suitability of use has been done.
2. That preserving the natural, historical, and rural landscapes of Shawnee County; maintaining agricultural farm ground and natural environmental constraints; and protecting the airspace and hazard zones are all priorities of the Comprehensive Plan.
3. That protecting the floodplain is a priority of the Comprehensive Plan and the Shawnee County Floodplain Management Regulations.
4. That protecting existing patterns of residential growth and development is a priority of the Comprehensive Plan and Shawnee County Zoning Regulations.
5. That protecting the health, welfare, and general well-being of the citizens of Shawnee County is a priority of Shawnee County and the Shawnee County Zoning Regulations.

As such, the Planning Staff finds that Commercial (Utility Scale) Wind Energy Conversion Systems and Projects do not comply with Shawnee County's priorities and goals at this time. Further, Planning Staff finds that Limited (Community Scale) Wind Energy Conversion Systems and Projects do not comply with Shawnee County's priorities and goals at this time.

Planning Staff recommends that based on these considerations, the Planning Commission **recommend approval of a ban prohibiting** Commercial (Utility Scale) Wind Energy Conversion Systems and Projects, and **recommend approval of a ban prohibiting** Limited (Community Scale) Wind Energy Conversion Systems and Projects.

Further, Planning Staff recommends the Planning Commission seriously consider whether Personal (Small Scale or Accessory Scale) Wind Energy Conversion Systems are appropriate for Shawnee County. Should the Planning Commission not vote to recommend approval of a ban of Personal (Small Scale or Accessory Scale) Wind Energy Conversion Systems, Planning Staff recommends the Planning Commission recommend approval of a one-year moratorium on these systems, for the same reasons as documented in the solar energy conversion systems proposal, to allow time to properly draft and approve regulations for consideration of approval of said systems.