Appendix E

Agency Correspondence and Consultation

AGENCY CORRESPONDENCE

List of Agency Comment Letters, Agency Approvals, and Agency Reports Provided	
Date	**Agency**
Federal Agencies	
July 10, 2002	US Fish and Wildlife Service
September 25, 2002	US Fish and Wildlife Service
April 9, 2003	Federal Aviation Administration
July 21, 2003	Federal Aviation Administration
March 21, 2004	US Air Force
May 17, 2004	Federal Aviation Administration
June 27, 2005	US Army Corps of Engineers
August 8, 2005	Federal Aviation Administration
March 10, 2006	E-Mail from US Army Corps of Engineers to Mineral Management Service
July 11, 2006	Fish and Wildlife Service
July 26, 2006	National Oceanic and Atmospheric Administration
July 27, 2006	US Environmental Protection Agency, Region 1
Spring, 2007	Department of Defense, Missile Defense Agency
April 25, 2007	Federal Aviation Administration
August 2, 2007	US Coast Guard
State Agencies	
November 15, 2001	MA Division of Fisheries and Wildlife
June 17, 2002	MA Division of Fisheries and Wildlife
September 4, 2002	MA Division of Fisheries and Wildlife
October 23, 2003	MA Division of Fisheries and Wildlife
March 3, 2005	Executive Office of Environmental Affairs
August 8, 2005	MA Executive Office of Environmental Affairs certification of Notice of Project Change
June 30, 2005	Executive Office of Environmental Affairs
July 11, 2006	State Representative Demetrius J. Astalis
July 14, 2006	Division of Marine Fisheries
July 27, 2006	Office of Coastal Zone Management
December 26, 2006	Division of Fisheries and Wildlife
March 29, 2007	Executive Office of Environmental Affairs
Local Agencies	
July 13, 2006	Cape Cod Commission
July 27, 2006	Town of Yarmouth

FEDERAL

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Field Office
70 Commercial Street, Suite 300
Concord, New Hampshire 03301-5087

July 10, 2002

Heather Rafferty Heater
Environmental Science Service, Inc.
888 Worcester Street, Suite 240
Wellesley, Massachusetts 02482

Dear Ms. Heater:

This responds to your June 4, 2002 letter requesting information on the presence of federally-listed and proposed endangered or threatened species in relation to two upland cable routes for the Cape Wind Project in Yarmouth and Mashpee, Massachusetts. Our comments are provided in accordance with Section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543).

Based on a review of our files, we have determined that the federally-listed threatened piping plover (*Charadrius melodus*) occurs on Popponesset Beach in Mashpee, Massachusetts (Alternative Landfall and Cable Route). Three pairs of piping plovers nested on this beach in 2001. You should contact Dr. Scott Melvin of the Massachusetts Natural Heritage and Endangered Species Program, Route 135, Westborough, MA 01581, telephone (508) 792-7270, for current nesting information. Should the Alternative Landfall and Cable Route be selected, please contact this office for additional consultation.

No other federally-listed or proposed threatened or endangered species under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the two project areas. However, we suggest that you contact Pat Huckery of the Massachusetts Natural Heritage and Endangered Species Program, Route 135, Westborough, MA 01581, telephone (508) 792-7270, for information on state-listed species that may be present.

A list of federally-endangered and threatened species in Massachusetts is included for your information. Thank you for your cooperation and please contact me at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Susanna L. von Oettingen
Endangered Species Biologist
New England Field Office

Enclosure

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES IN MASSACHUSETTS

Common Name	Scientific Name	Status	Distribution
FISHES:			
Sturgeon, shortnose*	Acipenser brevirostrum	E	Atlantic coastal waters and rivers (Conn. R.)
REPTILES:			
Turtle, bog	Clemmys muhlenbergii	T	Berkshire County
Turtle, green*	Chelonia mydas	T	Oceanic straggler in southern New England
Turtle, hawksbill*	Eretmochelys imbricata	E	Oceanic straggler in Southern New England
Turtle, leatherback*	Dermochelys coriacea	E	Oceanic summer resident
Turtle, loggerhead*	Caretta caretta	T	Oceanic summer resident
Turtle, Atlantic ridley*	Lepidochelys kempii	E	Oceanic summer resident
Turtle, Northern red-bellied couter Plymouth redbelly)	Chrysemys rubriventris bangsi	E	Plymouth & Dukes Counties
BIRDS:			
Eagle, bald	Haliaeetus leucocephalus	T	Nesting: Quabbin Res., Middleborough and along Conn. R.; entire state-migratory/wintering
Plover, piping	Charadrius melodus	T	Atlantic coast, nesting
Tern, roseate	Sterna dougallii dougallii	E	Atlantic coast/islands, nesting
MAMMALS:			
Bat, Indiana	Myotis sodalis	E	Berkshire County/historic
Whale, blue*	Balaenoptera musculus	E	Oceanic
Whale, finback*	Balaenoptera physalus	E	Oceanic
Whale, humpback*	Megaptera novaeangliae	E	Oceanic
Whale, right*	Eubalaena spp. (all species)	E	Oceanic
Whale, sei*	Balaenoptera borealis	E	Oceanic
Whale, sperm*	Physeter catodon	E	Oceanic
MOLLUSKS:			
Wedgemussel, dwarf	Alasmidonta heterodon	E	Hampshire, Franklin County
INSECTS:			
Beetle, Puritan tiger	Cicindela puritana	T	Hampshire County
Beetle, Northeastern beach	Cicindela dorsalis dorsalis	T	Dukes & Bristol Counties
Beetle, American burying	Nicrophorus americanus	E	Penikese & Nantucket Isl., reintroduced populations
PLANTS:			
Small whorled pogonia	Isotria medeoloides	T	Hampshire, Essex, Hampden, Worcester, Middlesex Counties
Sandplain gerardia	Agalinus acuta	E	Barnstable & Dukes Counties
Northeastern bulrush	Scirpus ancistrochaetus	E	Franklin County

* Except for sea turtle nesting habitat, principal responsibility for these species is vested with the National Marine Fisheries Service

Rev. 1/8/02

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Field Office
70 Commercial Street, Suite 300
Concord, New Hampshire 03301-5087

FILE

September 25, 2002

Heather Rafferty Heater
Environmental Science Service, Inc.
888 Worcester Street, Suite 240
Wellesley, Massachusetts 02482

Dear Ms. Heater:

This responds to your August 23, 2002 letter requesting supplemental information on the presence of federally-listed and proposed endangered or threatened species in relation to two upland cable routes for the Cape Wind Project in Yarmouth and Mashpee and terminating in Barnstable, Massachusetts. Our comments are provided in accordance with Section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543).

As mentioned in our letter of July 10, 2002, the federally-listed threatened piping plover (*Charadrius melodus*) occurs on Popponesset Beach in Mashpee, Massachusetts (Mashpee Route). However, based on a review of our files, no federally-listed or proposed threatened or endangered species under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in or immediately adjacent to the upland cable route areas within the NSTAR rights-of-way. We suggest that you contact Pat Huckery or Dr. Scott Melvin of the Massachusetts Natural Heritage and Endangered Species Program, Route 135, Westborough, MA 01581, telephone (508) 792-7270, for information on state-listed species that may be present.

Thank you for your cooperation and please contact me at 603-223-2541 if we can be of further assistance.

