For Office Use Only Executive Office of Environmental Affairs
MEPA AnalystiAisling Eglington
Phone: 617-626- 1024

# NPC

# **Notice of Project Change**

The information requested on this form must be completed to begin MEPA Review of a NPC in accordance with the provisions of the Massachusetts Environmental Policy Act and its implementing regulations (see 301 CMR 11.10(1)).

Project Name Massachusetts Technology Collaborative				EOEA #: 13525		
Renewable Energy Trust, Cape Cod						
Energy Project						
Street: 2240 lyanough Road						
Municipality: West Barnstable 02668	Watershed: None					
Universal Tranverse Mercator Coord	inates:	Latitude: 41-41-36.85, NAD83 Longitude: 70-20-25.64				
Status of project construction: Construction is estimated to commence Summer 2007.						
Co-Proponents:						
1. Massachusetts Technology Collab	oo <u>rativ</u> e R	enewable Energy	' Trus	st		
Street: 75 North Drive						
Municipality: Westborough		State: MA	Zip	Code: 01581		
2. Cape Cod Community College						
Street: 2240 lyanough Road	· · · · · · · · · · · · · · · · · · ·					
Municipality: West Barnstable		State: MA	Zip	Code: 02668		
Name of Contact Person From Whom Copies of this NPC May Be Obtained: Paul Cleri						
Firm/Agency: R.W. Beck, Inc. S		Street: 550 Cochituate Road, 4-East				
Municipality: Framingham		State: MA	Zip	Code: 01701-9344		
Phone: 508-935-1846	Fax: 508	3-935-1888	E-ma	ail: pcleri@rwbeck.com		

In 25 words or less, what is the project change?

To mitigate potential impacts to air navigational transportation, the proposed turbine has been lowered and relocated to the northwest quadrant of the college campus.

See full project change description beginning on page 3.

Date of ENF filing or publication in the Environmental Monitor: May 10, 2005

Was an EIR required? 🔲 Yes 🛛 🖾 No; if yes,	
was a Draft EIR filed? Yes (Date:	) 🖾 No
was a Final EIR filed?  [Yes (Date:	) 🛛 No
was a Single EIR filed? 🔲Yes (Date:	) 🛛 No
May 2001	

Have other NPCs been filed? Yes (Date(s): )

If this is a NPC solely for <u>lapse of time</u> (see 301 CMR 11.10(2)) proceed directly to "ATTACHMENTS & SIGNATURES" on page 4.

### PERMITS / FINANCIAL ASSISTANCE / LAND TRANSFER

List or describe all <u>new or modified</u> state permits, financial assistance, or land transfers <u>not</u> previously reviewed:

Are you requesting a finding that this project change is insignificant? (see 301 CMR 11.10(6)) Yes No; if yes, attach justification. Please see Attachment I

Are you requesting that a Scope in a previously issued Certificate be rescinded?  $\Box$ Yes  $\Box$ No; if yes, attach the Certificate

Are you requesting a change to a Scope in a previously issued Certificate?  $\Box$ Yes  $\boxtimes$ No; if yes, attach Certificate and describe the change you are requesting:

Summary of Project Size & Environmental Impacts	Previously reviewed	Net Change	Currently Proposed			
LAND						
Total site acreage	129	1				
Acres of land altered	Approx. 2 acres	-1 acres	Approx. 1 acre			
Acres of impervious area	negligible		negligible			
Square feet of bordering vegetated wetlands alteration	not applicable		not applicable			
Square feet of other wetland alteration	not applicable		not applicable			
Acres of non-water dependent use of tidelands or waterways	not applicable		not applicable			
S	TRUCTURES		- <u>/</u>			
Gross square footage	~330,100		~330,100			
Number of housing units	12		12			
Maximum height (in feet)	400 feet	-147 feet	253 above ground level (AGL), 373 above mean sea level (AMSL)			

TRA	NSPORTATION				
Vehicle trips per day	2000-3000	2000-3000			
Parking spaces	1300	1300			
WATER/WASTEWATER					
Gallons/day (GPD) of water use	4000-10,000	4000-10,000			
GPD water withdrawal	4000-10,000	4000-10,000			
GPD wastewater generation/ treatment	4000-10,000	4000-10,000			
Length of water/sewer mains (in miles)	1-2 miles septic, no sewer	1-2 miles septic, no sewer			

Does the project change involve any new or modified:

1. conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97? □Yes ⊠No

2. release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

3. impacts on Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities?

