

**Article 52**  
**Commercial Wind Power Generation Facility Siting Requirements**  
**Proposed Revision**

**Section 52.01 Purpose**

One or more commercial wind power generating facilities may be proposed within the boundaries of Union County in the future. Should that occur, Union County will have the opportunity and responsibility to review all siting applications. Union County will make recommendations, and set forth conditions for siting any such facilities. Article 52 provides guidelines and requirements to assist Union County through the siting process.

Requirements are hereby established to protect public health and safety, and to preserve the scenic, natural and historic resources important to the citizens of Union County. The statewide Land Use Plan is adopted by reference. If an issue is not covered in this document, apply the Oregon State Rules. When an issue is covered in both documents, this document shall be applied as being the more restrictive. The Oregon Department of Energy (ODOE), and the Energy Facility Siting Council (EFSC), must justify overriding Union County requirements.

**Section 52.02 Definitions**

- I. Commercial Wind Power Generation Facility.** Wind power generation consisting of one or more wind turbines, or other such devices, and their related or supporting structures, that produce electric power from wind and are: (a) connected to a common switching station or (b) constructed, maintained, or operated as a contiguous group of devices, in a non-residential setting.
- II. Union County (the County).** (a) All lands within the exterior boundaries of Union County, OR, as defined by statute, and (b) the residents of said county, as represented by the Union County Board of Commissioners, and such individuals and/or entities as the commissioners may appoint.

**Section 52.03 Commercial Wind Power Generation Facility Review Process**

- I.** When an applicant files a Notice of Intent to apply for a site certificate for a wind power generation facility, Union County shall arrange a pre-application meeting. Local, state, and federal representatives, and individuals with pertinent expertise will be invited to meet with the applicant's representatives. The purpose of said meeting will be to identify potential opportunities and impacts, and to advise on the detail required in each application component. Prior to said meeting, the applicant must provide:

- A. A cost/benefit analysis stating specific benefits to Union County, including, but not limited to, the minimum number of local full time employees that will be hired for construction and operation of the facility, establish a cost for damages to wildlife and habitat, property values, erosion damage, increased need for invasive weed control, loss of tourism revenue, increased need for fire and police protection, revenue loss due to farm and forest land taken out of production, and projected cost of bat fatalities in terms of insect control,
- B. A general description of said facility, including the energy production potential,
- C. The legal description of the location of said facility, the gross acreage within the project boundary, and documentation that all impacted property owners within the project boundary, and within the zone extending two miles beyond that boundary have been notified of the proposal,
- D. A GIS based map, or its technologically advanced equivalent, showing the location of all components of said facility, plus additional GIS overlays showing, within a two mile perimeter beyond the project boundary:
  - 1. Land ownership boundaries, including residences and/or agricultural structures
  - 2. Land zoning per Union County Land Use Plan,
  - 3. Wildlife habitat areas per ODFW classifications as identified in OAR-635-415-0025,
  - 4. Water resources (streams, ponds, etc.),
  - 5. Archaeological/Historical sites,
  - 6. Existing roads and transportation facilities (storage yards, rock quarries, rail lines, etc.) with proposed additional facility access,
  - 7. Location of any and all threatened or endangered flora and fauna,
  - 8. Nesting site locations identified for all raptors, as well as locations of concentrated bat dens, and wolf dens.
- E. Non-proprietary evidence of wind monitoring data demonstrating sufficient wind resources within the facility boundaries to warrant development,
- F. Evidence of active utility transmission inter-connect requests and/or processes, and description of same, and
- G. Route and plan for transmission components connecting the facility to the grid.

- II. For a proposed facility forecasted to produce less than 105 megawatts, siting authority shall rest with Union County through the conditional use permitting process. When the forecasted power production is 105 megawatts or more, siting authority rests with EFSC, with Union County retaining advisory authority to ensure that local land use goals are met, and all natural resource concerns, and public concerns are addressed. Union County will send its findings and conclusions to EFSC.
- III. An applicant filing Application for a Site Certificate for a commercial wind power generation facility must seek land use approval to ensure that said facility complies with existing state and local land use statutes, rules, and goals. The applicant must seek this approval from Union County and/or EFSC. In either case, Union County will provide the applicant and EFSC with the county's restrictions, requirements, and recommendations. Due diligence by Union County officials being paramount, public hearings will be scheduled pursuant to Article 21.00 to allow Union County citizens to become informed about the proposed facility, and to provide the opportunity to make their positions or concerns known.
- IV. From the time of an Application for a Site Certificate, Union County shall respond to the applicant and EFSC within mandatory reporting timeframes, unless an extension is mutually agreed upon.
- V. Should an expansion to a proposed facility be proposed by an applicant during the planning process, the amendment must be submitted as a separate application to ensure that the proposed modifications meet all land use requirements.