Sincerely yours,

Susanna L. von Oettingen

Susanna L. von Oettingen
Endangered Species Biologist
New England Field Office

U.S. Department of Transportation
United States Coast Guard

Commanding Officer
U. S. Coast Guard
Marine Safety Office

20 Risho Ave.
East Providence, RI 02914-1208
Phone: (401) 435-2330
FAX: (401) 435-2399

16670
February 10, 2003

Karen K. Adams
Chief, Permits and Enforcement Section
Department of the Army
Corps of Engineers – New England District
696 Virginia Road
Concord, MA 01742-2751

RECEIVED
FEB 13 2003
NEW ENGLAND DISTRICT

Dear Ms. Adams:

Enclosed are a variety of analyses that we are requiring to be included in the Environmental Impact Statement (EIS) for the Cape Wind Energy Project in Nantucket Sound. We have included analysis requirements regarding the project's potential impact on navigational safety and also on search and rescue operations, communications, radar, and positioning systems. In addition to these analyses, any structures built will be required to meet Coast Guard regulations for marking as private aids to navigation.

We are prepared to review and comment on the completed assessments and on other marine navigation related information associated with the preparation of the EIS. We are not, however, in a position to undertake data collection, conduct EIS analyses, or prepare sections of the draft or final EIS as staff and resources are fully tasked in other obligatory programs. However, we understand that the Coast Guard will be the source agency for some of the data required for the assessments and we will provide the data under routine methods upon request of the developer.

We recommend that you forward sections 2 and 3 of the enclosure to the Federal Aviation Administration and section 3 to the Federal Communications Commission as these areas of concern are also within their purview.

If you have any questions, please contact the Coast Guard project POC, Mr. Peter Popko at (401) 435-2380 or ppopko@msoprov.uscg.mil.

Sincerely,

Mary E. Landry
Captain, U.S. Coast Guard
Captain of the Port

Enclosure: Cape Wind – Nantucket Sound - Assessment Elements

CAPE WIND – NANTUCKET SOUND – Assessment Elements

1. Navigational Safety:

The Cape Wind – Nantucket Sound project developers must conduct a navigational safety risk assessment as part of the Environmental Impact Statement. The assessment must include, but is not limited to, the following elements:

a. A marine traffic survey in proximity to the proposed locations that includes:

- Types, sizes, and drafts of vessels.
- Typical routes.
- Density of traffic.
- Seasonal variances in traffic.
- Marine events.

b. An analysis of expected weather conditions, current directions/velocities, water depths and sea states that might aggravate or mitigate the likelihood of collision with the towers and navigational safety in general.

c. An evaluation of the risk of collision between vessels and the towers that includes:

- Likely frequency of collision.
- Likely consequences of collision ("What- If" analysis).
- The ability of a tower to withstand collision damage without toppling for a range of vessel speeds and vessel sizes.

d. An analysis of any likely changes in vessel movements resulting from the installations.

e. An analysis of any constraints imposed by the installations upon local navigation and anchoring.

f. An analysis of any increased danger of vessels colliding with each other or grounding due to the installations.

g. An analysis of the likelihood of floating ice build-up around and between the towers, and its possible impact on vessel navigation.

h. An analysis and discussion of the impact on the ability of all classes of vessels to anchor within the vicinity of the tower field.

2. Search & Rescue

Coast Guard opinion: Searches for small vessels or people in the water (PIW) and smaller search objects will be particularly affected due to the higher helicopter and fixed wing search altitudes required. The probability of detecting these targets will be decreased due to the presence of the wind farm. Additionally, the presence of the towers and their rotating blades will significantly diminish the ability to hoist victims by helicopter in the area of the wind farm.

To gauge the potential extent of impact on search and rescue operations, the Cape Wind – Nantucket Sound project developers must conduct an assessment that includes, but is not limited to, the following elements:

a. How many search and rescue cases has the CG conducted in the Horseshoe Shoals region over the last ten years?

b. How many of these cases involved helicopter hoists?

c. How many were at night or in poor visibility/low ceiling?

d. How many of these cases involved helicopter searches?

e. How many times have commercial salvors (e.g., BOAT US, SEATOW, commercial tugs) responded to assist vessels in the Horseshoe Shoals region over the last ten years?

f. How many were at night or in poor visibility?

g. What number of additional SAR cases is projected due to allisions with the towers?

3. Communications, Radar and Positioning Systems:

To gauge the potential extent of impact on communications, radar and positioning systems, the Cape Wind – Nantucket Sound project developers must provide researched opinion concerning whether or not:

a. The generators and their mountings could produce radio interference such as reflections or phase changes, with respect to any frequencies used for marine positioning, navigation or communications, including VHF radio, Radio Direction Finding equipment, and Automatic Identification Systems.

b. The generators could produce radar reflections, blind spots or shadow areas:

- Vessel to vessel.
- Vessel to shore.
- Racon (radar beacon) to / from vessel.

c. The generators, in general, would comply with current recommendations concerning electromagnetic interference.

d. The site might produce acoustic noise that could mask prescribed navigational sound signals.

e. The generators and the seabed cabling might produce magnetic fields affecting compasses and other navigation systems.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Field Office
70 Commercial Street, Suite 300
Concord, New Hampshire 03301-5087

September 10, 2003

Rebecca Weissman
ESS Group, Inc.
888 Worcester Street, Suite 240
Wellesley, MA 02482

Dear Ms. Weissman:

This letter responds to your August 12, 2003 letter requesting information on the presence of federally-listed and proposed endangered or threatened species in relation to a proposed submarine and upland transmission line for the Cape Wind Project in Barnstable and Yarmouth, Massachusetts. Our comments are provided in accordance with Section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531-1543).

Based on information currently available to us, piping plovers occur on Kalmus Park Beach and Dunbar Point, Barnstable and Great Island, Yarmouth in the vicinity of the submarine portion of the transmission line. No other federally-listed or proposed threatened or endangered species under the jurisdiction of the U.S. Fish and Wildlife Service are known to occur in the project area, with the exception of occasional transient bald eagles (*Haliaeetus leucocephalus*).

Thank you for your cooperation and please contact me at 603-223-2541, extension 22, if we can be of further assistance.

Sincerely yours,

for Susanna L. von Oettingen
Endangered Species Biologist
New England Field Office

Federal Aviation Administration
New England Regional Office
12 New England Executive Park-ANE-520
Burlington, MA 01803

AERONAUTICAL STUDY No
2002-ANE-982-OE
THROUGH
2002-ANE-1111-OE

Issued Date: 4/9/2003

LEONARD J. FAGAN
CAPE WIND ASSOCIATES, LLC
75 ARLINGTON STREET, SUITE 704
BOSTON, MA 02116

** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has completed an aeronautical study under the provisions of 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure Type: Wind Turbine (A8)
Location: NANTUCKET SOUND, MA
Latitude: 41-29-41.03 NAD83
Longitude: 70-23-3.33
Heights: 426 feet above ground level (AGL)
426 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure should be marked and/or lighted in accordance with FAA Advisory Circular 70/7460-1 AC 70/7460-1K, Obstruction Marking and Lighting, AS PER ATTACHED.

