

setback requirements, whichever is greater.

## **2-2-125 LARGE WIND ENERGY SYSTEMS**

- a. Purpose** - To oversee the permitting of wind energy systems for the purpose of preserving and protecting public health and safety; to reasonably preserve and protect natural and cultural resources; to protect the quality of life for nearby property owners; to facilitate economic opportunities for both County and local residents; and to allow for the orderly development of land.
- b. Applicability** - These regulations govern the siting of large wind energy systems and all associated projects and substations throughout all the unincorporated areas of Laramie County. Small wind energy systems are exempt from this article. Large wind energy systems and wind farms that have been permitted and constructed or approved for construction by federal, state or local agencies prior to the adoption of this article are exempt from this regulation.

It is unlawful for any person to construct, install, maintain, modify, operate or abandon a large wind energy system and/or wind farm that is not in compliance with this article or with any condition contained in a wind energy permit or other land use permit issued pursuant to this article or any other applicable law or regulation.

- c. Standards** - These standards apply to large wind energy systems and wind farm systems only.
  - i. Structure** - The wind tower portion of any large horizontal wind energy system should be of monopole construction. Other construction may be considered by the Board if monopole construction is not practicable or if new technology emerges. A wind tower must be of freestanding construction to the extent practicable. If monopole or freestanding construction is not practicable, a wind tower may be guyed upon approval of the Board.
  - ii. Location** - A large wind energy system may be located only in areas that are within the Agricultural Residential (AR), Agricultural and Rural Residential (A-1), Agricultural (A-2), and Heavy Industrial (HI) zone districts and in the regulatory area of the County. A wind farm may be located only in areas that are zoned Agricultural Residential (AR),

Agricultural and Rural Residential (A-1), Agricultural (A-2), Heavy Industrial (HI) and in the regulatory area of the County.

**iii. Setbacks**

Reduced setbacks may be allowed if written permission, as recorded with the Laramie County Clerk, is granted by the affected adjacent nonparticipating property owners for a specific lesser setback.

- A.** The center of the base of each wind tower shall be located no less than 1.5 (hub height + rotor diameter) from adjacent unplatted nonparticipating property lines and dedicated public roads.
- B.** No tower or other structure, other than underground structures, transmission lines, roadways and structures appurtenant to roadways, shall be located at a distance of less than five and one-half (5.5) times the maximum height of the tower, but in no event less than one thousand (1,000) feet from any platted subdivision unless this restriction is waived in writing by the owners of all lands included within the distance specified in this paragraph.
- C.** The base of any tower shall not be located at a distance of less than five and one-half (5.5) times the maximum height of the tower, but in no event less than one thousand (1,000) feet from a residential dwelling or occupied structure, unless waived in writing by the person holding title to the residential dwelling or occupied structure;
- D.** The base of any tower shall not be located at a distance of less than one-half (1/2) mile from the limits of any town or city.

- iv. Height -** The total height of a large wind energy system shall comply with all federal, state and local regulations, including FAA guidelines. Applicants are strongly encouraged to contact the Cheyenne Regional Airport Manager and the Pine Bluffs Municipal Airport Manager concerning airport operations, approaches and local matters critical to flying safety and airspace conflicts prior to submitting an application for review. Applicants are required to review the relevant airport information packet available from the Laramie County Planning Department, the Cheyenne Regional Airport Manager, or the Pine Bluffs Clerk's Office.

- v. Clearance - The vertical distance from ground level to the tip of a large horizontal wind energy system turbine blade when the blade is at its lowest point must be at least twenty five (25) feet.
- vi. Access - A wind tower, including any climbing aids, must be secured against unauthorized access.
- vii. Electrical Wires - Electrical wires associated with a large wind energy system shall be located underground when practicable.
- viii. Code Compliance - All large wind energy systems must comply with the most recent adopted edition of the National Electrical Code, International Building Code and all applicable local, county, state and federal codes and regulations.
- ix. Lighting - Wind tower and turbine lighting for large wind energy systems must comply with FAA minimum requirements and be at the lowest intensity allowed. No accessory lighting is permitted unless it is determined by the Board to be necessary for safety and security.
- x. Appearance - Wind energy systems in a wind farm should be of a coordinated design to minimize visual impacts to the surrounding area. Wind energy systems shall be exempt from landscape requirements in this regulation.
- xi. Signs - No wind turbine, tower, building, or other structure associated with a WES may be used to advertise or promote any product or service. No word or graphic representation other than appropriate warning signs, tower identification, and owner, land owner or manufacturer identification, may be placed on a wind turbine, tower, building, or other structure associated with a WES.
- xii. Noise - The noise generated by the operation of a large wind energy system or wind farm may not exceed a noise level of more than fifty (50)dB(A) as measured at any point along the common property lines between a nonparticipating property and a participating property. This level, however, may be exceeded during short-term events such as utility outages, severe weather events, construction or maintenance operations. Noise levels may exceed the 50dB(A) limit along common property lines if written permission, as recorded with the Laramie County Clerk, is granted by the affected adjacent nonparticipating property owners. Sound measurements shall be made five (5) feet above ground level over 10-minute measurement periods, on the basis

of equivalent sound pressure levels and wind speed equal to 8 meters/second, using the procedures established by IEC 61400-11 (International Electrotechnical Commission, 2nd Edition, 2002-12.)