#### **Section 52.04 Application**

The Applicant shall be responsible for analyzing and providing all plans and assessments as specified in Section 52.04.

#### **I. Identification of Potential Conflicts:**

Identification of potential conflicts shall include the nature and extent of the impact of the proposed facility on the cost of existing practices.

- A. Accepted farming and forest practices: As defined in ORS 215.203 (2) (c) on adjacent lands devoted to farm uses, or on surrounding resource lands. If the proposed facility exceeds 12 acres on high-value cropland, and/or 20 acres on other lands, a Goal 3 or Goal 4 exception is required per OAR 660-033-0130 (22).
- B. Other resource operations and practices, except for wind power generation facilities, on adjacent lands.
- C. Transmission Lines and Substations: All systems and associated structures needed to accomplish energy collection, transmission, monitoring, control, and connection

to substation(s) must be identified and shown in conjunction with all existing electrical, telephone, cellular, microwave, meteorological, gas, and fiber-optic systems. All accommodations and conflicts with existing or anticipated future systems must be identified. Aboveground structures must be minimized.

## **II. Plans and Assessments:**

All plans and assessments shall be in final form prior to filing of the application.

- A. **Transportation Plan.** A final Transportation Plan, with proposed recommendations shall follow the guidelines in Union County's Transportation System Plan (TSP). After consultation with the Union County Public Works Director, the Plan shall include transportation impacts from the proposed facility on local and regional road systems during and after construction. The Plan will designate the size, number, location, and nature of vehicle access points, and include speed limits for roads on the site. The final Plan, and/or changes during construction must be approved by the Union County Public Works Director.
- B. **Fish, Wildlife, and Avian Impact Monitoring Plan.** The monitoring plan shall be designed and administered by the applicant's accredited wildlife professionals, and will be in compliance with the United States Fish and Wildlife Service and the Oregon Department of Fish and Wildlife recommended monitoring requirements. Anticipated physical take of all wildlife must be estimated, and justified by empirical data. Said estimate shall be presented with corresponding data from mortality studies by similar existing facilities, and wildlife studies by accredited sources, and shall include the estimated impact the facility will have on wildlife habitat and use areas, and disruption to historical use due to identified conflicts and/or changes. Wildlife surveys will be completed for the entire site, and shall extend two miles beyond the project perimeter.
- C. **Emergency Management Plan.** A fire prevention and emergency response plan for all phases of the facility, reviewed and approved by the local Fire Chief and Sheriff who would normally respond to the site, shall address the major concerns associated with the site, including, but not necessarily limited to: terrain, seasonal conditions, fire hazards, access, available water, emergency response capabilities and limitations, and shall address the fire siting standards in the applicable zone.
  - 1. The plan shall identify/verify the fire district and/or contract fire department responsible for providing emergency services. High Rise Rescue/Fire Control shall be the responsibility of the facility owner/operator, with local emergency responders providing ground level assistance. The developer must provide, at no cost, training for local responders to obtain and retain certification necessary to ensure that responders are prepared to take action without endangering themselves or others.
  - 2. A Spill Prevention, Control, and Counter-Measure Plan (SPCC) shall be provided. The plan shall include verification that a local emergency service

provider has equipment, training, and personnel to respond to spills.

3. An Operations and Maintenance Plan detailing expected work force, local response capability (contract or otherwise), controlled access, and in the case of transmission lines, proof of emergency response capability in accordance with Oregon Public Utilities Commission (OPUC) rules governing operation and maintenance of such lines.

4. An Emergency Response Plan for responding to Natural and/or man-made emergencies or disasters. To minimize the potential for said emergencies or disasters, the following setbacks shall be included in the Plan:

(a) Each generating device shall be set back from an occupied building, and/or county approved building site, a distance of no less than two miles, as measured from the closest point of the generating device to the closest point of the building, and/or county approved building site,

(b) Each generating device shall be set back no less than one-half mile from abutting property lines belonging to non-participating property owners, and

(c) Each generating device shall be set back from the nearest public road, and its right-of-way, a distance of no less than one-half mile.

