**ARTICLE 2** To see if the Town will vote to amend Chapter 10 of the General By Laws, known as the Zoning By Laws, by inserting in Section VI.D.1 the words "not greater than 14 feet in height above average grade" between the words "accessory use" and "shall", so that said Section VI. D.1 reads

"In a Residence AA, A, B or C district no building except a one-story building of accessory use, not greater than 14 feet in height above average grade, shall be erected or maintained within 30 feet of the rear lot line, provided that no building need be set back from the rear lot line more than 30 percent of the mean depth of the lot."

and to act on anything relating thereto.

Submitted by the Board of Selectmen

RECOMMENDED that the Town vote to amend Chapter 10 of the General By Laws, known as the Zoning By Laws, by inserting in Section VI.D.1 the words "not greater than 20 feet in height above average grade" between the words "accessory use" and "shall", so that said Section VI. D.1 reads

"In a Residence AA, A, B or C district no building except a one-story building of accessory use, not greater than 20 feet in height above average grade, shall be erected or maintained within 30 feet of the rear lot line, provided that no building need be set back from the rear lot line more than 30 percent of the mean depth of the lot."

**COMMENT**: The Warrant Committee concurs with the Planning Board in recommending a height restriction of 20 feet for accessory structures within 30 feet of the rear lot line. The Committee shared a number of the concerns expressed by the Planning Board in selecting a number but feels that the height of 20 feet provides for the appropriate aesthetics in design while preventing the abuse of the current zoning where homeowners add a second story at a later time to an existing one-story structure. The Warrant Committee understands from the Planning Board that they will be reviewing this section of the Zoning Bylaws in detail with the view to presenting an entirely revised Section at the May 2011 Annual Town Meeting. The Planning Board feels that inserting a height restriction now will mitigate or ameliorate the current loophole until a more thorough review can be accomplished.

**ARTICLE 3** To see whether the Town will vote to amend Chapter 10 of the General Bylaws known as the Zoning bylaws, by striking Section IV.D and by substituting the following Section IV.D

## SECTION IV. D. Wind Turbines

- 1. <u>Definition</u>. A wind turbine consists of a foundation, a tower, a generator located at the top of the tower, associated wiring and a rotor with two or more blades. It may include an accessory structure necessary for operations. The height of a wind turbine shall be measured from the grade at its base to the tip of a rotor blade at its highest point.
- 2. <u>Authorization of up to Two Wind Turbines.</u> Up to two wind turbines may be erected and maintained on a parcel of land owned by the Town subject to the requirements specified in this section. There shall be only one or two wind turbines erected, maintained and operated pursuant to this section. The turbine(s) shall at all times be owned by the Town and sited on Town-owned land. The wind turbine(s) may be operated, maintained and managed by experienced persons or entities under contract with the Town.
- 3. <u>In applicable Zoning Provisions</u>. The requirements set out in Sections III, V, VI, VII and VIII D of the zoning bylaws shall not be applicable to the wind turbine and its components on this site.

## 4. Requirements for Wind Turbine(s).

- (a) Siting: The wind turbine(s) shall be sited on a parcel of land owned by the Town at least 1200 feet from the nearest dwelling and at least 1100 feet from the nearest state highway and at least 1200 feet from the nearest public town street, which is not separated from the selected site by the state highway, and at least 100 feet from the green and fairway of any golf course. Siting of the wind turbine(s) shall be supported by a study concluding that the selected site is a good wind energy project site and by a study concluding that siting the wind turbine(s) on the selected site would minimize any adverse environmental consequences and any adverse impacts on historical or archeological sites.
- (b) <u>Height:</u> The wind turbine(s) shall in no event exceed 480 feet in height. If the Town determines that a lesser height will reasonably enable performance sufficient to make the wind turbine(s) project financially feasible to the Town in a manner that efficiently generates the desired amount of electricity (not less than 1.5 megawatts in rated capacity), the height of the wind turbine(s) shall not exceed such lesser height. The height of the tower and its location shall be approved by state and federal entities if such approval is legally required.
- (c) Noise: As the wind turbine ages, it shall be properly maintained and serviced so as to ensure continued reasonably quiet operation at all times. The wind turbine(s) and appurtenant equipment shall be reasonably quiet, comparable with other such turbines and equipment. Under no circumstances shall the noise level of actual operations of the wind turbine(s) and of the appurtenant equipment exceed the standards set in the Massachusetts DEP's Noise Control Regulation, 310 CMR 7.10 or successor regulatory provision.