- xiii.** Impacts to Public Roads - The use of dedicated public roads shall be in accordance with and in compliance of federal, state, county and local regulations governing such activities. The owner shall be responsible for any degradation to or damage of dedicated public roads by any and all parties affiliated with the installation of the wind farm and will bear all costs required to return the public roads to their original or better condition prior to their use of same. The use of any dedicated public road for the purpose of transporting parts, materials and/or equipment for construction of a large wind energy system or wind farm shall require the following prior to approval of any wind energy permit:
- A.** A detail mapping of known haul routes shall be submitted with the wind energy permit application. Haul routes shall be updated as transit information becomes available. Final haul routes must be submitted at least ten (10) days prior to the start of construction.
  - B.** Completion of a pre-construction baseline survey prepared by a mutually agreed upon professional engineer to determine existing road conditions.
  - C.** An engineer's assessment of the potential for damage or impact to the roads detailed in the haul route.
  - D.** A mitigation plan and/or long-term road maintenance plan to address the impacts to the roads as determined in the assessment.
  - E.** Preparation of an engineer's estimate for the total estimated cost to improve, maintain or repair the existing roads as detailed in the mitigation/maintenance plan.
  - F.** Documentation of the establishment of a bond for the repair of roads along the haul route for a wind farm in an amount of not less than 115 percent of the cost for infrastructure improvement or repair as determined in the engineer's estimate of cost, but in no case less than \$25,000 for the purpose of repairing any damage to public roads caused by constructing, operating or maintaining the system. Prior to commencement of any work on the participating property, the owner shall enter into with the Board or its designee an agreement that documents the owner's obligations for the

County roads.

**G.** Any additional information, studies, or reports as reasonably determined by the Board as necessary.

**xiv.** Reclamation and Decommissioning - Documentation of a guarantee between the owner and the participating property owner for the reclamation and decommissioning of the wind farm shall be provided at the time of the site plan application. A guarantee should be in the form of financial assurance, lease agreements, or other terms as negotiated between the owner and the participating property owner. At the time of abandonment or removal as further described in this article, the participating property shall be reasonably restored to the physical state as existed before the wind energy system or wind farm was constructed. A decommissioning plan shall be submitted as part of the wind energy site plan application. If a Wind Energy Permit is granted, the owner shall provide an updated reclamation and decommissioning plan to the Laramie County Planning and Development Office every five (5) years. The plan shall specify and provide for the following:

**A.** The physical removal of wind energy systems, equipment, security barriers and transmission lines from the site.

**B.** Disposal of all solid and hazardous waste in accordance with local, state and federal waste disposal regulations.

**C.** Stabilization or re-vegetation of the site as necessary to minimize erosion. The decommissioning plan may allow the owner to leave landscaping or designated below-grade foundations and other below-grade infrastructure as agreed upon by the participating property owner in order to minimize erosion and disruption to vegetation.

**D.** Identification of all physical elements that may remain on the property at the discretion of the participating property owner.

**xv.** Liability Insurance - At the time of a wind energy permit application for a wind farm, the owner shall provide evidence of liability insurance for a duration of not less than 24 months from the estimated time of project completion to cover loss or damage to persons and structures occasioned by the failure of the facility.

**xvi.** Impacts to Natural and Cultural Resources - The owner of a large

wind energy system and/or wind farm shall comply with all federal, state and local requirements pertaining to natural and cultural resources. The owner of a wind farm system shall submit written statements that the project is in full compliance with all relevant requirements at the time of the permit application submittal. The owner of a large wind energy system and/or wind farm should make reasonable efforts to avoid siting large wind energy systems components in a manner that will adversely impact wildlife, water, historical and/or cultural resources.

