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**For Immediate Release**

## **EasthamWind Wind Energy for Eastham- Position Paper Zoning: A Top Concern**

**The Eastham Energy Commission's Position on the Issues**

### **Eastham Wind Siting & Setbacks:**

**Concerns voiced:** "Siting on this North Eastham site places turbines too close to homes. Setbacks should be maximized to minimize noise, flicker & views and to maximize safety." "I support renewable energy but not in a residential area." "I believe you guys have the right thing in mind, but Eastham, and perhaps the whole Cape, is the wrong place for this."

**EEC Position:** A zoning by-law that provides adequate protection through setbacks requirements and other regulations should satisfy the majority of resident's concerns. Setbacks equal to 1.5 times the total height of the structure to the highest point (blade-tip height) are appropriate for this site. The site has a dense tree cover around the turbines buffering most neighboring homes. On this site is a 197 ft cell tower, two active gravel pits, a town stump dump & composting area, Nstar transmission lines, and Tilcon's abandoned buildings, and is adjacent to busy Route 6 and the Eastham gun range. Eastham needs a Public Wind Energy Facility By-law. The ECC recommends that the town adopt the new, comprehensive Massachusetts Division of Energy Resources (DOER) model zoning by-law or incorporate its language.

**---More---**

Eastham (and other locations on the Cape) is a prime location for the development of wind energy because of the simple fact that wind is a constant and there is a significant need for clean, renewable energy in the State and the Nation.

The EEC did not arbitrarily recommend the North Eastham location in question. Rather, it relied on an assessment conducted by a highly reputable engineering firm that investigated a number of town-owned sites and ultimately recommended this one. Their reports are available on our website at [www.eastham-ma.gov](http://www.eastham-ma.gov).

In addition, the Committee relies heavily on the information included in two essential documents published by the US Department of Energy, Energy Efficiency and Renewable Energy, Wind Technologies Program:

- *Wind Energy Guide for County Commissioners* at [http://www.eere.energy.gov/windandhydro/windpoweringamerica/pdfs/wpa/county\\_commissioners.pdf](http://www.eere.energy.gov/windandhydro/windpoweringamerica/pdfs/wpa/county_commissioners.pdf)

And its companion publication:

- *New England Forum: Issues Affecting Public Acceptance* at [http://www.eere.energy.gov/windandhydro/windpoweringamerica/ne\\_issues.asp](http://www.eere.energy.gov/windandhydro/windpoweringamerica/ne_issues.asp)

**Precedence:**

Furthermore, the committee relies on the wisdom of those who have come before us.

With that in mind, we have reviewed and taken into consideration the following coastal Massachusetts installed turbines that are currently up and running:

**Coastal MA installed utility-class turbines**

- **Hull 1:** School at 262ft; nearest dwelling at 788ft
- **Hull 2:** Nearest dwelling at 465ft; dwellings at 500ft, 600ft; many dwellings between 700ft & 1,000ft.
- **MA Maritime Academy, Bourne:** Nearest dwelling at 525ft; home plate of ball-field at 150ft; office buildings at 150 ft; Beachmoor Inn & Restaurant at 500ft.
- **IBEW Dorchester:** Office building at 125 ft; Southeast Expressway at 200ft.

**AND**

- **Cell towers & utility poles have no special setbacks.**

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Additionally, the Committee has reviewed and suggests the following essential reading from the experts:

- **Massachusetts Division of Energy Resources Companion Document to Model Amendment to a Zoning Ordinance or By-law: Allowing Wind Facilities by Special Permit** at: <http://www.windaction.org/?module=uploads&func=download&fileId=1118>
  
- **The ECC has voted to recommend the following provisions from the state model as follows:**
  - **Massachusetts Division of Energy Resources, Model Amendment to a Zoning Ordinance or By-law: Allowing Wind Facilities by Special Permit:**

#### **4.1 Height**

Wind facilities shall be no higher than 400 feet above the current grade of the land, provided that wind facilities may exceed 400 feet if:

- (a) the applicant demonstrates by substantial evidence that such height reflects industry standards for a similarly sited wind facility;
- (b) such excess height is necessary to prevent financial hardship to the applicant, and
- (c) the facility satisfies all other criteria for the granting of a special permit under the provisions of this section.

#### **4.2 Setbacks**

Wind turbines shall be set back a distance equal to 1.5 times the overall blade tip height of the wind turbine from the nearest existing residential or commercial structure and 100 feet from the nearest property line and private or public way.

##### **4.2.1 Setback Waiver**

The special permit granting authority may reduce the minimum setback distance as appropriate based on site-specific considerations, if the project satisfies all other criteria for the granting of a special permit under the provisions of this section.

And:

#### **6.3 Noise**

The wind facility and associated equipment shall conform with the provisions of the Department of Environmental Protection's, Division of Air Quality Noise Regulations (310 CMR 7.10), unless the Department and the Special Permit Granting Authority agree that those provisions shall not be applicable. A source of sound will be considered to be violating these regulations if the source:

- (a) Increases the broadband sound level by more than 10 dB(A) above ambient, or

- (b) Produces a “pure tone” condition – when an octave band center frequency sound pressure level exceeds the two adjacent center frequency sound pressure levels by 3 decibels or more.

These criteria are measured both at the property line and at the nearest inhabited residence. Ambient is defined as the background A-weighted sound level that is exceeded 90% of the time measured during equipment hours. The ambient may also be established by other means with consent from DEP. An analysis prepared by a qualified engineer shall be presented to demonstrate compliance with these noise standards.

The special permit granting authority, in consultation with the Department, shall determine whether such violations shall be measured at the property line or at the nearest inhabited residence.

Based on the research of experts, as well as state and town precedents, the EEC makes its findings known in the proposed Public Wind Facility By-law, as amended herein. The ECC believes they have the best interests of the Town of Eastham and its residents in mind.

The proposed Public Wind Energy Facility By-law, as amended may be considered at the May 2007 Annual Town Meeting.

*Watch for more position papers over the next few months as the 2007 Annual Town Meeting nears.*