- (d) Ownership: The wind turbine(s) shall be constructed on town-owned land in such manner and under such terms and conditions as may be authorized by the Board of Selectmen using grants, gifts, and other financing. Following construction the wind turbine(s) shall be owned by the Town.
- (e) Operations: During its useful life or until such earlier time as its operations permanently cease, the wind turbine(s) shall be operated, maintained and managed by one or more persons or entities skilled in such operation, maintenance and management (the "operator"). The operator shall be under contract with the Board of Selectmen. The contract shall provide terms and conditions pursuant to which the wind turbine shall be operated and maintained and pursuant to which all necessary and appropriate charges and expenses shall be paid from revenues of the wind turbine(s). A separate reserve from these revenues shall be maintained by the Town Treasurer for unforeseen contingencies and for the eventual dismantling of the wind turbine(s). The operator shall have the responsibility and obligation to maintain all parts of the wind turbine(s) and associated structures and equipment in good condition providing for the safe, efficient and quiet generation of electricity. The operator shall have the responsibility to operate the wind turbine in the manner for which it was designed, safely, efficiently and quietly. In the event of any malfunction of or damage to the wind turbine the operator shall take all necessary steps to remedy the malfunction or to repair the damage as quickly as reasonably possible. At the end of the useful life of the wind turbine or at such earlier time as the wind turbine(s) can no longer generate electricity safely, efficiently and quietly, the operator shall notify the Town, and the wind turbine(s) shall be removed and the site restored to an attractive natural condition.
- (f) <u>Lighting and Signs:</u> The wind turbine(s) shall carry aircraft warning lights as required under federal law, regulation or permit. The wind turbine(s) shall carry no logos or signs except as authorized by the Town's sign regulations.
- 5. <u>Contents of Application:</u> The application for a building permit shall be in the usual form but shall also include the following:
- 1. GIS maps showing the proposed site of the wind turbine(s). The topography, all significant natural features, lot lines and identification of lot owners, all existing ways and trails, and all existing power lines shall be shown with reasonable accuracy.
- 2. A plan showing the distances from the proposed site of the closest residence, the nearest state highway, the nearest public street not separated from the proposed site by a state highway, and the nearest fairway and green of a golf course. Distances can be calculated using the geological survey map of the area produced by the United States Geological Survey.
- 3. A site plan showing all site work necessary for the construction and operation of the wind turbine(s), including specifications for: clearing; foundation work; grading; and construction of power lines, access road, fencing, and accessory building.
- 4. Detailed plans for the wind turbine(s) including renderings showing the front, rear and side profiles of the wind turbine(s) in all material detail.
- 5. Elevations accurately depicting the wind turbine(s) on site.

- 6. Specifications of the wind turbine(s) including: height and diameter of tower; length, width and weight of blades; color and type of exterior finish; make and characteristics of the generator, including power output and noise characteristics.
- 6. <u>Compliance:</u> The requirements of this Section shall bind and be enforceable against both the Town and the operator then under contract with the Town or otherwise operating the wind turbine(s).

Submitted by the Board of Selectmen

RECOMMENDED that the Town vote to amend Chapter 10 of the General Bylaws known as the Zoning bylaws, by striking Section IV.D and by substituting the following Section IV.D

Section IV. D. Wind Turbines

- 1. <u>Definition.</u> A wind turbine consists of a foundation, a tower, a generator located at the top of the tower, associated wiring and a rotor with two or more blades. It may include an accessory structure necessary for operations. The height of a wind turbine shall be measured from the grade at its base to the tip of a rotor blade at its highest point.
- 2. <u>Authorization of up to Two Wind Turbines.</u> Up to two wind turbines may be erected and maintained on a parcel of land owned by the Town subject to the requirements specified in this section. There shall be only one or two wind turbines erected, maintained and operated pursuant to this section. The turbine(s) shall at all times be owned by the Town and sited on Town-owned land. The wind turbine(s) may be operated, maintained and managed by experienced persons or entities under contract with the Town.
- 3. <u>Inapplicable Zoning Provisions</u>. The requirements set out in Sections III, V, VI, VII and VIII D of the zoning bylaws shall not be applicable to the wind turbine and its components on this site.
- 4. Requirements for Wind Turbine(s).
  - (a) Siting: The centerline of the base of the wind turbine(s) shall be sited on a parcel of land owned by the Town at least 1200 feet from the nearest dwelling and at least 1100 feet from the nearest state highway and at least 1200 feet from the nearest public town street, which is not separated from the selected site by the state highway, and at least 500 feet from the green and fairway of any golf course. Siting of the wind turbine(s) shall be supported by a study concluding that the selected site is a good wind energy project site and by a study concluding that siting the wind turbine(s) on the selected site would minimize any adverse environmental consequences and any adverse impacts on historical or archeological sites.