It is required that the enclosed FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

See Attached At least 10 days prior to start of construction (7460-2, Part I)

See Attached Within 5 days after the construction reaches its greatest height (7460-2, Part II)

As a result of this structure being critical to flight safety, it is required that the FAA be kept appraised as to the status of the project. Failure to respond to periodic FAA inquiries could invalidate this determination.

See attachment for additional condition(s) or information.

This determination expires on 10/9/2004 unless:

(a) extended, revised or terminated by the issuing office.
(b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed , as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE POSTMARKED OR DELIVERED TO THIS OFFICE AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE.

This determination is subject to review if an interested party files a petition on or before 5/9/2003. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted in triplicate to the Manager, Airspace Branch, Federal Aviation Administration, Washington, D.C. 20591.

This determination becomes final on 5/19/2003 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

A copy of this determination will be forwarded to the Federal Communications Commission if the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (781)238-7520. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2002-ANE-982-OE.

(DNH)

David T. Bayley
Manager, Airspace Branch

Attachment(s)

7460-2 Attached

Determination of No Hazard
Aeronautical Study Number 2002-ANE-0982-OE

LOCATION:

The proposed Wind Turbine Generator Farm will be located on Horseshoe Shoals in Nantucket, MA, and is approximately 10.39 Nautical Miles (NM) southwest of the airport reference point of Barnstable Municipal (Hyannis) Airport (HYA), MA.

DESCRIPTION:

This proposed Wind Turbine Generator project is known as the Cape Winds Horseshoe Shoals Project. It is composed of 130 Wind Turbine Generators. The center of the project can be found at the approximate location of 41° 29' 57.29" North Latitude by 070° 19' 28.84" West Longitude (NAD83). This project is one of three alternative sites to be studied.

OBSTRUCTION STANDARDS EXCEEDED:

The aeronautical study indicates that the structures do not exceed the Obstruction Standards of Federal Aviation Regulations (FAR) Part 77.

OTHER AERONAUTICAL EFFECTS:

The preliminary aeronautical study indicates that no part of the windmill farm underlies a federal airway. The eastern half of the windmill farm lies in airspace which is designated as uncontrolled airspace below 1,200 feet AMSL. The western portion of the windmill farm underlies airspace designated as uncontrolled below 700 feet AMSL.

The New York Sectional Aeronautical Chart, 66th Edition, indicates the Maximum Elevation Figure (MEF) in the area is between 600 and 700 feet AMSL. This elevation is based on the highest known feature in the quadrants immediately to the north and south of the windmill farm.

PUBLIC NOTICE COMMENTS:

The aeronautical study was mailed out as a public notice on January 30, 2003, with a closing date of March 8, 2003. Six letters containing aeronautical comments were received during the public notice period.

The following is a summary of comments received:

- Towers may prove to be obstacles to VFR flight through the sound with flight visibility as low as 3 miles.
- The wind turbines may interfere with the non-precision approach (VOR Runway 24) at Martha's Vineyard.
- Pilots with faulty altimeters will not be able to maintain clearance.
- Pilots in certain weather conditions can fly close to the water legally without radio communications.

- When cloud ceilings are between 1200-1500, pilots would not be able to transit the area at 500-600 feet MSL.
- Aircraft circumnavigating the wind farm will crowd into the path of commercial traffic.
- Wind Turbines may be a possible electrical interference.
- Lighting will be a distraction.
- The proposed wind farm will have little to no impact on military flights on the 102nd Fighter Wing of the Massachusetts National Guard.

DISPOSITION OF COMMENTS:

- Federal Aviation Regulations (FAR) require pilots to remain 500 vertically and/or horizontally from any charted obstruction.
- None of the wind turbines interfere with any arrival, departure, or enroute IFR procedure at any airport.
- Pilots flying VFR only must maintain required obstruction clearance from all obstacles, as well as, terrain.
- VFR flight, throughout the sound, in accordance with FAR Part 91, will remain.
- The wind turbine farm is not located under any known direct route between HYA-MVY-ACK. It is located in the approximate middle of the triangle area. When ceilings are less than 500 feet above the windmills, pilots will be required to circumnavigate the area.
- IFR altitudes throughout the Nantucket Sound area begin at 1500 feet MSL.
- The FAA Airway Facilities division have analyzed the wind farm and are satisfied there will not be any interference from the wind turbine generators.
- Obstruction marking and lighting over water as on land can be used as a visual reference.

SUMMARY OF EFFECTS:

The aeronautical study found that the proposed Horseshoe Shoals Wind Turbine Generators would not have an adverse effect on air traffic operations enroute through the Nantucket Sound airspace under Visual Flight Rules (VFR) conditions.

The aeronautical study found that the proposed Horseshoe Shoals Wind Turbine Generators would not have an adverse effect on any air traffic operations outbound from any Nantucket Sound vicinity airport under VFR conditions.

The aeronautical study found that the proposed Horseshoe Shoals Wind Turbine Generators would not have an adverse effect on air traffic operations inbound to any Nantucket Sound vicinity airport under VFR conditions.

The aeronautical study found that the proposed Horseshoe Shoals Wind Turbine Generators would not have any adverse effect on air traffic operations inbound, outbound, or enroute through the Nantucket Sound airspace under Instrument Flight Rules (IFR) conditions.

The aeronautical study found that the Horseshoe Shoals Wind Turbine Generators would not have an adverse effect on any existing or planned runway length.

Determination of No Hazard
Aeronautical Study Number 2002-ANE-0982-OE

The aeronautical study found that the Horseshoe Shoals Wind Turbine Generators would not have an adverse effect or derogation to any airport efficiency.

The aeronautical study found that the Horseshoe Shoals Wind Turbine Generators would not have an adverse effect on any planned IFR and VFR airport operations indicated by plans on file.

The aeronautical study found that the Horseshoe Shoals Wind Turbine Generators would not be located within any airport traffic pattern and would not have an effect on traffic.

Therefore, a **Determination of No Hazard to Air Navigation** is issued.

MARKING AND LIGHTING:

In general, all the wind turbines inside the perimeter will have red lights (L810). On the perimeter, every other wind turbine will also have red lights (L810). Those lights on the perimeter not having red lights will have a dual-medium intensity lighting system. Omission from marking of all wind turbine generators has been approved.

The proponent and the FAA have agreed on a letter-number grid to identify each wind turbine generator. In accordance with the grid, the following aeronautical studies (GRID #) will be lighted with dual-medium intensity lights: 2002-ANE-1002-OE (D1), 2002-ANE-1004-OE (D3), 2002-ANE-1006-OE (D5), 2002-ANE-0995-OE (C7), 2002-ANE-0998-OE (B7), 2002-ANE-0982-OE (A8), 2002-ANE-0984-OE (A10), 2002-ANE-0986-OE (A12), 2002-ANE-0987-OE (A13), 2002-ANE-1001-OE (C13), 2002-ANE-1039-OE (F14), 2002-ANE-1055-OE (G15), 2002-ANE-1082-OE (I15), 2002-ANE-1093-OE (J16), 2002-ANE-1103-OE (K16), 2002-ANE-1111-OE (L14), 2002-ANE-1108-OE (L11), 2002-ANE-1098-OE (K11), 2002-ANE-1080-OE (I12), 2002-ANE-1078-OE (I9), 2002-ANE-1077-OE (I7), 2002-ANE-1088-OE (J6), 2002-ANE-1107-OE (L4), 2002-ANE-1104-OE (L1), 2002-ANE-1083-OE (J1), 2002-ANE-1056-OE (H1), 2002-ANE-1027-OE (F1).