**d. General Requirements -**

- i. Notification - The owner shall send notice via certified mail to all property owners of record within (1) mile of and to cities and towns within one half (1/2) mile of the perimeter of the property affected at least thirty (30) days prior to the Planning Commission review of any site plan. The notice shall include a general project description, the project location, the number of turbines proposed, and routes of ingress and egress to the location.
- ii. The Laramie County Planning and Development Office shall publish a legal notice thirty (30) days prior to the Planning Commission review of any site plan.
- iii. Siting Process - Each large wind energy system and/or wind farm shall require both a site plan and a wind energy permit. Site plans will be reviewed by both the Planning Commission and the Board. All site plans, after action by the Planning Commission, shall be heard by the Board at its next available regular meeting. The Board shall approve site plans according to the Board approval process. The Administrator shall approve wind energy permits accordance with this article. The installation of a large wind energy system and/or wind farm is contingent upon compliance with any and all conditions established by the Board. The applicant shall meet with a Planning and Development Office representative prior to submittal of any site plan. This pre-application meeting will allow the applicant to define the project and provide information. During this pre-application meeting a list of items needed for the submittal of the site plan will be addressed. Applicants shall provide copies of all FAA Form 7460 submissions to any airport authority that could be affected by the application when such forms are tendered to the FAA for approval.

- e. Site Plan** - A site plan illustrating preliminary layout, design and access shall be submitted for Planning Commission review and Board review and approval. The site plan must meet the requirements of the Site Plan Review Application, available through the Laramie County Planning and Development Office. No wind energy permit shall be issued by the Administrator without a Board-approved site plan. The applicant shall provide a complete application in accordance with the requirements of the pre-application meeting. Failure to do so shall result in a denial of the application. Upon submittal of the site plan, Laramie County Development Office staff shall have 5 (five) business days to determine if the site plan is complete. At the end of that period, if no letter has been issued to the applicant, the application will be automatically determined to be complete.

The Laramie County Planning and Development Office shall begin the public notification period no less than 7 (seven) days from the submittal of the site plan. The proposed large wind energy system and/or wind farm shall comply with all federal, state and local regulations. A site plan approval shall expire three (3) years from the date of approval by the Board unless the construction of the wind farm has been initiated. All site plans shall include the following as a minimum:

- i. Name, mailing address and telephone number of the person signing the application, certifying that the application is true and correct.
- ii. Name, mailing address, and telephone number of the owner.
- iii. Name, signature, mailing address and telephone number of the participating property owner(s).
- iv. Legal description of the participating property and/or proposed participating property.
- v. General description of the proposed large wind energy system(s), including the estimate of total number of systems, lighting and estimated total height of each large wind energy system.
- vi. General location of proposed wind energy system(s) and buildings. Actual locations of wind energy systems and buildings will be required for the wind energy permit and any associated building permits.
- vii. Proposed location of above ground and underground electrical wiring, vehicular access routes and fencing.

- viii.** Location of any existing above ground utility lines, roads, right-of-way, pipelines, easements and etc. within the property.
- ix.** Existing buildings and structures within one-quarter mile (1320 feet) of the property, including any church, hospital, public library, residence, school or other structure designated for public assembly. This information may be based on available public data.
- x.** Location of cultural and sensitive natural resources (such as historical structures, trails, archaeological sites, wetlands, migratory flight paths, and endangered wildlife and/or vegetation).
- xi.** The following documents shall be submitted with the site plan:
  - A.** Statement that each large wind energy system will be installed in compliance with manufacturer's specifications.
  - B.** Statement that the owner will construct and operate each large wind energy system or wind farm in compliance with all applicable local, state, and federal codes, laws, orders, regulations, and rules.
  - C.** Preliminary construction documents describing general plans for appropriate drainage, erosion control and infrastructure improvements. Final construction documents will be required with the wind energy permit.
  - D.** Reclamation and decommissioning plan in accordance with this regulation.
  - E.** Preliminary road assessment and mitigation plan.
  - F.** A noise analysis to determine the decibel (dbA) level at adjacent nonparticipating property lines. The analysis shall be completed in accordance with this regulation.
  - G.** Certification that the applicant has reviewed the airport information packet of any affected airport and has provided to such airport authority a copy of the site plan submitted to the County and a copy of FAA form 7460 if the form was submitted for FAA approval.
  - H.** A proposed phasing plan showing areas or locations of wind energy



systems for the purposes of permitting.

- I. Written certification that notice of the proposed facility has been given to the owners and claimants of mineral rights located on and under lands encompassed by the site plan.
- xii. Following Board approval of the site plan, the owner shall have three (3) years to apply for a wind energy permit.
- f. **Wind Energy Permits** - Upon Board approval of the site plan, the owner may submit a wind energy permit application to the Laramie County Planning and Development Office. If the wind energy permit application meets the requirements and conditions set forth in the approved site plan, the Administrator shall issue the wind energy permit within twenty-one (21) days of application submittal.
- i. A wind energy permit is required prior to the installation of a large wind energy system.
  - ii. A wind energy permit is required for large wind energy systems that will be operated as part of a wind farm. Following Board approval of a wind farm site plan, the Administrator shall issue a single wind energy permit that approves all large wind energy systems in total or in specific phases that meet the criteria of this article and any conditions required by the Board as part of the site plan approval. All wind energy permit fees must be paid in full before permits are issued.
  - iii. Application for a wind energy permit must be on a form provided by the Administrator.
  - iv. Permitting for structures other than large wind energy systems, including but not limited to buildings constructed for administration, operations and maintenance of large wind energy systems shall be in compliance with all applicable County building permit requirements.
- g. **Wind Energy Permit Application**
- i. Each application for a large wind energy system wind energy permit shall include the following:
    - A. Confirmation that the permit is in substantial conformance with the general and specific conditions of the approved site plan;

