

6.6. PERFORMANCE STANDARDS

6.6.6. Revision

6.6.6. Wind Energy Systems

6.6.6.1. Wind Energy Systems (WES) are subject to a Development Plan Review granted by the Planning Board and to the following conditions, unless waived or adjusted by the Planning Board as is consistent with the purposes of this Section.

a) Area and Height.

A Small Wind Energy System (SWES) shall be located on a parcel of forty thousand (40,000) square feet minimum or on Town owned property. For a SWES the blade tip height, defined as combined tower and turbine height, shall not exceed eighty (80) feet measured from the average elevation of the existing grade at the base of the tower to the highest reach of the blade tip of the turbine.

A Commercial Wind Energy System (CWES) is located on a minimum of 400,000 square feet (10 building acres) or on Town owned property. The maximum height shall be determined by the Planning Board and/or according to manufacturer recommendation, not to exceed FAA Regulations.

b) Setback.

A SWES and CWES minimum horizontal distance shall be measured from the base of the tower structure to any property line or road right-of-way and shall be the greater of either the blade tip height plus ten (10) feet or the "fall zone", as determined by the Wind Turbine Chart or Engineering Standards supplied by the manufacturer. No part of any WES, including guy wire and anchors, may extend closer to the property boundaries than the setback for the zoning district in which it is located, as provided in the dimensional table in Section 5.0. of this bylaw.

c) Security.

The system is to be designed to prevent unauthorized access.

d) Appearance and Design.

The system shall be of monopole design with appropriate bracings, unless otherwise approved by the Planning Board, and a non-reflective exterior color designed to blend with the surrounding environment. No logos, designs, decorations, or writing shall be visible at or beyond the property line so that the visual character of surrounding neighborhoods and the community is minimally affected by site selection, turbine design or appearance, buffering, screening or lighting.

e) Cables.

All electrical cables from the tower base on all connected facilities are to conform to the Massachusetts Electrical Code *as directed by the Building Official*.

6.6.6.2. Construction, Operation and Maintenance.

a) An Application for a Wind Energy System:

A review for a Wind Energy System (WES) shall include a plan for the general procedures for safe and effective operation and maintenance of the facility and the following:

1. SWES. A schematic plan to scale showing placement of the tower distance to all property lines and abutting dwellings, proposed elevations, public and private roads, above ground utility lines, any other significant features and any measures designed to mitigate the impact of SWES. Any portion of these requirements may be waived by the Planning Board, if, in its opinion, the engineering/manufacturing information submitted is sufficient for the Board to make a decision.
2. CWES. A site plan, which is prepared to scale, stamped by a professional land surveyor, registered landscape architect or licensed civil engineer, showing, in addition, to other applicable requirements for a Site Plan, the location of the proposed WES and any associated buildings or appurtenances, distances to all property lines and abutting dwellings, existing and proposed structures, existing and proposed elevations, public and private roads including temporary access roads, above and below ground utility lines, any other significant features or appurtenances, and any measures designed to mitigate the impacts of the WES. Any portion of these requirements may be waived by the Planning Board, if in its opinion, the engineering/manufacturing information submitted is sufficient for the Board to make a decision.
3. A plan for the construction, operation, maintenance and removal of wind facilities, which shall be consistent with all other applicable Town, State and Federal requirements, including all applicable health and safety regulations *shall be submitted to the Planning Board*. Evidence shall be submitted to the Planning Board that the utility has been informed of the customer's plans and approval for an intertie agreement *has been obtained*.

b) Codes.

Building Permit Applications for small wind energy systems shall comply with the State Building Code and all applicable *State Electrical Codes*.

c) Noise.

Wind Energy Systems shall comply with the Massachusetts noise regulations (310 CMR 7.10).

d) Height.

WES towers shall comply with the above applicable section or with applicable FAA regulations, whichever is more restrictive.

e) Abandonment.

Unless authorized by written approval from the Planning Board, a WES shall be considered to be abandoned if it is not operated for a period of two (2) years, and shall be removed. If it is designated a safety hazard by the Building Commissioner, the owner shall correct the hazard or remove the WES within ninety (90) days. If the property owner fails to correct the safety hazard or to remove the wind energy system in accordance with the requirements, the Town may physically remove the WES at the owner's expense.

f) Removal.

Removal of a WES, any equipment shelters, and security barriers from the subject property requires proper disposal of the waste materials from the site in accordance with Local and State solid waste disposal regulations and restoration of the location of the WES to a stable condition with vegetation sufficient to prevent erosion and sedimentation.

g) Fees.

SWES. The applicant shall pay all costs, including application fee, review and inspecting fees as deemed appropriate by the Planning Board Fee Schedule.

CWES. The applicant shall pay all costs, including application fee, peer review and inspecting fees as determined by the Planning Board Fee Schedule.

h) Insurance.

Evidence of insurance coverage for all potential damages relating to a CWES shall be provided prior to construction.

i) Inspections.

Annual inspections to determine certification, safety and appearance shall be performed by the Building Commissioner.

j) Bonds.

An original Bond for a CWES shall be required to cover the cost of construction. An annual maintenance bond shall be posted as directed by the Planning Board Fee Schedule.