CONSTRUCTION NOTICE AND CHARTING REQUIREMENTS:

A 7460-2, Notice of Actual Construction or Alteration is enclosed. Please complete the form and submit for proper aeronautical charting.

Charting of the wind farm is a very important issue. Therefore, we are requiring notice well in advance of the normal notice required. We are requesting **180 day notice** from the time the construction is approved and ready to begin. This time period will allow for two charting cycles on all aeronautical publications.

Please refer to Aeronautical Study Number 2002-ANE- 0982 -OE in any correspondence.

Federal Aviation Administration
New England Regional Office
12 New England Executive Park-ANE-520
Burlington, MA 01803

Aeronautical Study No.
2002-ANE-1200-OE

Through

Aeronautical Study No.
2002-ANE-1291-OE

Issued Date: 7/21/2003

LEONARD J. FAGAN
CAPE WIND ASSOCIATES, LLC
75 ARLINGTON STREET, SUITE 704
BOSTON, MA 02116

** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has completed an aeronautical study under the provisions of 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure Type:	Turbine (AAA5)
Location:	NANTUCKET SOUND, MA
Latitude:	41-33-54.21 NAD 83
Longitude:	70-12-44.64
Heights:	426 feet above ground level (AGL)
	426 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure would have no substantial adverse effect on the safe and efficient utilization of the navigable airspace by aircraft or on the operation of air navigation facilities. Therefore, pursuant to the authority delegated to me, it is hereby determined that the structure would not be a hazard to air navigation provided the following condition(s) is(are) met:

As a condition to this Determination, the structure should be marked and/or lighted in accordance with FAA Advisory Circular 70/7460-1 AC 70/7460-1K, Obstruction Marking and Lighting, See Attachment

It is required that the enclosed FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or: See Attachment

N/A At least 10 days prior to start of construction
(7460-2, Part I)

N/A Within 5 days after the construction reaches its greatest height
(7460-2, Part II)

As a result of this structure being critical to flight safety, it is required that the FAA be kept appraised as to the status of the project. Failure to respond to periodic FAA inquiries could invalidate this determination.

See attachment for additional condition(s) or information.

This determination expires on 1/21/2005 unless:

(a) extended, revised or terminated by the issuing office.
(b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed , as required by the FCC, within 6 months of the date of this

determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE POSTMARKED OR DELIVERED TO THIS OFFICE AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE.

This determination is subject to review if an interested party files a petition on or before 8/20/2003. In the event a petition for review is filed, it must contain a full statement of the basis upon which it is made and be submitted in triplicate to the Manager, Airspace Branch, Federal Aviation Administration, Washington, D.C. 20591.

This determination becomes final on 8/30/2003 unless a petition is timely filed. In which case, this determination will not become final pending disposition of the petition. Interested parties will be notified of the grant of any review.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

This aeronautical study considered and analyzed the impact on existing and proposed arrival, departure, and en route procedures for aircraft operating under both visual flight rules and instrument flight rules; the impact on all existing and planned public-use airports, military airports and aeronautical facilities; and the cumulative impact resulting from the studied structure when combined with the impact of other existing or proposed structures. The study disclosed that the described structure would have no substantial adverse effect on air navigation.

An account of the study findings, aeronautical objections received by the FAA during the study (if any), and the basis for the FAA's decision in this matter can be found on the following page(s).

A copy of this determination will be forwarded to the Federal Communications Commission if the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (781)238-7520. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2002-ANE-1200-OE.

for John R. Donnelly
Manager, Airspace Branch

(DNH) 196018

Determination of No Hazard for
Aeronautical Study Number 2002-ANE-1200-OE
Through
Aeronautical Study Number 2002-ANE-1291-OE

LOCATION:

The Windmill Farm is located approximately 8 nautical miles (NM) southeast of the airport reference point of the Barnstable Municipal-Boardman/Polando Airport (HYA), in Hyannis, MA.

DESCRIPTION OF PROPOSAL:

This proposal is the second of three locations. This project is known as **Handkerchief Shoals.** The proposed project consists of 92 electrical power generating windmills. The farm will be in Nantucket Sound with the center of the farm located at approximately 41° 33' 08" North Latitude, 70° 10' 02" West Longitude.

When the propellers are at their apex, they reach 426 feet Above Mean Sea Level (AMSL).

OBSTRUCTION STANDARDS EXCEEDED:

The preliminary aeronautical study indicates that none of the 92 structures exceeds the Obstruction Standards of Federal Aviation Regulations (FAR) Part 77.

OTHER AERONAUTICAL CONCERNS:

The preliminary aeronautical study indicates that the western edge of the windmill farm underlies a federal airway. All the airspace overlying the windmill farm is designated as uncontrolled airspace below 1,200 feet AMSL.

The New York Sectional Aeronautical Chart, 67th Edition, indicates the Maximum Elevation Figure (MEF) in the area is 700 feet AMSL. This elevation is based on the highest known feature in the quadrants immediately to the north of the windmill farm.

PUBLIC NOTICE COMMENTS:

The aeronautical study was mailed out as a public notice on May 16, 2003, with a closing date of June 22, 2003. No letters containing aeronautical comments were received during the public notice period.

The Flight Standards Division of the FAA has made three comments in relation to this wind farm. First: a request that the wind farm be charted prior to construction. Second: a request that "compression" effect during MVFR weather conditions be considered. Third: that the curiosity and novelty effect on VFR sightseeing aircraft be considered.

Attachment

DISPOSITION OF COMMENTS:

The marking and lighting concerns will be addressed at the end of the determination.

Because the wind farm is not located below Class B nor Class C airspace, VFR and MVFR operations are at the pilots discretion. The pilots must maintain VFR at all times.

For VFR sightseeing aircraft , the curiosity and novelty effect is at the pilots discretion. Pilots not under an Instrument Flight Plan (IFR) must maintain VFR at all times when sightseeing over any natural or manmade structure. Maintaining VFR is also applicable traversing to and from the areas of curiosity, such as the island of Nantucket.

SUMMARY OF EFFECTS:

The aeronautical study found that the proposed Handkerchief Shoals area Wind farm would not have a significant adverse effect on air traffic operations inbound to, outbound from, or enroute through any airport in the Nantucket Sound area under Visual Flight Rules (VFR) conditions.

The aeronautical study found that the proposed Handkerchief Shoals area Wind farm would not have a significant adverse effect on air traffic operations inbound to, outbound from, or enroute through any airport in the Nantucket Sound area under Instrument Flight Rules (IFR) conditions.

The aeronautical study found that the Handkerchief Shoals area Wind farm would not have an adverse effect on any Nantucket Sound area airport's existing or planned runway length.

The aeronautical study found that the Handkerchief Shoals area Wind farm would not have an adverse effect or derogation to any Nantucket Sound area airport efficiency.

The aeronautical study found that the Handkerchief Shoals area Wind farm would not have an adverse effect on planned IFR and VFR Nantucket Sound area airport operations indicated by plans on file.

The aeronautical study found that the Handkerchief Shoals area Wind farm would not be located within any Nantucket Sound area airport traffic pattern and would not have an effect on traffic in the traffic pattern of any airport in the Nantucket Sound area.