4. impact on any structure, site or district listed in the State Register of Historic Place or the inventory of Historic and Archaeological Assets of the Commonwealth?

☐Yes ⊠No; if yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources? ☐Yes ☐No

5. impact upon an Area of Critical Environmental Concern? Yes No If you answered 'Yes' to any of these 5 questions, explain below:

**PROJECT CHANGE DESCRIPTION** (attach additional pages as necessary). The project change description should include:

(a) a brief description of the project as most recently reviewed

#### NOTE: The following describes the original project as planned:

#### Project Background

MTC and the Cape Cod Community College (CCCC) initially proposed to install a 1.5 MW wind turbine, approximately 397 feet tall, on the CCCC eampus in order to demonstrate, educate, and promote the use of renewable wind energy. The CCCC Wind Turbine was to be integrated into the educational curriculum of the Cape Cod Community College. It was intended also to serve to increase public awareness of the viability of renewable energy, and will provide economic benefits to low income residents in Massachusetts through the MTC's Low Income Initiative, and to CCCC in the form of lower electricity prices. MTC was to be responsible for overall management of the development process.

#### Educational Benefits and Use

The wind turbine, which was initially scheduled to be installed at Cape Cod Community College's campus in early 2006, was to provide an excellent teaching instrument for CCCC's environmental program as well as other courses at the college. The wind turbine was to enable the CCCC to further its goal of becoming an energy sustainable campus. The presence of the wind turbine was also to be a visual reminder for other departments at the college to relate sustainable issues to their subject areas. Furthermore, the turbine was planned for a location that is easily seen and may be visited by tourists who come to Cape Cod every year, and was to give residents of this area their first real experience with a modern, commercial-seale wind turbine.

CCCC is developing a renewable energy certificate program with a three-year grant from the National Science Foundation. The Renewable Energy Sources instructor was planning to demonstrate a working turbine for the ongoing classes, and, as we develop the certificate program, to make the wind turbine an integral part of any wind energy courses that are created. As the wind

industry develops in the northeast, the presence of a wind turbine at the college could make CCCC an ideal place to train students for careers in this rapidly growing wind energy industry, and the potential exists for developing a variety of courses related to this career path.

#### **Project Site**

The CCCC main campus is located in West Barnstable, north of Exit 6 of the Mid-Cape Highway at the junction of U.S. Route 6 and Massachusctts Route 132. The campus occupies approximately 129 acres. There are a total of twelve buildings on campus, which comprise approximately 330,000 square feet. Approximately 25 acres on campus are impervious, with buildings or pavement for parking and transportation; the balance of the campus is landscaped greenery, athletics fields, or forested. The original proposed location of the wind turbine, which is approximately 400 feet east of the Parking Lot 5, is principally forested with a mixture of dense hardwoods and conifers; the area is already partially developed by CCCC as a student recreation area, with walking paths and an extensive Frisbee-golf eourse. To construct the wind turbine unit at that location, a circular area approximately 260 feet in diameter, covering approximately 1.22 acres, would have been needed to be cleared and leveled. An access road approximately 400 feet long and 16 feet wide would have been required between the parking lot and the turbine site; it would be located at or near the northeast corner of Parking Lot 5.

#### **On-Site and Off-Site Alternatives and Impacts**

The principal impacts of the CCCC Wind Turbine project at the originally proposed location included potential views of the turbine from locations on and off the CCCC campus and potential noise impacts. Receptors near to that location included a number of residential homes, a YMCA complex, a private golf course, a small church, a highway rest area including a gas station and several fast-food establishments, and a nearby tourist/chamber of commerce information center. Impacts would have been greatest at some of the nearest residential receptors to the northwest of the campus property; however, these receptors would have been on the opposite side of the campus from the wind turbine. The nearest property line to the originally proposed wind turbine site is the Mid-Cape Highway and several un-developed parcels of land primarily owned by the Town of Barnstable and the Commonwealth.