D. **A Damage Liability Funding Plan** addressing potential financial liability for damage/injury to adjoining property or persons resulting from fire, accident, etc. on the project site. The plan shall include proof of applicant's ability to obtain, and maintain sufficient liability insurance, or an equally sufficient escrow fund to cover reasonable projected damage estimates. A Covenant Not to Sue, by the applicant, with regard to generally accepted farming practices shall be recorded with the Union County Clerk's Office. Generally accepted farming practices shall be consistent with the definition of Farming Practices under ORS 30.930. The applicant shall covenant not to sue owners, operators, contractors, employees, or invitees of property of zoned for farm use or for generally accepted farming practices.

E. **Erosion Control Plan.** An Erosion Control Plan, developed in consultation with the Union County Planning Department and the Union County Road Department (weed supervisor), shall include the seeding of all road cuts, or related bare road areas as a result of any construction, demolition, or rehabilitation, with an appropriate mix of native vegetation, or vegetation suited to the area. The applicant shall have a National Pollution Discharge Elimination System (NPDES) permit, if one is required.

F. **Weed Control Plan.** A comprehensive Weed Control Plan, addressing prevention and control of all Union County identified noxious weeds, shall be provided. The

plan shall cover all phases of the proposed project during preparation, construction, operation, retirement, and restoration. The Plan shall include monitoring and treatment to ensure that weeds do not produce viable seeds. The plan will include establishing monitoring sites outside the project perimeter to determine if there is an increase in weeds near the project perimeter as compared to control sites located one-half mile from the project perimeter. If weeds are dispersed outside the project perimeter, as evidenced by the monitoring data, the developer will treat those areas also. Impacted property owners who do not use chemical weed control may require other weed control measures, whether or not said property is a certified Organic farm.

**G. Socioeconomic and Health Impact Assessment.** A comprehensive Socioeconomic Impact Assessment of said facility shall be provided. The assessment shall address, but not be limited to, effects upon the social, economic, cultural, visual, public service, and recreational aspects of affected communities, and/or individuals. Effects both positive and negative shall be presented equally, so that decision makers can maximize benefits, and mitigate problematic outcomes. All health related concerns that have been identified concerning similar industrial systems must be identified along with peer-reviewed studies and analyses demonstrating the actions required to mitigate their impacts. Any existing systems that might contribute to the cumulative health impact of the proposed facility must be identified and quantified to the extent possible.

**H. Assessment of Potential Facility Impacts on:**

1. Wetlands and streams, including intermittent streams, springs, and drainages,
2. All fish, wildlife, and avian species of concern, threatened and endangered species, as well as all state or federally protected wildlife species,
3. Fish, wildlife, and avian species and their habitats, as defined in Oregon Department of Fish and Wildlife Administrative Rules (OAR 635-415-0025). Information must include, but not necessarily be limited to: Category 1 and Category 2 Habitats,
4. Criminal activity (vandalism, theft, trespass, etc.) Include a plan and actions proposed to avoid, minimize or mitigate negative impacts,
5. Open space, scenic viewsheds, historic, cultural, and archaeological resources as identified and inventoried in an updated Union County Land Use Plan Goal 5 Resources catalog,
6. Visual Impacts: Visual changes due to construction, operation, and retirement of the facility need to be described in a manner that displays those changes from multiple locations within visual range. Those locations must include all municipalities, reserves, public highways, parks, viewpoints, reservoirs and

lakes, archaeological sites, and the nearest residential structures,

7. **Recreational Activity Impacts:** Each existing and potential recreational activity (e.g., Hunting, Fishing, Camping, Hiking, Skiing, Photography, Snowmobiling, etc.) and the impact of the proposed facility on that activity must be identified. Mitigation measures for those impacts need to be demonstrated to the satisfaction of multiple participants. Those measures must be accompanied by documentation of effectiveness at existing similar facilities, and
8. **Property Value Impacts:** Comparable properties and verified financial impacts of similar facilities must be presented along with the sources of analysis. There shall be multiple examples of each financial comparison. Alternative approaches considered by the applicant to resolve negative financial impact must also be presented and verified.

**I. Retirement, Restoration, and Financial Assurance Plan.** Applicant shall provide a comprehensive Retirement, Restoration, and Financial Assurance Plan, prepared by the applicant with the approval of the affected landowner(s). The retirement and restoration standard requires that the facility site can be restored to a useful, non-hazardous condition at the end of the facility's useful life, should either the certificate holder stop construction prior to completion of the facility, or the facility cease to operate.

**1. Retirement and Restoration.**

To satisfy the standard, the applicant must show that the site can be restored to a non-hazardous condition suitable for its existing zoning. In past final orders, the Union County Board of Commissioners (UCBOC) has interpreted the term "useful non-hazardous condition" to mean a condition that will allow use consistent with the applicable local comprehensive land use plan and land use regulations.