Therefore, a **Determination of No Hazard To Air Navigation** is issued.

Attachment

Determination of No Hazard for
Aeronautical Study Number 2002-ANE-1200-OE
Through
Aeronautical Study Number 2002-ANE-1291-OE

MARKING AND LIGHTING:

In general, all the wind turbines inside the perimeter will have red lights (L810). On the perimeter, every other wind turbine will also have red lights (L810). Those lights on the perimeter not having red lights will have a dual-medium intensity lighting system. Omission from marking of all wind turbine generators has been approved.

The proponent and the FAA have agreed on a letter-number grid to identify each wind turbine generator. In accordance with the grid, the following aeronautical studies (GRID #) will be lighted with dual-medium intensity lights: 2002-ANE-1200-OE (AAA5), 2002-ANE-1201-OE (AAA6), 2002-ANE-1203-OE (AAA8), 2002-ANE-1205-OE (AAA10), 2002-ANE-1207-OE (AAA12), 2002-ANE-1209-OE (AAA14), 2002-ANE-1211-OE (AAA16), 2002-ANE-1213-OE (AAA18), 2002-ANE-1215-OE (AAA20), 2002-ANE-1216-OE (BBB4), 2002-ANE-1230-OE (BBB18), 2002-ANE-1243-OE (CCC16), 2002-ANE-1244-OE (DDD3), 2002-ANE-1255-OE (DDD14), 2002-ANE-1265-OE (EEE12), 2002-ANE-1266-OE (FFF3), 2002-ANE-1273-OE (FFF10), 2002-ANE-1274-OE (GGG2), 2002-ANE-1280-OE (GGG8), 2002-ANE-1285-OE (HHH6), 2002-ANE-1286-OE (III1), 2002-ANE-1289-OE (III4), 2002-ANE-1290-OE (JJJ1), 2002-ANE-11291-OE (JJJ2).

CONSTRUCTION NOTICE AND CHARTING REQUIREMENTS:

A 7460-2, Notice of Actual Construction or Alteration is enclosed. Please complete the form and submit for proper aeronautical charting.

Charting of the wind farm is a very important issue. Therefore, we are requiring notice well in advance of the normal notice required. We are requesting **180 day notice** from the time the construction is approved and ready to begin. This time period will allow for two charting cycles on all aeronautical publications.

Please refer to Aeronautical Study Number 2002-ANE- 1200 -OE in any correspondence.

Attachment

04/25/2007 02116

** PUBLIC NOTICE **

The Federal Aviation Adminstration is conducting an aeronautical study concerning the following:

Aeronautuical Study No. (ASN) 2006-ANE-1082-OE

Structure:	Wind Turbine A12-HSS
Location:	Edgartown, MA
Latitude:	41-28-26.27 N
Longitude:	70-22-18.39 W
Heights:	440 feet above ground level (AGL)
	440 feet above mean sea level (AMSL)

The structure described above exceeds obstruction standards. To be eligible for consideration, comments must be received on or before 2007-06-01

To access complete details regarding this determination, use View Circularized Cases on the Internet at http://oeaaa.faa.gov and search by state and ASN, or contact our office at (718) 553-2560

Signature Control No: 484476-100019890

DEPARTMENT OF THE AIR FORCE

HEADQUARTERS AIR FORCE SPACE COMMAND

21 Mar 04

MEMORANDUM FOR AF/XO

FROM: HQ AFSPC/XO
150 Vandenberg St Ste 1105
Peterson AFB CO 80914-4170

SUBJECT: Proposed Wind Power Plant Near Cape Cod AFS

1. Our experts have reviewed the proposed locations for the Wind Power Plant near Cape Cod AFS and have determined it poses no threat to the operation of the PAVE PAWS radar at Cape Cod AFS. At the nearest proposed location, the main radar beam will clear the towers by more then 4500 feet. These findings have been corroborated by the attached MITRE study performed last year.

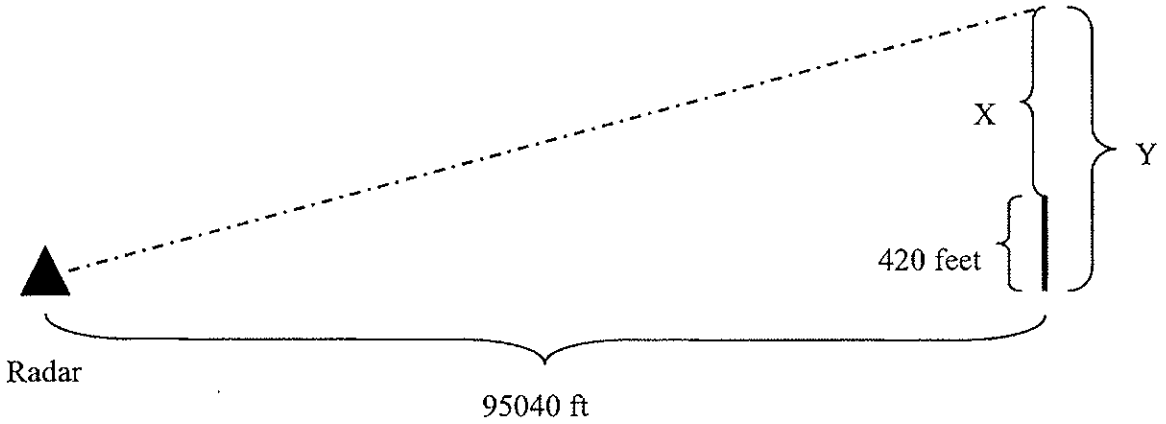
2. Please direct any questions to my POC, Mr Jimmy Miller, HQ AFSPC/XOS at DSN 692-3789, email james.miller2@peterson.af.mil.

///// SIGNED /////

DOUGLAS M. FRASER
Major General (Sel), USAF
Director of Air and Space Operations

3 Attachments:
1. XOS Wind Farm Notes
2. MITRE Wind Farm Notes
3. Proposed Wind Farm Locations

Tower Height: 420 feet (sea-level to tip of the blade)
Closest tower to radar: 18 miles (95040 feet)
Radar Fence Elevation: 3 degrees



Y = Height of main beam above ground

Sin 3° = Y/95040

0.052336 * 95040 = Y

Y = 4974 feet

X = Height of beam above tower

X = 4974 – 420

X = 4554 feet (Note: This does not take into account the height of the radar above sea level, or the curvature of the earth. Both calculations would increase the distance between the beam and the tower.

We examined in July 2002 the problem, of the possible impingement of the main lobe of the antenna beam from the PAVE PAWS radar located at Cape Cod Air Force Station upon the wind generating towers. The towers are located about 3 miles from the radar. Figure 1 shows the geometry.