The neighborhood topography is generally hilly and densely forested, providing good cover and visual impact mitigation for the originally proposed wind turbine at least during the seasons when one would expect leaf density to be greatest, although much of forestation appears to be coniferous suggesting good leaf density throughout the year. The hilly, densely forested area was expected to mitigate potential noise impacts. During off-peak, mid-day hours, noise from the Mid-Cape highway is noticeable and pervasive on the CCCC Campus, particularly near the originally proposed location for the wind turbine. It seems likely that the greatest noise component in this area after installation of the originally proposed wind turbine would have continued to be the highway.

A Phase I Avian and Bat Risk Assessment was conducted for the project in early 2005. The study offered a number of recommendations to reduce potential risk to birds and bats, and concluded that the project is likely to be of low risk to birds and resident bats, with potential impacts to migrating bats largely unknown. Although the Phase I assessment indicated low risk, in 2005 MTC also conducted spring songbird migration studies at the wind turbine site, and a similar study for fall songbird migration in order to gain information about migration behavior and interaction with wind turbines in New England. This radar study concluded the site presents a low mortality risk to birds.

#### Initial Original On-Site and Off-Site Mitigation Measures

MTC and CCCC have developed a comprehensive schedule of stakeholders, which we planned to use during the development phase of the originally proposed project to identify concerns that need to be addressed during project implementation. As discussed above, mitigation was to be provided primarily by the extensive buffer zone provided by the college campus surrounding the turbine site, the generally hilly topography in West Barnstable, and the heavily forested campus surroundings.

#### (b) a description of material changes to the project as previously reviewed,

To mitigate potential impacts to air navigational transportation, the proposed turbine has been lowered as well as relocated from the southeast quadrant of the college campus to the northwest quadrant of the college eampus. In general, the potential visual and noise impacts to potential receptors will be the same as the originally proposed project. A limited number of residential receptors may experience greater impacts; however, this will be offset by reduced impacts to other receptors.

The key changes to the project are; (i) the turbine height will be lowered from approximately 400 above grade to approximately 253 feet above grade, resulting in a 147 feet lower height; (ii) the relocation of the turbine from the southeast corner of the college campus, which was virgin forest, to the northwest corner of the campus, which is partially developed and much less forested; and (iii) a reduction in the area of land impacted, and an approximately 50% reduction in the number of trees to be cut. On balance, the net impact of the project on the environment should be reduced as a result of this project change.

(c) the significance of the proposed changes, with specific reference to the factors listed

## 301 CMR 11.10(6), and

Under 301 CMR 11.10 (6) the project change will not result in any environmental consequences and would be expected to result in less of an impact to the environment.

(d) measures that the project is taking to avoid damage to the environment or to minimize and mitigate unavoidable environmental impacts. If the change will involve modification of any previously issued Section 61 Finding, include a proposed modification of the Section 61 Finding (or it will be required in a Supplemental EIR).

Refer to NPC "PROJECT CHANGE DESCRIPTION, (b)".

#### **ATTACHMENTS & SIGNATURES**

Attachment 1. Justification that the proposed project change is insignificant.

Attachment 2. Secretary's most recent Certificate on this project

Attachment 3. Plan showing most recent previously-reviewed proposed build condition

Attachment 4. Plan showing currently proposed build condition

Attachment 5. Original U.S.G.S. map or good guality color copy (8-1/2 x 11 inches or larger) indicating the project location and boundaries

Attachment 6. List of all agencies and persons to whom the proponent circulated the NPC, in accordance with 301 CMR 11.10(7)

Signatures:

Signature of

Responsible Officer or Proponent

Signature of Responsible Officer or Proponent

641176

Signature of person preparing ENF (if different from above)

Martha brond

Dixie Norris

Vice President

09/06

Date

Name (print or type)

Administration & Finance

Title

Cape Cod Community

College

Firm/Agency

2240 lyanough Road

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Municipality/State/Zip

Phillip F. Holahan

Name (print or type)

Deputy Executive Director

and General Counsel

Title

Massachusetts Technology

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Martha Broad Name (print or type)

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