

## 6.31 WIND POWER/WIND ENERGY/WIND FARM

This regulation is adopted under the authority granted by Wyoming Statute Title 9 Administration of the Government, Chapter 8 Land Use Planning, Article I. General Provisions, 9-8-101 to 9-8-302 (see Appendix P). Non-commercial Wind Farms are aggregate generation for size 1 kW to 10 kW and permitting shall follow the Zoning and Development Permit Procedure (see Land Use Regulations Chapter 2.1). Commercial Wind Farms are aggregate generation above 10 kW and permitting shall follow the Conditional Use Permit Procedure (see Land Use Regulations Chapter 3.1).

Aggregate generation less than 1 kW non-commercial wind farms shall be considered exempt where: stand alone tower is less than 30 feet in height from ground, roof mount is less than 60 feet in height from ground; and setback as noted in 6.31.A.3.

Agriculture non-commercial wind farms shall be considered exempt where: aggregate generation is less than 10 kW, setback as noted in 6.31.A.3., and minimum parcel size is 35 acres.

### A. Non-Commercial Wind Farm (definition includes purpose is to produce power primarily for the On- site single user)

The purpose is to provide for construction and operation of wind turbines that will preserve public health and safety and minimize adverse impact on neighboring properties. Non-commercial wind farms shall be an accessory use and shall be permitted by the issuance of an approved Zoning and Development Permit. The approval is subject to compliance with the standard application requirements and compliance with all of the following non-commercial wind farm requirements as set forth below:

1. All wind turbines shall have automatic braking, governing or feathering system to prevent uncontrolled rotation, overspeeding and excessive pressure on the tower, blades and turbine components, no furling, upwind rotor, at least three (3) tapered and twisted blades.
2. The minimum distance between the ground and any part of the rotor shall be 15 feet. Wind turbines must limit climbing access.
3. Wind turbines shall have a minimum setback distance from property lines, overhead utility lines, dwellings, public buildings, and other wind turbines no less than 1.5 times the sum of the height of the tower plus rotor radius, plus the normal setbacks as outlined in 6.20 Setbacks.
4. Minimum parcel size: The minimum parcel size to establish a non-commercial wind farm is two (2) acres.
5. Noise shall not exceed 60 dba as measured at the property line. The level, however, may be exceeded during short-term events such as utility outages and/or severe wind storms.
6. The applicant must mitigate or eliminate interference with electromagnetic communication such as radio, telephone, or television, or microwave communications.

7. Colors and surface treatment shall be non-reflective neutral colors.
8. There is no height limitation on tower except as imposed by setback, airport overlay zones, and FAA regulations.
9. Aggregate generation is 1 kW to 10 kW.
10. No illumination of the turbine or tower shall be allowed unless required by the FAA or other appropriate authorities.
11. All signs, other than the manufacturer's or installer's identification, appropriate warning signs, or owner identification on a wind generator, tower, building, or other structure associated with a small wind energy system visible from any public road, shall be prohibited.
12. Multiple wind turbines on same parcel: Multiple wind energy systems are allowed on a single parcel as long as the owner/operator complies with all non-commercial wind farm regulations contained in these regulations. Units shall be installed in compliance with minimum setback requirements as defined.
13. Applicant(s) must contact and inform neighbors in writing about proposed installation.
14. At the time of application, the applicant must present a certification from the manufacturer that the system's turbine and other components equal or exceed the standards of one of the following national certification programs such as: National Electrical Code (NEC), American National Standards Institute (ANSI), Underwriters Laboratories (UL), or any other small wind certification program recognized by the American Wind Energy Association; and upon the construction and installation phase the applicant must provide written documentation verifying compliance with ICBO Building and Electric Code.
15. On the application, the applicant must certify that the proposed system will be used primarily to reduce onsite consumption of electricity.
16. Must comply with applicable FAA regulations, including any necessary approvals for installations close to airports.
17. Provide documentation that the appropriate utility company has been informed of the applicant's intent to install an interconnected customer-owned generator. Off-grid systems shall be exempt from this requirement.
18. If any wind energy system is not operated for a continuous 18 month period, or is considered unsafe, the county may notify the owner of record by certified mail and provide 90 days for response. In such response, the owner shall set forth reasons for operational difficulty and reasonable timeframe for corrective action. If the County deems the timeframe or corrective action unreasonable, the owner will be notified that within six (6) months the turbine must be removed. Wind turbines designated for agricultural use may be exempt from this requirement.
19. Wind turbine(s) that may present a threat to the public health, safety, or welfare, regardless of height, shall require a Conditional Use Permit.

#### B. Commercial Wind Farm

This governs the siting of Wind Energy Projects that provide electricity sold to wholesale or retail markets, with aggregate generation above 10 kW, and the following requirements applies, in addition to applicable requirements under Section A above. Permitting shall follow the Conditional Use Permit Procedure (see Land Use Regulations Chapter 3.1).

1. Appearance
  - a. There shall be no signage or logo of any type allowed on the wind tower(s) with the exception of safety signs, warning signs and emergency contact signs. Any other signage shall only be allowed as approved by the County.
  - b. All Wind Energy project facilities must be of neutral, non-reflective colors.
  - c. To minimize the degradation of the visual character of the area, additional performance standards may be adopted by the County upon formal consideration, review and public hearing(s).
  