To ensure that the applicant is able to achieve the required level of site restoration, Union County requires the certificate holder to prevent the development of any conditions on the site that would preclude restoration of the site to a useful, non-hazardous condition.

The applicant is obligated to retire the facility, and restore the site, upon permanent cessation of operation, or cessation of construction prior to completion of the project. A six month cessation of operation or construction of the project will trigger the need to begin retirement and restoration. Before the applicant restores the site, the UCBOC must review and approve a final retirement plan. The plan must, at a minimum, include provisions for dismantling all aboveground structures and equipment, removing nacelles and rotors, pad-mounted transformers and related aboveground equipment, or their equivalents, concrete turbine tower and transformer pads and underground foundations to a depth of three feet, gravel or crushed rock from adjacent turbine pad areas, Operations and Maintenance (O&M) buildings, all aboveground transmission lines, Supervisory Control and

Data Acquisition (SCADA) lines and support structures, grading the surface with all excavated areas backfilled with topsoil, and all affected areas replanted with native plant seed mixes or agricultural crops, as appropriate. To assure that the certificate holder is able to achieve the required level of site restoration, the applicant must submit an additional final retirement plan, describing the individual activities necessary to restore the site to a useful non-hazardous condition.

All lubricants, oils, grease, antifreeze, cleansers, degreasers, and other substances required for operation and maintenance of the facility must be stored in a secure, aboveground manner meeting all EPA and DEQ requirements. Any contamination resulting from spills or leakage will be covered by the contingency included in the cost estimate for the facility site restoration plan.

Upon retirement of the facility, the certificate holder shall remove all O&M structures or convert those structures to use by the property owner(s) with their consent, and with approval by the UCBOC.

## **2. Financial Assurance.**

OAR 345-022-0050 (2) requires that the County find that the applicant has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount sufficient to restore the facility site to a useful non-hazardous condition. The Retirement and Financial Assurance standard protects Union County and its citizens in the event that the certificate holder fails to perform its obligation to restore the site under any circumstances. The bond or letter of credit must remain in force until the certificate holder has fully restored the site.

If the certificate holder elects to use a bond to meet the requirements of Union County, the certificate holder shall ensure that the surety is obligated to comply with the requirements of applicable statutes, County rules, and the site certificate when the surety exercises any legal or contractual right it may have to assume construction, operation, or retirement of the facility. The certificate holder shall also ensure that the surety is obligated to notify the County that it is exercising such rights, and to obtain any County approvals required by applicable statutes, County rules, and the site certificate, before the surety commences any activity to complete construction, operate, or retire the facility.

## **3. Estimated Cost of Site Restoration.**

The County's recommended financial assurance amount will be based on assumed circumstances under which the restoration cost would be highest, to provide a fund that is adequate for the County to pay site restoration costs if the certificate holder fails to perform its retirement obligations. Following the estimating procedure outlined in the state EFSC Facility Retirement Cost Estimating Guide assumes a facility configuration that would result in the highest restoration cost, consistent with the maximum design flexibility for the applicant.

The applicant is required to utilize a qualified professional project engineer to



prepare a cost estimate utilizing the described resources. The County will also prepare an estimate based on the applicant's site plan, utilizing the same resources.

The County will approve the more acceptable estimate at its discretion. Based on this cost estimate, the County will require the applicant to obtain a bond or letter of credit for that amount. Before beginning construction, the certificate holder shall submit to Union County a bond or letter of credit in the amount described, naming Union County as beneficiary or payee. The initial bond or letter of credit amount is to be adjusted to the date of issuance as described in "a" below. The certificate holder shall adjust the amount of the bond or letter of credit on an annual basis thereafter, as described in "b" below.

- a. The certificate holder may adjust the amount of the surety bond or letter of credit based on the final design configuration of the facility and turbine types selected by applying the unit costs and general costs illustrated by the Facility Retirement Cost Estimating Guide adjusted to the date of issuance as described in "B" below, and subject to approval by the County.
- b. The certificate holder shall adjust the amount of the surety bond or letter of credit, using the following calculation, and subject to approval by the County. Adjust the subtotal component of the bond or letter of credit amount to present value, using the U.S. Gross Domestic Product Implicit Price Deflator, Chain Weight, as published in the Oregon Department of Administrative Services' "Oregon Economic and Revenue Forecast", or by any successor agency (the "index").
- c. The certificate holder shall use a form of bond or letter of credit approved by the County.
- d. The certificate holder shall use an issuer of the bond or letter of credit approved by the County.
- e. The certificate holder shall describe the status of the bond or letter of credit in the annual report submitted to the County.
- f. The bond or letter of credit shall not be subject to revocation or reduction before retirement of the facility site.