- B. Appropriate fees;
  - C. Evidence of liability insurance for large wind energy systems that will be part of a wind farm;
  - D. Final road assessment and mitigation plan
  - E. Professional engineer's estimate of road work
  - F. Final construction documents prepared in accordance with County regulations for appropriate drainage, erosion control and infrastructure improvements;
  - G. Specific site plan showing all large wind energy system locations.
  - H. A written emergency management plan and certification that the plan will be revised prior to the start of operation if changes to the site occur during construction that would affect the emergency management plan.
  - I. A written waste management plan detailing the estimated solid wastes and proposed disposal program for all phases of the project.
- ii. A wind energy permit issued pursuant to this article expires if the large wind energy system is not installed and functioning within five (5) years from the date the permit is issued. The Administrator may extend the permit in response to a written request made prior to its expiration if the Administrator determines that the request is reasonable under the circumstances.
- h. **Fees** - The submittal of a site plan for any large wind energy system or wind farm must be accompanied by the fee required for a site plan review as determined and published by the Board. The application for a wind energy permit for any large wind energy system or wind farm must be accompanied by the fee required for a wind energy permit as determined and published by the Board.
  - i. **Reclamation and Decommissioning Plan**
    - A. An owner shall provide the Administrator with a written Notice of Termination of Operations if the operation of a permitted large wind

energy system or wind farm is terminated. Such notice shall be provided within thirty (30) days of system operation termination.

- B.** A large wind energy system or wind farm that is out of service for a continuous 12-month period will be deemed to have been abandoned and the Administrator may issue a Notice of Abandonment to the owner. If, within thirty (30) days of issuance of a Notice of Abandonment, the owner provides the Administrator written verification showing the system has not been abandoned, the Administrator may withdraw the notice.
- C.** A large wind energy system or wind farm must be removed within six (6) months of the issuance date of the Notice of Abandonment unless the Administrator withdraws the Notice or within twelve (12) months of the owner providing Notice of Termination of Operations.
- D.** The Notice of Abandonment shall be sent by certified mail to the address of the owner and the participating property owner as listed by Land Records Department.
- E.** The owner shall remove all of the following:
  - 1. Wind energy systems, above ground improvements and outdoor storage, except those to remain at the discretion of the participating property owner;
  - 2. Foundations, pads and underground electrical wires as indicated in the approved reclamation and decommissioning plan and in accordance with any agreement between the owner and participating property owner(s).
  - 3. Hazardous material from the property and dispose of the hazardous material in accordance with federal and state law.
- F.** The owner shall restore all of the following to their original or better condition:
  - 1. County roads damaged by the removal of large wind energy systems or wind farm components.
  - 2. Soils and/or vegetation located on site.
- G.** If the owner fails to remove a wind energy system or wind farm within

the specified time frame, the owner shall be deemed to be in violation of this article and subject to the penalties as described in this article. The County shall have the right, but not the requirement, to enter the property and cause the appropriate abandonment and restoration measures as determined by the approved Reclamation and Decommissioning Plan. The County shall have the right to recover the cost of any and all work completed from the owner.

**j. Variance and Appeals Procedure**

- i. Variances to this regulation may be allowed by the Board. Legal notice of any variance request shall be in conformance with this regulation.
- ii. Appeals of both Board and administrative decisions shall be filed in conformance with this regulation.

**k. Violations**

- i. No person shall:
  - A. Commence to construct a wind energy facility without first obtaining a site plan and permit required by this regulation; or
  - B. Construct, reconstruct, operate, locate, erect, maintain, enlarge, change or use a wind energy facility, after having first obtained a site plan approval and permit, other than in specific compliance with the permit; or
  - C. Cause any of the acts specified in this subsection to occur.
- ii. Any person violating subsection (a) of this section is liable for a civil penalty of not more than ten thousand dollars (\$10,000.00) for each violation. Each day of a continuing violation constitutes a separate offense.
- iii. Any wind turbine tower or wind generator erected in violation of this article shall subject the owner of the tower or generator to a penalty of seven hundred fifty dollars (\$750.00) per day for every tower or generator so erected.

**2-2-126 SITE ADDRESS REQUIRED**