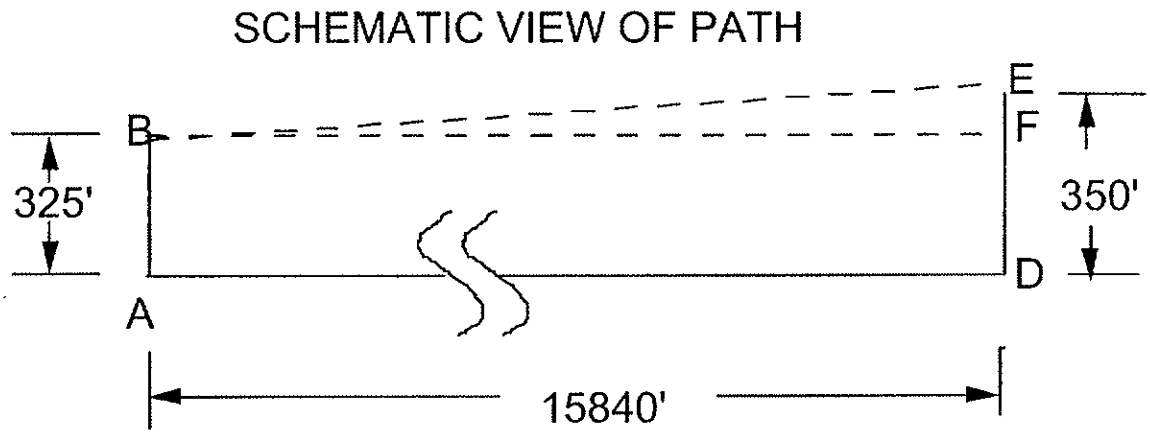


Figure 1
Geometry of PAVE PAWS-Wind Towers Problem

The towers, shown by the line DE, are 350 feet high. The center of the PAVE PAWS array is 325 feet above mean sea level. The range of three miles from the radar is sufficient for the far field antenna pattern to apply. The angle BEF is the elevation angle of the towers as seen from the radar. It can be computed from the following relationship.

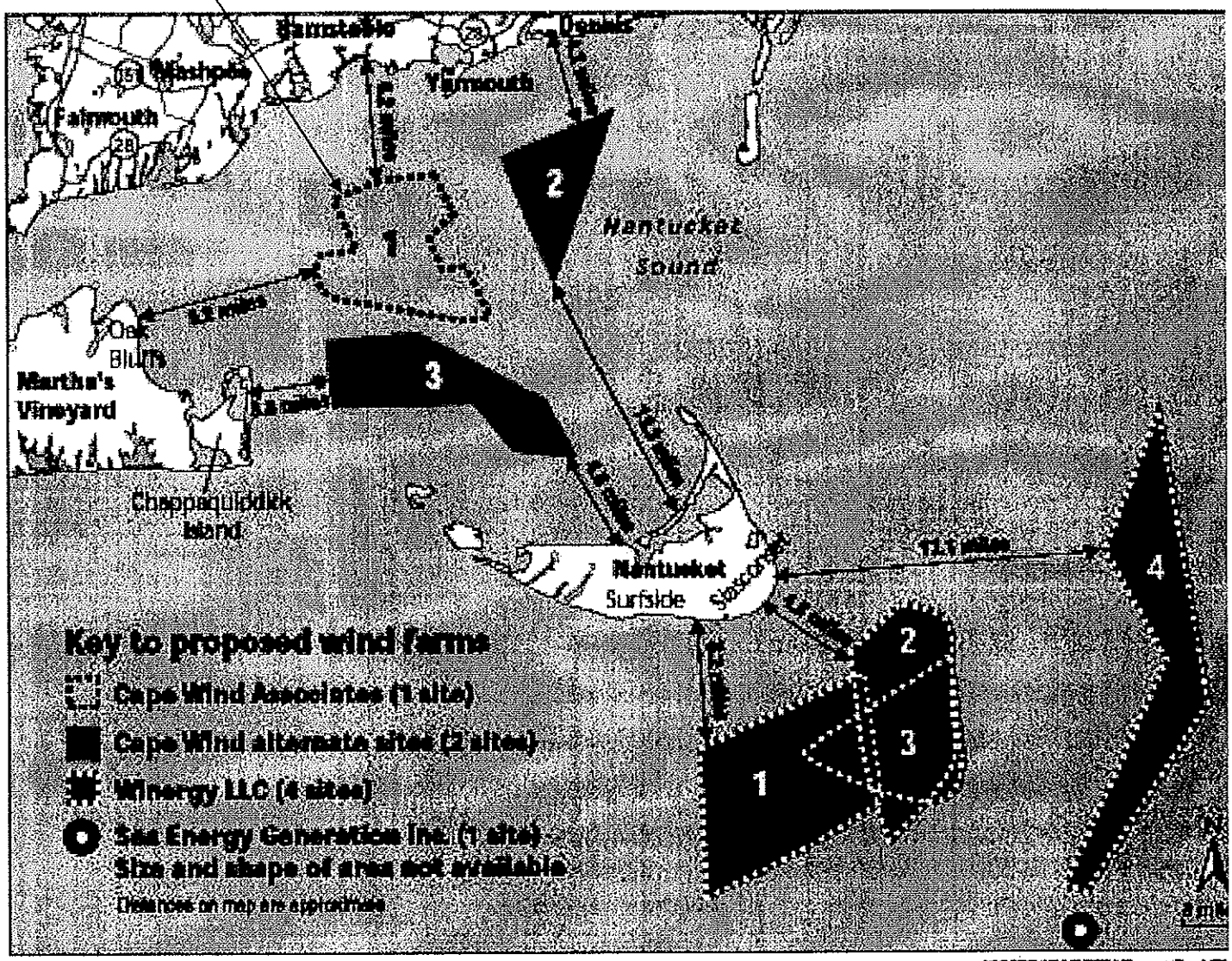
$$\angle BEF = \mathrm{Tan}^{-1}\left(\frac{DE - AB}{AD}\right)$$

For the geometry shown, the angle BEF is equal to 0.090°. The difference from the 3° pointing angle of the beam is 2.91°. The wind tower is thus not illuminated by the main lobe of the transmit antenna pattern of PAVE PAWS.

On 12 March 2004, it has been brought to my attention that the wind towers are 420 feet tall. Using the previous analysis, we find that the elevation angle of the wind towers is equal to 0.34°. The difference from the 3° pointing angle of the beam is 2.66°. The wind tower is thus not illuminated by the main lobe of the transmit antenna pattern of PAVE PAWS.

A more accurate analysis was performed taking into account surface refraction of the transmitted beam the results for the 350' tower is 2.93° from the center of the transmit beam and the results for the 420' tower is 2.67° from the center of the transmit beam.

approx 18 miles



Sources: Cape Wind Associates, Sea Energy Generation Inc. and Winergy LLC.

JAMES WARREN/Cape Cod Ti

Atch 3

Federal Aviation Administration
New England Regional Office
12 New England Executive Park-ANE-520
Burlington, MA 01803

Aeronautical Study No.
2004-ANE-330-OE

Issued Date: 5/17/2004

Terry Orr
Cape Wind Associates, LLC.
75 Arlington Street, Suite 704
Boston, MA 02116

**** DETERMINATION OF NO HAZARD TO AIR NAVIGATION ****

The Federal Aviation Administration has completed an aeronautical study under the provisions of 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerning:

Structure Type:	WIND TURBINE (H14)
Location:	Nantucket Sound, MA
Latitude:	41-13-13.93 NAD 83
Longitude:	70-19-30.35
Heights:	417 feet above ground level (AGL)
	417 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

As a condition to this Determination, the structure should be marked and/or lighted in accordance with FAA Advisory Circular 70/7460-1 AC 70/7460-1K, Obstruction Marking and Lighting, a med-dual system - Chapters 4,8(M-Dual),&12.