### **Section 52.05 Application Review Requirements**

- I. In a review process, Union County must find that an applicant can design and construct the facility to minimize cumulative adverse environmental and socio-economic effects in the vicinity sufficiently to satisfy the cost versus benefit analysis by the County. There must be adequate net benefit to support proceeding with the review. Union County must also verify that the application is in complete compliance

with this document, especially section 52.04. Conditions imposed by Union County shall be in accordance with the Union County Land Use Plan, County Zoning, Partition & Subdivision Ordinance, and Oregon State Law, as well as federal laws.

- II. Prior to commencement of any construction, applicant shall obtain all other permits necessary, e.g. building permits, rural address permit, road access and other permits from the permitting authority.
- III. The following requirements and restrictions apply to the siting of any Commercial Wind Power Generation Facility:
  - A. Said facility shall be located on land zoned A-1, A-2, A-3, or A-4. No portion of the facility shall be within 2 miles of properties zoned residential use, or designated on the Union County Land Use Plan as residential,
  - B. Facility towers shall be located to avoid negatively impacting the viewshed from the Grande Ronde Valley floor,
  - C. Facility design shall be modified to protect and preserve existing vegetation, trees, water resources, wildlife habitat, and/or other significant natural resources,
    1. To reduce the need for fish or wildlife mitigation measures, facility design must avoid any direct or indirect impact on any parts of Union County that have been designated as:
      - (a) Category 1 or Category 2 Habitat as defined by OAR 635-415-0025, and
      - (b) Threatened or Endangered Plant Habitat.
    2. Human activity has a cumulative negative impact on wildlife, Therefore, a one mile buffer zone shall be maintained around Category 1 and Category 2 Habitats (OAR 635-415-0025). Reference is made to the big-game monitoring study previously completed at the Elkhorn Valley Wind Facility, in Union County, which helped define the effects of a wind energy project on the distribution of big game populations.
  - D. Generating devices, and transmission line spacing shall be designed and built to discourage bird nesting, and wildlife attraction,
  - E. Generating devices shall be designed to minimize noise, strobe, vibration, or other detrimental effects,
  - F. The electrical cable collector system shall be installed underground at a minimum depth of four feet; shallower depths may be authorized by Union County on a case-by-case basis, where appropriate notification and safety measures are taken. The cable collector system shall be installed to prevent adverse impacts on agricultural

operations,

G. Necessary permanent O&M buildings shall be located off-site in one of Union County's appropriately zoned areas. Such a building may be constructed on-site if: (1) the building is designed and built in a manner generally consistent with the character of similar buildings used by commercial farmers or ranchers, and (2) the building will be removed or converted to farm use upon facility decommissioning, and

H. The facility shall comply with the Specific Safety Standards for Wind Facilities delineated in OAR 345-024-0010 (as adopted at the time of application).

IV. To the extent feasible, Union County will accept information presented by an application for EFSC proceedings in the form, and on the schedule required by EFSC.

#### **Section 52.06 Amendments**

I. Commercial Wind Power Generation Facility requirements shall be facility specific, but can be amended within one year of siting certification, as long as the facility does not exceed the boundaries of the original conditional use permit. Amendment more than one year after siting certification shall require the applicant to update the original application.

II. An amendment to the conditional use permit shall be required if proposed facility changes would result in the total land area taken out of agricultural production to exceed 12 or 20 acres, whichever is applicable.

III. A new Application shall be required if proposed facility changes would:

A. Increase the number of generating devices, generating capacity, height or ground clearance of generating devices, or increase the overall generating capacity of the facility,

B. Increase the land area taken out of agricultural production sufficiently to trigger taking a Goal 3 exception, and

C. Require an expansion of the established facility boundaries.

#### **Section 52.07 Annual Review**

I. Within 60 days after the end of each calendar year, for the life of the project, the facility owner/operator shall provide Union County an annual report containing the following information:

- A. Monthly energy production,
  - B. A summary of facility changes not requiring facility amendments,
  - C. A summary of the Fish, Wildlife, and Avian Impact Monitoring Program, to include, but not be limited to, bird and bat injuries, fatalities, fish and wildlife impacts, operational changes, Monitoring results, and any recommendations for changes to the Monitoring Plan,
  - D. Monitoring results and progress report regarding revegetation plan and weed control measures, including a record of herbicide use, and
  - E. Summary Comments. (e.g. problems, needed adjustments, suggestions, etc.).
- II. The Annual Review shall be presented in a public forum, before the Union County Commissioners.