Commonwealth of Massachusetts Executive Office of Environmental Affairs ■ MEPA Office

ENF

Environmental Notification Form

	For Office Use Only
Executive	Office of Environmental Affairs

EOEA No.:/2993 MEPA Analystaethur Pugsley Phone: 617-626-

The information requested on this form must be completed to begin MEPA Review in accordance with the provisions of the Massachusetts Environmental Policy Act, 301 CMR 11.00.

Project Name: Nantucket Shoals Wind Turbine Generators							
Street: NA							
Municipality:		Watershed: Cape Cod					
Universal Transverse Mercator Coordinates:		Latitude: 41° - 09' - 30"N					
Zone: 19, easting (m): 428405, north 4556684	ning (m):	Longitude: -69° - 51' - 12"W					
Estimated commencement date: 3/15/05		Estimated completion date: 9/15/06					
Approximate cost: \$2,160,000,000		Status of project design: 60%complete					
Proponent: Winergy, LLC							
Street: 640 Montauk Highway							
Municipality: Shirley		State: NY	Zip Code: 11967-1124				
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Richard Podolsky, PhD.							
Firm/Agency: Technology Planning and		Street: Mill Wharf Plaza, Suite 208					
Management Corp.			·				
Municipality: Scituate		State: MA	Zip Code: 02066				
Phone: 781-545-1346	Fax: 781	I-544-3086	E-mail:				
			richard.podolsky@tpmc.com				
Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)? ☐ Yes Chapter 91 ☐ No							
Has this project been filed with MEPA b	res onapter 51						
		es (EOEA No) ⊠No				
Has any project on this site been filed with MEPA before?							
		es (EOEA No) ⊠No				
Is this an Expanded ENF (see 301 CMR 11.0 a Single EIR? (see 301 CMR 11.06(8)) a Special Review Procedure? (see 301 CM a Waiver of mandatory EIR? (see 301 CM a Phase I Waiver? (see 301 CMR 11.11)	MR 11.09) IR 11.11)	esting: Yes Yes Yes Yes Yes	⊠No ⊠No ⊠No ⊠No				
Identify any financial assistance or land the agency name and the amount of fur	transfer fr nding or la	om an agency of t nd area (in acres):	the Commonwealth, including None				
Are you requesting coordinated review with any other federal, state, regional, or local agency? ⊠Yes(Specify: U. S. Army Corps of Engineers, Cape Cod Commission) □No							
List Local or Federal Permits and Approvals: Corps of Engineers (Section10), FERC, FAA							

FEMA, Conservation Commission, Cape Cod Commission, Municipal Conservation Commission(s)

☐ Land [☐ Water ☐ Energy ☐ ACEC	Wastewater Air		Wetlands, Waterways, & Tidelands Transportation Solid & Hazardous Waste Historical & Archaeological Resources	
Summary of Project Size	Existing	Change	Total	State Permits &
& Environmental Impacts				Approvals
l	_AND			Order of Conditions
Total site acreage	5.7			Superseding Order of Conditions
New acres of land altered		0.2		Chapter 91 License
Acres of impervious area	3.5	0	3.5	401 Water Quality
Square feet of new bordering vegetated wetlands alteration		0		Certification MHD or MDC Access Permit
Square feet of new other wetland alteration		0		☐ Water Management Act Permit
Acres of new non-water dependent use of tidelands or waterways		2.2		☐ New Source Approval ☐ DEP or MWRA Sewer Connection/ Extension Permit
STRU	JCTURES			☑ Other Permits
Gross square footage	0	0	0	(including Legislative
Number of housing units	0	0	0	. Approvals) – Specify:
Maximum height (in feet)	0	0	0	<u>MA DTE, EFSB, CZM</u> Consistency Review ISO New
TRANS	PORTATION			<u>England</u>
Vehicle trips per day	0	0	0	
Parking spaces	0	0	0	
WATER/W	/ASTEWATE	ER		
Gallons/day (GPD) of water use	0	0	0	
GPD water withdrawal	0	0	0	
GPD wastewater generation/ treatment	0	0	0	
Length of water/sewer mains (in miles)	0	0	0	
CONSERVATION LAND: Will the processources to any purpose not in according Yes (Specify	rdance with Arti	cle 97?)	⊠No	·

∐Yes (Specify) ⊠No
RARE SPECIES: Does the project site include Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities? Syes (Specify: Onshore cable may pass through a priority habitat within an existing right of way. Figure 11, 12)
HISTORICAL /ARCHAEOLOGICAL RESOURCES: Does the project site include 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 (Specify: Nantucket is an Historic District.) □No
If yes, does the project involve any demolition or destruction of any listed or inventoried historic or archaeological resources?
□Yes (Specify) ⊠No
AREAS OF CRITICAL ENVIRONMENTAL CONCERN: Is the project in or adjacent to an Area of Critical Environmental Concern? ⊠Yes (Specify: The beach south of Siasconset is estimated habitat for rare wildlife.) □No

PROJECT DESCRIPTION: The project description should include **(a)** a description of the project site, **(b)** a description of both on-site and off-site alternatives and the impacts associated with each alternative, and **(c)** potential on-site and off-site mitigation measures for each alternative (*You may attach one additional page, if necessary.*)

The Nantucket Wind Power Sites are located on Nantucket Shoals outside of State waters. They will use wind turbine generators (WTG) rated at 3.6 MW each. Nantucket 1 will use 231 turbines with a total capacity of 832 MW. Nantucket 2 will use 212 turbines with a total capacity of 764 MW. Nantucket 3 will use 169 turbines with a total capacity of 608 MW. The power will be conveyed to shore through a submarine cable. Once on land the power will be carried through a conventional cable to a switchyard where it will be connected to the grid. Winergy, LLC will install, maintain, and operate the wind turbine generators, power cable, and associated facilities.

Three alternative cable routes are shown on the attached drawings. We expect to evaluate all them during the environmental review process. The currently preferred route is the on through Harwich and is the basis for the impact estimates included in this application form.

Because of the large amount of power that could be generated at these sites, Winergy LLC might develop them in phases. Phasing will allow the construction of WTGs to match the demand growth.

Each WTG will be mounted on a monopile foundation that will be constructed using a pile driver mounted on a jack-up barge. Pile inclination will be controlled using an adjustable sleeve. A second barge will be required to transport pile sections and to assist in upending and positioning the pile sections. Once the foundation pile is in place the monopole will be erected using a gin pole to align the sections. Monopole and platform erection will be supported from barges. Bottom conditions will be evaluated during final design and scour protection will be placed as needed to protect the pile bases. The submarine cable will be placed approximately 6 ft. below the seabed using a jet plow. The cable may be buried up to 13 ft. if necessary to protect the cable, such as in areas where other projects may require dredging. Once on land the power line will be installed on land using conventional techniques.

The locations of the WTGs and alternative cable routes are shown on the attached figures.

Wind power is the only viable alternative for generating power offshore. Power generation alternatives on land include WTGs, fossil fueled power stations, and solar panels. Generating more than 600 MW on land using WTGs does not appear feasible because of the large site that would be required for a single WTG array. The alternative of using ten widely scattered sites would be very difficult to manage and is likely to be very expensive. Solar panels are very expensive and are not a technically feasible alternative for generating more than 600 MW. Fossil fueled power stations also require large sites, contribute to air pollution, and consume none renewable energy. All of the on land alternatives have land use, esthetic, and ecological impacts.