It is required that the enclosed FAA Form 7460-2, Notice of Actual Construction or Alteration, be completed and returned to this office any time the project is abandoned or:

_X__ At least 10 days prior to start of construction
(7460-2, Part I)

_X__ Within 5 days after the construction reaches its greatest height
(7460-2, Part II)

As a result of this structure being critical to flight safety, it is required that the FAA be kept appraised as to the status of the project. Failure to respond to periodic FAA inquiries could invalidate this determination.

See attachment for additional condition(s) or information.

This determination expires on 11/17/2005 unless:

(a) extended, revised or terminated by the issuing office.
(b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed , as required by the FCC, within 6 months of the date of this determination. In such case, the determination expires on the date prescribed by the FCC for completion of construction, or the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION

MUST BE POSTMARKED OR DELIVERED TO THIS OFFICE AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, and frequencies or use of greater power will void this determination. Any future construction or alteration, including increase to heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission if the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at (781)238-7525. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 2004-ANE-330-OE.

Signature Control No: 376437-277113 (DNE)

Angel Cases
Specialist

Attachment(s)
Additional Information
Case Description

7460-2 Attached

Additional Information for ASN 2004-ANE-330-OE

ELECTROMAGNETIC STANDARDS EXCEEDED:

This Determination of No Hazard To Air Navigation is granted provided the following condition is adhered to:

There is no objection to this wind turbine. However, should spurious electromagnetic noise from the wind turbine or aggregate noise from multiple wind turbines adversely cause Electro-Magnetic Interference (EMI) to an FAA facility, the proponent agrees to cease operations of the wind turbine(s) until such EMI is mitigated"

This determination concerns the effect of the proposal on the safe and efficient use of the navigable airspace by aircraft and does not relieve the sponsor of compliance relating to laws, ordinances, or regulations required by other governmental bodies.

Please refer to Aeronautical Study Number 2004-ANE- 0330 -OE in any correspondence.

Case Description for ASN 2004-ANE-330-OE

One of 130 offshore wind turbines being evaluated as part of Cape Wind alternatives analysis by US Army Corps of Engineers

CENAE-EP-EW 27 June 2005

MEMORANDUM FOR Chief, Regulatory Division, ATTN: CENAE-R-PEA, Ms. Karen Adams

SUBJECT: Cape Wind Energy Project – Hydrodynamic/Sediment Numerical Model Needs Assessment

1. At the request of Ms. Karen Adams, Regulatory Division, Mr. John Winkelman of the Engineering/Planning Division, Water Management Section, investigated the need to perform, and practicability of, hydrodynamic and sediment movement numerical modeling for the Cape Wind Energy Project. The request was in response to comments received from the Massachusetts Coastal Zone Management office (CZM) related to the draft EIR/EIS for the subject project. The specific comments by the CZM have been included in Enclosure 1.

2. The investigation answered three key questions: First, if available numerical models are actually capable of capturing the currents, wave climate, and sediment transport around the proposed wind towers, as well as any down field effects; Second, if the wind towers would impact the currents, waves, and sediment transport in a way that they would act as a field or if they simply act as individual structures; Third, would the available information be adequate for calculating expected scour around the structures.

3. In order to answer the questions listed under item #2 numerous inquires with leading coastal engineering/science experts were made which included ERDC (Waterways Experiment Station) personnel, the Corps North Atlantic Division Regional Coastal Expert, and private consulting companies (including DHI which was a company explicitly named by the CZM's engineering consultant).

4. Based upon the inquiries, it was concluded that 2-D modeling could be performed at a high enough resolution to model the hydrodynamic currents, wave conditions, and sediment movement for the existing and with-project conditions. However, it was also concluded that due to the diameter of the wind towers and the proposed spacing that the towers would act as individual structures and not as a field. This means that each tower will impact currents, waves, and sediment movement locally, but the effects of one tower will not reach the adjacent towers (or shorelines).

5. It was also concluded scour around each tower could not be determined with numerical models since scour is significantly impacted by 3-D affects and existing models could not handle this task.

6. Given the accuracy of scour potential equations, the existing tidal current and wind current data should suffice to determine the scour. If a numerical model was used it would be for the purpose of using a more accurate number in what are widely regarded as inaccurate scour equations.

7. It is the recommendation of the Engineering/Planning Division that existing data and recently collected hydrodynamic data from the site be used to determine expected conditions and be used to calculate scour.

8. Please contact Mr. John Winkelman of my staff at ext. 615 for additional information or for questions.

H. FARRELL MCMILLAN, P.E.
Chief, Engineering/Planning Division

Encls

CF:

Mr. John Winkelman
Ms. Karen Adams

Enclosure 1
MA CZM Comments Related to Sediment Transport and Scour

Excerpt taken from MA CZM Cape Cod Wind Farm Project comment letter dated February 24, 2005 to Ms. Karen Adams U.S. Army Corps of Engineers, Regulatory Division

"Sediment Transport

Nantucket Sound is part of a large sand-sharing system. Sediment transport within the Sound is a regional, transjurisdictional process that affects all marine environments and coastal landforms within and adjoining the Sound. While it is not a closed system, as some sand enters the sound and some is lost to the open ocean, the majority of sand cycles throughout the Sound over time. As the DEIR/S states, the sand waves within Horseshoe Shoals are actively migrating. The area of Horseshoe Shoals can be seen on historic nautical charts, but the sand that comprised those shoals is not the same sand that is there today. Horseshoe Shoals is shallow, dynamic, and contains a significant volume of sand; an alteration to the project area may have a significant impact to the sediment transport system in Nantucket Sound. Tidal, and to a lesser extent wind-driven, currents move sand into and out of these areas daily; these processes are accelerated during storm events. Changes to this system may have widespread effects, potentially affecting benthic habitat and changing erosion and accretion patterns in the coastal zone.

CZM's review of projects that may affect sediment transport is guided by Coastal Hazard Policy #2, which requires an analysis of a project's potential to alter wave or tidally generated sediment transport at the project site or on adjacent downcoast areas. The policy states that "[o]f particular concern are significant adverse changes in depositional patterns and natural storm damage prevention or buffering functions." CZM believes that more analysis concerning the effect of the project on sediment transport is necessary to evaluate potential impacts. The array of monopiles and associated scour mats will stand as new features that will affect sediment transport. To assess the significance of this effect, CZM requests that an oceanographic modeling study be undertaken to develop a better understanding of sediment transport pathways for all of the options in the alternatives analysis, as well as for Nantucket Sound in general and any potential impacts of the proposed project to those sediment transport pathways.

To understand the potential impacts of the proposed project on the physical processes of the Sound, it is necessary to understand the physical processes which daily shape the littoral environment of the area within which the project is proposed. The DEIS/R provides an overly simplified model of sediment transport within the Sound that is based on inadequate data and focuses narrowly on the immediate project area. Wave data is hindcast from meteorological records, which, while often an appropriate and cost-effective means of characterizing wave climate, does not provide sufficient detail to assess the potential impacts of a project of this magnitude. Key factors that affect the

overall sediment transport process, including tidal and wind-driven currents, sediment transport patterns, and the frequency and magnitude of storm events, are evaluated using data from studies and records developed for areas and purposes not directly related to a characterization of the environment in which the project is proposed. For example, the 1996 FEMA study used to determine that currents will move over Horseshoe Shoals at 1.8 ft/second during a 100-year return frequency was developed as a general, broad scale model applicable to the coastline of Nantucket Island, and can not be used exclusively to characterize conditions within the Sound or at alternative sites. Data such as those provided by the FEMA study are valuable as a general characterization of potential conditions, and as guidance for scoping detailed, site-specific analysis, but they do not provide an adequate basis for a detailed characterization of the affected environment or to determine potential project impacts.

