

**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.: 13172  
MEPA Analyst: Arthur Pugley  
Phone: 617-626-1029

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 Cable Project ("Project")		
Street: Industrial Way, Merchant's Way, Kidd's Hill Rd., Barnstable Municipal Airport, Barnstable Rd., Ridgewood Ave., Center St., Old Colony Rd., Ocean St., Nantucket Sound, Jetties Beach Area, Jefferson Ave., N. Beach St., S. Beach St., Oak St., Easy St., and Candle St.		
Municipality: Barnstable and Nantucket	Watershed: Nantucket Sound	
Universal Transverse Mercator Coordinates: Start: Zone 19 391951.2906X; 4615669.227Y End: Zone 19 408187.6476X; 4570693.025Y	Latitude/Longitude: Start: 41° 41' 7.7" N; 70° 1.7' 53.8" W End: 41° 16' 56.9" N; 70° 5' 46.9" W	
Estimated commencement date: Fall 2004	Estimated completion date: Spring 2006	
Approximate cost: \$32 million	Status of project design: 10 % complete	
Proponent: Nantucket Electric Company – A National Grid Company		
Street: 2 Fairgrounds Road		
Municipality: Nantucket	State: MA	Zip Code: 02554
Name of Contact Person From Whom Copies of this ENF May Be Obtained: Daniel Stuart		
Firm/Agency: Epsilon Associates	Street: 150 Main Street	
Municipality: Maynard	State: MA	Zip Code: 01754
Phone: 978.897.7100	Fax: 978.897.0099	E-mail: dstuart@epsilonassociates.com

Does this project meet or exceed a mandatory EIR threshold (see 301 CMR 11.03)?

Yes

No

Has this project been filed with MEPA before?

Yes (EOEA No. \_\_\_\_\_)

No

(Note, however, the original cable Project was reviewed under EOEA No. 10062 n July 1994)

Has any project on this site been filed with MEPA before?

Yes (EOEA No. \_\_\_\_\_)

No

Is this an Expanded ENF (see 301 CMR 11.05(7)) requesting: \*

a Single EIR? (see 301 CMR 11.06(8))

Yes

No

a Special Review Procedure? (see 301CMR 11.09)

Yes

No

a Waiver of mandatory EIR? (see 301 CMR 11.11)

Yes

No

a Phase I Waiver? (see 301 CMR 11.11)

Yes

No

\*The Project does not meet any EIR thresholds. If the Secretary believes an EIR to be necessary, Nantucket Electric Company (NEC) requests that it be a Single EIR.

Identify any financial assistance or land transfer from an agency of the Commonwealth, including the agency name and the amount of funding or land area (in acres):

Are you requesting coordinated review with any other federal, state, regional, or local agency?

Yes (Specify \_\_\_\_\_)  No

**List Local or Federal Permits and Approvals:**

A list of potential permits and approvals for the proposed Project is included in Attachment A to this form.

Which ENF or EIR review threshold(s) does the project meet or exceed (see 301 CMR 11.03):

- Land                                       Rare Species                                       Wetlands, Waterways, & Tidelands  
 Water                                               Wastewater                                               Transportation  
 Energy                                               Air                                               Solid & Hazardous Waste  
 ACEC                                               Regulations                                               Historical & Archaeological Resources

Summary of Project Size & Environmental Impacts	Existing	Change	Total	State Permits & Approvals
<b>LAND</b>				<input checked="" type="checkbox"/> Order of Conditions <input type="checkbox"/> Superseding Order of Conditions <input checked="" type="checkbox"/> Chapter 91 License <input checked="" type="checkbox"/> 401 Water Quality Certification <input type="checkbox"/> MHD or MDC Access Permit <input type="checkbox"/> Water Management Act Permit <input type="checkbox"/> New Source Approval <input type="checkbox"/> DEP or MWRA Sewer Connection/ Extension Permit <input checked="" type="checkbox"/> Other Permits (including Legislative Approvals) – Specify:  DTE Rates and Necessity Approval
Total site acreage	3.0 acres			
New acres of land altered		3.0 acres		
Acres of impervious area	0 acres	< 0.5 acres	< 0.5 acres	
Square feet of new bordering vegetated wetlands alteration		0		
Square feet of new other wetland alteration *		183,050 sf		
Acres of new non-water dependent use of tidelands or waterways		0		
<b>STRUCTURES</b>				
Gross square footage (Control Bldg)	0	560 sf	560 sf	
Number of housing units	0	0	0	
Maximum height (feet) (utility pole)	0	30 ft	30 ft	
<b>TRANSPORTATION</b>				
Vehicle trips per day	NA	NA	NA	
Parking spaces (Substation)	0	2	2	
<b>WATER/WASTEWATER</b>				
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	

\* All wetland disturbances are from jet plow installation of the submarine cable across the Sound. This consists of temporarily liquefying the sandy bottom in front of the jet plow; sand then resettles immediately behind the jet plow.