2. Setbacks. All Wind Energy Project Structures shall be set back:
  - a. At least one-quarter mile from any residential structure. The owner of the residential structure may waive this setback requirement, but in no case shall a tower be located closer than 1.5 times the tower height;
  - b. A distance of at least 1.5 times the tower height from third party transmission lines and communication towers;
  - c. At least 1.5 times the tower height from adjacent property lines;
  - d. One (1) mile from any incorporated municipality, unless waived by the municipality;
  - e. Except transmission lines, one-quarter mile from state highways, and 1.5 times the tower height from public roads;
  - f. Setback distances may be modified at the discretion of the County Commissioners if affected adjacent property owner(s) have provided a waiver to the setback requirement.
  
3. Construction and Transportation Plan (provide detailed Construction Plan and Transportation Impact Study) to include, but not limited to:
  - a. An applicant(s), owner(s), operator(s) or transportation company(s) proposing to use any county road(s) for the purpose of transporting Wind Energy Project, substation parts and/or equipment for construction, operation, or maintenance of the Wind Energy Project or Substation(s), shall:
    1. Identify all such public roads and submit detail mapping of haul routes;
    2. Obtain applicable weight and size permits from relevant government agencies prior to transport;
    3. Obtain new access, access modification or change of use of access permit;
    4. Applicant(s) may be requested to provide additional studies and reports Prepared by a qualified professional(s) to determine if impacts to public roads will occur. If impacts are determined, a mitigation plan and/or long term road maintenance agreement will be required at the discretion of the County Commissioners;
    5. Plan to include disposal of material (not necessary able to take to landfill).
  
  - b. To the extent an applicant(s), owner(s), operator(s) or transporter(s) must obtain

a weight or size permit from the County, the applicant(s), owner(s), operator(s) and/or transporter(s) shall:

1. Conduct a pre-construction baseline survey to determine existing road conditions for accessing potential future damage; and
2. Secure financial assurance in a reasonable amount at the discretion of the County Commissioners for the purpose of repairing any damage to public roads caused by transporting, constructing, operating or maintaining the Wind Energy Project;
3. The use of public roads and other infrastructure shall be in accordance with and compliance of Federal, State and County regulations governing such activities. Any degradation to or damage of public roads or other infrastructure by parties affiliated with the transportation, installation, operation or maintenance of Wind Energy Project will bear all costs required to return the public roads or other infrastructure to their original or better condition prior to their use of same.

c. Environmental Impacts.

#### 4. Life of Project and Final Reclamation of Project

Provide a statement of the useful life of the project, a decommissioning plan (as noted below) and a final land reclamation plan in the event the project is abandoned or terminated. Bonding shall be required for construction phase as well as decommission/reclamation. Detailed costs shall be submitted for each. Bonding shall remain in place for life of project and reclamation/decommission after construction has been completed.

- a. Decommissioning: For applicants that are not otherwise regulated by the Wyoming Public Service Commission, each Commercial Wind Energy Project shall have a Decommissioning Plan outlining the anticipated means and cost of removing Wind Energy Project facilities at the end of their serviceable life or upon becoming a discontinued use. The cost estimates shall be made by a competent party such as a professional engineer, a contractor capable of decommissioning, or a person with suitable expertise or experience with decommissioning. The plan shall also identify the financial resources that will be available to pay for the decommissioning and removal of the Wind Energy Project and any accessory facilities.

#### 5. Impact and Mitigation

In the absence of a required environmental analysis by a state or federal agency, which encompasses the entire project area, provide a project impact review and a proposed mitigation plan addressing:

- a. Environmental: wildlife, wildlife habitat, endangered or threatened species,

avian population (including migratory birds), flora, soil, water quality and water supply, dust from project activities, and historic, cultural or archaeological resources within the project area.

- b. Wind Farm: noise levels at the residence(s) nearest to the project boundary and at the property line, any wastes, electromagnetic fields and communications interference generated by the project, public safety in regard to the potential hazards to adjacent properties, public roadways, communities, aviation, etc. that may be created, discuss any potential changes that could be anticipated when considering the cumulative impacts of other adjacent wind energy projects.

### **6.32 COMMUNICATION TOWERS & WIRELESS TELECOMMUNICATION FACILITIES (including antennas)**

The purpose of this regulation is to provide for placement, construction, operation and modification of Communication Towers (includes Wireless Telecommunication Towers) that will preserve public health and safety and minimize adverse impact on neighboring properties. This regulation will establish requirements for the permitting associated with a Communication Tower. Each Tower shall require a permit and permitting shall follow the Zoning and Development Permit Procedure (see Land Use Regulations Chapter 2.1). Exemptions shall include amateur radio operators using attached antennas for personal, non-commercial use, including, but not limited to, television and ham radio antennas.

#### **A. General Requirements:**

The approval is subject to compliance with the standard application requirements and compliance with all of the following requirements as set forth below:

1. All Communication Towers construction plans and drawings shall be certified by an engineer licensed in the State of Wyoming, that demonstrate the suitability of the tower site, the suitability of the foundation design, and show the number and position of guy wires and proposed tower(s).
2. Towers shall, to the extent possible, use materials, colors, textures, screening and landscaping that will blend them into the natural setting and surround buildings. Colors and surface treatment shall be non-reflective neutral colors.
3. Lighting: Towers may not be artificially lighted, unless required by public safety, the Federal Aviation Administration (FAA), or other applicable authority.
4. General Nuisances: Minimize light, glare, heat, noise, vibration, odors, fumes, smoke, or other off-site nuisances generated by the use.
5. All towers must meet current standards and regulations of the Federal Aviation Administration (FAA), Federal Communications Commission (FCC), and any other agency of the local, state or federal government with the authority to regulate towers and antennas.
6. Shall have a minimum setback distance from all property lines, overhead utility lines, dwellings, public buildings, and other structures no less than 1.5