

Bylaw 1491 - Schedule "A"

WIND ENERGY FACILITY DISTRICT (WEF)

PURPOSE

The purpose of this district is to provide for the development of wind power generators which feed power into the provincial grid. It shall take the form of an overlay district in which the requirements of the existing Land use District will continue in effect for all uses other than Wind Energy Facilities and associated uses. In addition to the requirements of the General Land Use Regulations and Schedules, the following Regulations shall apply to any Wind Energy Facility Application.

DEFINITIONS

The following definitions apply to this schedule:

Blade - An element of a WEF rotor, which acts as a single airfoil, thereby extracting kinetic energy directly from the wind.

Blade Clearance - In reference to a horizontal axis rotor, the distance from grade to the bottom of the rotor's arc

Horizontal Axis Rotor - A wind energy conversion system, typical of conventional or traditional windmills, where the rotor is mounted on a downward 5 percent angle to the earth's surface

Over Speed Control - A device which prevents excessive rotor speed

Rotor's Arc - The largest circumferential path travelled by a WEF blade.

Total Height - The height from grade to the highest vertical extension of a WEF. In the case of a WEF with a horizontal axis rotor, total height includes the distance from grade to the top of the tower, plus the distance from the top of the tower to the highest point of the rotor's arc.

Towers - The structure, which supports the rotor above grade.

Vertical Axis Rotor - A wind energy conversion system where the rotor is mounted on an axis perpendicular to the earth's surface

1. PERMITTED USES

1. Accessory buildings and uses
2. Small Scale Wind Energy Facilities – Maximum Capacity 10kW, Maximum height 30 Meters, Maximum Diameter 10 Meters

2. DISCRETIONARY USES

1. Wind Energy Facilities
2. Transformers and Transmission towers
3. Other Uses consistent with the Definition or General Purpose of the Land Use District as approved by the Municipal Planning Commission

3. MINIMUM LOT AREA

Existing title or an unsubdivided quarter section – A Development Permit is required for each Wind energy Facility that is to be constructed.

4. SETBACKS

1. Where, in the opinion of the Development Authority, the setbacks referred to in section 5 are not sufficient to reduce the impact of a WEF from a public roadway or a primary highway, the Development Authority may increase the required setback.
2. A WEF should not be located less than four times the height of the WEF, as measured from the ground to the highest point of the rotor's arc, from a residential dwelling unit; but in all instances, the minimum setback applied shall be in accordance with AEUB (Alberta Energy and Utilities Board) stipulations or standards.

5. SPECIAL SETBACKS

- 1 A WEF shall be located so that the horizontal distance measured at grade from the tower to any road allowance boundary is at least the total height of the WEF.

6. MINIMUM INFORMATION REQUIREMENTS

- 1 All development applications for a WEF shall be accompanied by:
 - (a) An accurate site plan showing and labeling the information including the location of overhead utilities on or abutting the subject lot or parcel, and contours of the land and access roads;
 - (b) A visual representation including scale elevations, photographs and/or digital information of the proposed WEF showing total height, tower height, rotor diameter, color and the landscape;
 - (c) The manufacturer's specifications indicating:
 - (i) The WEF rated output in kilowatts,
 - (ii) Safety features and sound characteristics,
 - (iii) Type of material used in tower, blade, and/or rotor construction,
 - (d) An analysis of the potential for noise at the site of the installation,
 - (e) The boundary of the parcel containing development,
 - (f) And any habitable residence within a 2 km (1.2 miles) distance;
- 2 A report regarding any public information meetings or other process conducted by the developer;
- 3 Any impacts to the local road system including required approaches from public roads having regard to County standards;
- 4 Preliminary reclamation/decommissioning plans

7. REFERRALS

1. As a condition of approval on a development application for a WEF, the developer:
2. Shall be responsible for providing the appropriate reports and/or obtaining the approvals from the following:
 - (a) Alberta Energy and Utilities Board,
 - (b) Transport Canada,
 - (c) Navigation Canada,
 - (d) Alberta Community Development;
3. May be required to obtain approval from Alberta Environment if the proposal is on crown land or located on or in close proximity to lands identified as environmentally sensitive areas.

8. DECOMMISSIONING

1. Once a WEF has discontinued producing power for a minimum of two years, the WEF operator shall be required to provide a status report. A review of the status report by the Development Authority may result in a request for the WEF to be decommissioned. Failure to comply with a decommissioning request may result in the issuance of a stop order by the designated officer in accordance with the provisions of the Municipal Government Act.

9. MINIMUM BLADE CLEARANCE

1. The minimum vertical blade clearance from grade shall be 7.5 m (24.6 ft.) for a WEF employing a horizontal axis rotor unless otherwise required by the Development Authority.

10. TOWER ACCESS AND SAFETY

1. To ensure public safety, the Development Authority may require that:

(a) A security fence with a lockable gate shall surround a WEF tower not less than 1.8 m (5.9 ft.) in height if the tower is climbable or subject to vandalism that could threaten tower integrity;

(b) No ladder or permanent tower access device shall be located less than 3.7 m (12.1 ft.) from grade

(c) A locked device shall be installed on the tower to preclude access to the top of the tower;

2. All of the above is to be provided or such additional safety mechanisms or procedures be provided as the Development Authority considers reasonable and appropriate;

3. The use of tubular towers, with locked door access, will preclude the above requirements.

11. DISTRIBUTION LINES

1. All power lines from the approved WEF up to the point of interconnection of the grid should be underground except where the Development Authority approves overhead installations.

12. COLOUR AND FINISH

1. Unless otherwise required by the Development Authority, a WEF shall be finished in a non-reflective matte and in a color which minimizes the obtrusive impact of a WEF to the satisfaction of the Development Authority.

2. No lettering or advertising shall appear on the towers or blades. In other parts of the WEF, the only lettering will be the manufacturers and/or owner's identification or municipal symbol

13. MULTIPLE WECS

1. Two or more wind energy conversion systems on a parcel or lot will be considered a multiple WECS for the purposes of this bylaw.

2. The Municipal Planning Commission may approve multiple WECS on a case-by-case basis having regard for:

- (i) Proximity to other immediate land uses,
- (ii) Density of WECS,
- (iii) Underlying land uses.

3. The Municipal Planning Commission may notify adjacent landowners in order to solicit the views of the public in regard to the proposal prior to the Municipal Planning Commission making a decision.

14. APPROVAL PROCESS

1. The Development Authority may apply any standards that are provided for in the underlying district.

2. As WEF are categorized as a discretionary use, the Development Authority may approve WEF on a case-by-case basis having regard for:

- (a) Information provided in the application,
- (b) Proximity to other land uses in the immediate area,
- (c) Consideration of the cumulative effect of all WEF approved or proposed in the immediate area,
- (d) Underlying utilities,
- (e) Information received from the circulation of the application and the public.

15. TIME EXTENSIONS FOR APPROVALS

1. Any portion of a project not completed within two years of approval shall require an application for a time extension. The time extension application shall be considered by the MPC and may be granted in one year increments.