**CONSERVATION LAND:** Will the project involve the conversion of public parkland or other Article 97 public natural resources to any purpose not in accordance with Article 97?

Yes (Specify \_\_\_\_\_ )  No

Will it involve the release of any conservation restriction, preservation restriction, agricultural preservation restriction, or watershed preservation restriction?

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?

Yes (Specify: Piping Plover and terns, see Attachment A, Section 5.3.2, *Rare Species*)  No

**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: Hyannis Main Street/Waterfront Historic District and Nantucket National 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 \_\_\_\_\_ )  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.)

(A) Project Site

The Nantucket Electric Company (NEC) proposes to install a second underground and submarine electric power cable from the Cape Cod mainland, across Nantucket Sound, to the Island of Nantucket (see Figure A-1). The first cable was installed in 1996 and leaves Cape Cod from the Town of Harwich. The new cable system is planned to extend from the Cape Cod mainland in the Hyannis section of the Town of Barnstable, cross Nantucket Sound, and make landfall on the Island of Nantucket at a location similar to the first cable. The proposed Nantucket Cable Project will provide Nantucket Island with a second electrically distinct connection to the New England transmission grid. Extensive analysis has concluded that this is the most reliable and cost-effective means to supplement the Island's energy delivery service in order to meet its growing electric demand.

The Nantucket Cable Project will mirror the first cable installation. The proposed cable facilities are broadly defined as a mainland substation that will support a new 46 kilovolt (kV) underground and submarine electric power cable, and one fiber optic communications cable. The electric cable will have a delivery capability of approximately 35 megawatts (MW).

Additionally, a new substation will be located in Barnstable adjacent to three existing NSTAR 115 kV transmission lines and proximate to the existing NSTAR Barnstable 115 kV

substation. An interconnection of the new cable will be made to existing NSTAR facilities through the new substation. A new overhead line will extend from the new substation 3,200 feet east (owned and operated by NStar) within the existing NSTAR right-of-way and interconnect at the Barnstable Ring. NSTAR has indicated that it will design and permit, if necessary, the interconnection.

The substation parcel is situated in the Hyannis Industrial Park between Thornton Drive and Industrial Boulevard. The rear of the property abuts an existing transmission line right-of-way and the Mid-Cape Highway (Route 6). The new Barnstable substation is proposed on a 3.0 acre industrially-zoned site. The proposed design of the station is in conformance with local zoning regulations. Construction of the substation on a vacant lot in an industrial area of the town avoids any disruption of existing land use patterns. Preliminary station designs in plan and profile are provided in Attachment A, Figures A-2 and A-3.

The submarine cable will be buried nominally eight feet below the seabed. Installation, known as simultaneous embedment, will be completed with a jet plow, which moves across the seabed temporarily liquefying the sandy bottom in front of the jet plow. The cable then drops down into the liquefied sand and the sand resettles behind the jet plow producing temporary, minor disturbance of the seabed.

Additional information regarding the proposed Project design and installation is included in Attachment A to this form in Section 3.0, *Project Description*.

**(B) Alternatives**

Based on the growing demand for electricity, NEC began evaluation of alternative approaches to meet the projected need. After due consideration of other supply and demand control options, NEC determined a second and distinct cable is the most reliable means to meet the electrical need. Selecting a preferred alignment for the proposed cable consisted of a series of key siting decisions for different components of the Project. The first step determined the substation interconnections. The second step assessed land routes to both shorelines. The third step evaluated landfalls and alignments in near shore areas. Finally, an offshore alignment was determined. Additional information regarding alternative approaches and selection methods is included in Attachment A to this form, in Section 4.0, *Alternatives*.

**(C) Mitigation**

The Project is anticipated to have minimal impacts on the surrounding area. Any impacts associated with the Project are anticipated to be temporary and associated with the construction period. NEC will work with all necessary agencies to ensure that any impacts to the community or natural resources in the area are mitigated. Pre-filing regulatory and resource agency meetings have assisted in evaluating preliminary mitigation options.