- (b) <u>Height:</u> The wind turbine(s) shall in no event exceed 480 feet in height. If the Town determines that a lesser height will reasonably enable performance sufficient to make the wind turbine(s) project financially feasible to the Town in a manner that efficiently generates the desired amount of electricity (not less than 1.5 megawatts in rated capacity), the height of the wind turbine(s) shall not exceed such lesser height. The height of the tower and its location shall be approved by state and federal entities if such approval is legally required.
- (c) Noise: As the wind turbine ages, it shall be properly maintained and serviced so as to ensure continued reasonably quiet operation at all times. The wind turbine(s) and appurtenant equipment shall be reasonably quiet, comparable with other such turbines and equipment. Under no circumstances shall the noise level of actual operations of the wind turbine(s) and of the appurtenant equipment exceed the standards set in the Massachusetts DEP's Noise Control Regulation, 310 CMR 7.10 or successor regulatory provision.
- (d) Ownership: The wind turbine(s) shall be constructed on town-owned land in such manner and under such terms and conditions as may be authorized by the Board of Selectmen using grants, gifts, and other financing. Following construction the wind turbine(s) shall be owned by the Town.
- (e) Operations: During its useful life or until such earlier time as its operations permanently cease, the wind turbine(s) shall be operated, maintained and managed by one or more persons or entities skilled in such operation, maintenance and management (the "operator"). The operator shall be under contract with the Board of Selectmen. The contract shall provide terms and conditions pursuant to which the wind turbine shall be operated and maintained and pursuant to which all necessary and appropriate charges and expenses shall be paid from revenues of the wind turbine(s). A separate reserve from these revenues shall be maintained by the Town Treasurer for unforeseen contingencies and for the eventual dismantling of the wind turbine(s). The operator shall have the responsibility and obligation to maintain all parts of the wind turbine(s) and associated structures and equipment in good condition providing for the safe, efficient and quiet generation of electricity. The operator shall have the responsibility to operate the wind turbine in the manner for which it was designed, safely, efficiently and quietly. In the event of any malfunction of or damage to the wind turbine the operator shall take all necessary steps to remedy the malfunction or to repair the damage as quickly as reasonably possible. At the end of the useful life of the wind turbine or at such earlier time as the wind turbine(s) can no longer generate electricity safely, efficiently and quietly, the operator shall notify the Town, and the wind turbine(s) shall be removed and the site restored to an attractive natural condition.
- (f) <u>Lighting and Signs:</u> The wind turbine(s) shall carry aircraft warning lights as required under federal law, regulation or permit. The wind turbine(s) shall carry no logos or signs except as authorized by the Town's sign regulations.
- 5. <u>Contents of Application:</u> The application for a building permit shall be in the usual form but shall also include the following:

- 1. GIS maps showing the proposed site of the wind turbine(s). The topography, all significant natural features, lot lines and identification of lot owners, all existing ways and trails, and all existing power lines shall be shown with reasonable accuracy.
- 2. A plan showing the distances from the proposed site of the closest residence, the nearest state highway, the nearest public street not separated from the proposed site by a state highway, and the nearest fairway and green of a golf course. Distances can be calculated using the geological survey map of the area produced by the United States Geological Survey.
- 3. A site plan showing all site work necessary for the construction and operation of the wind turbine(s), including specifications for: clearing; foundation work; grading; and construction of power lines, access road, fencing, and accessory building.
- 4. Detailed plans for the wind turbine(s) including renderings showing the front, rear and side profiles of the wind turbine(s) in all material detail.
- 5. Elevations accurately depicting the wind turbine(s) on site.
- 6. Specifications of the wind turbine(s) including: height and diameter of tower; length, width and weight of blades; color and type of exterior finish; make and characteristics of the generator, including power output and noise characteristics.
- 6. <u>Compliance:</u> The requirements of this Section shall bind and be enforceable against both the Town and the operator then under contract with the Town or otherwise operating the wind turbine(s).

COMMENT: The Warrant Committee concurs with the Planning Board in recommending that the Town vote to amend the Zoning bylaws by striking the existing Section IV. D. and replacing it with the new language providing for as-of-right zoning for wind turbines. As noted in the report of the Warrant Committee, the driving force for this article are the requirements laid out by the State in the Green Communities Act. At the time of the May 2009 Annual Town Meeting, when the original zoning was created, it was not clear what the benefits would be to the Town, nor was the Town in a place to move forward with an application to be a Green Community. There is now greater clarity as to the process and benefits available to the Town that changing the zoning language to meet the provisions of the Green Community Act makes sense and provides the Town substantial benefit.