Based on the information at hand, CZM recommends that the proponent develop detailed site-specific oceanographic models to evaluate different magnitude storms, as well as fair-weather, tidal and wind-driven conditions, for the Nantucket Sound and South of Tuckernuck sites (see Alternatives Analysis section below), and we provide the following technical guidance as the basis for discussion of an appropriately scaled effort.

An in-depth study of these processes would provide the required information to quantitatively assess sediment transport pathways, as well as near-field effects of the proposed wind tower structures and any scour protection proposed or permitted. In addition to a more complete spatial and temporal oceanographic data collection (e.g. wind, tides, sediment characteristics, etc.) and analysis effort, a thorough investigation into the coastal dynamics of the alternative sites should include a hydrodynamic and sediment transport modeling component. Regional hydrodynamics should be determined using a spatially- and time-varying model based on the governing equations of fluid flow. Similarly, the study of sediment transport patterns at alternative sites would require the use of a model that can adequately represent the regional variability of the area. Appropriate models should be calibrated with data to represent a full range of tidal conditions, and validation of the models also should be performed. The model domain should represent the entire region to ensure that boundary conditions do not inappropriately influence the solution within the area of interest (i.e. the alternative sites). Once calibrated, model simulations should be performed to evaluate the influence of typical conditions as well as storms on both regional and local sediment transport patterns."

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Obstruction Evaluation Case 04-AWA-OE-24
Aeronautical Study Number's 02-ANE-982-OE
Through 02-ANE-1111-OE
Wind Turbines – Nantucket Sound
NOTICE OF AFFIRMATION OF DETERMINATION
OF NO HAZARD TO AIR NAVIGATION

We have completed our examination of the two petitions submitted for discretionary review of the subject determinations issued by the Federal Aviation Administration's (FAA) New England Regional Office. These determinations address a series of proposed wind turbines at a height of 426 feet (ft) above ground level (AGL)/426 ft above mean sea level (MSL) at a site located on Nantucket Sound, between Cape Cod, MA and Nantucket Island. On April 9, 2003, the FAA issued Determinations of No Hazard to Air Navigation for these proposed wind turbines. At the sponsor's request, on October 5, 2004, the FAA issued an extension to the expiration date for the Determinations of No Hazard to Air Navigation. Subsequently, the FAA received two valid petitions for discretionary review of this extension for the Determinations of No Hazard to Air Navigation.

The petitioners claim that the FAA's Determination of No Hazard to Air Navigation was in error. Specifically, they claim that the proposed wind farm, if built, would be a hazard to air navigation because (1) of the negative impact to local air traffic and military radar facilities; (2) the wind turbines, may result in an adverse impact to the environment; and (3) the wind farm, would pose a safety hazard to aircraft that lose power and need an emergency landing site.

Both petitioners allege that the proposed wind turbines, would be a hazard to air navigation by negatively impacting local air traffic and military radar facilities. In support of this position, the petitioners have submitted several studies conducted by the British government regarding the effect of wind turbines on radar.

Wind turbines are located throughout this country, in various locations and configurations. Historically, the FAA studies the wind turbines primarily with regard to height of these structures and potential effects of physical blockage. This wind turbine farm does not exceed any of the obstructions standards in 14 Code of Federal Regulations part 77, and does not pose any adverse effect. Accordingly, we support the region's determination of no hazard.

Notwithstanding the above, radar is a vital component for the safe and efficient operation of the National Airspace System (NAS). The proposed locations of the wind turbines are in an area which may affect existing radar facilities supporting the NAS. Two of these radars are used to support terminal surveillance services at Nantucket Memorial Airport (ACK) and at the Otis Air National Guard Base (FMH). The third is a long range radar used to support enroute surveillance services from North Truro, located in the northern portion of the Cape Cod National Seashore, and is utilized jointly by the FAA and the Department of Defense.

As part of the examination of this case, the FAA has reviewed the British studies, and has begun its own comprehensive research on this matter. If our future studies reveal that wind

turbines adversely affect the operability of radar, we will amend our policy. If this wind farm is constructed, and radar interference is detected, the FAA will notify the sponsor of the wind turbine farm and request action from the sponsor to mitigate the interference by either ceasing operations or correcting the problem by other means agreeable to the sponsor and the FAA. Historically, sponsors of turbine farms that have adversely affected close proximity radars have mitigated such interference by disabling the wind turbine's ability to freely rotate on the vertical axis with the direction of the wind in order to minimize the amount of interference to the radar.

Both petitioners also claim that the structure, if built, may result in an adverse impact to the environment. Though we can appreciate the significance of this matter, environmental factors are not considered during an aeronautical study. The navigable airspace is a limited national resource, the use of which Congress charged the FAA to administer in the public interest as necessary to ensure the safety of aircraft and the efficient utilization of such airspace. The primary focus of an obstruction evaluation aeronautical study and any subsequent review is on insuring safety, airport capacity and efficiency of the navigable airspace. Environmental factors are outside the scope of aeronautical studies conducted for obstructions.

One petitioner alleges that this structure, if built, could pose a safety hazard to aircraft that lose power and need an emergency landing site. We do not agree. By definition, an emergency is an unscheduled occurrence requiring immediate attention. In-flight emergencies can and do occur at any time and any place. Due to the unlimited types of

emergencies and their unpredictable nature, aeronautical studies do not consider every site as a potential emergency landing site.

In conclusion, we can find no fault with the procedures used by the Regional Office in the conduct of these aeronautical studies. Accordingly, these Determinations of No Hazard of Air Navigation are affirmed, and are now final. The determinations will now expire on FEB 2 - 2007.

If you have any questions regarding this matter, please contact Mrs. Ellen Crum, at (202) 267-8783.

Sincerely,

Nancy B. Kalinowski

Director, System Operations Airspace and Aeronautical Information Management

Montague, Lennis

From: Adams, Karen K NAE [Karen.K.Adams@nae02.usace.army.mil]

Sent: Friday, March 10, 2006 10:11 AM

To: Cluck, Rodney

Cc: Olmsted, Craig

Subject: Air Force PAVE PAWS radar

Attachments: XO memo.pdf; Atch 1 XOS Wind Farm Notes.pdf; Atch 2 MITRE Wind Farm Notes.pdf; Atch 3 Proposed Wind Farm Locations.pdf

I've heard that radar issues with Cape Wind are in the news again. The Air Force has clearly stated in the attached memo that there would not be an impact on the PAVE PAWS facility on Cape Cod. I wanted to make sure you have this supporting documentation that was not in the DEIS.

Karen Kirk Adams
Chief, Permits & Enforcement Branch
U.S. Army Corps of Engineers, New England District
696 Virginia Road
Concord, MA 01742
978-318-8828

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Field Office
70 Commercial Street, Suite 300
Concord, New Hampshire 03301-5087

RECEIVED
RE 7/13/06

July 11, 2006

Rodney E. Cluck
Project Coordinator – Cape Wind Project
Minerals Management Service
381 Elden Street, Mail Stop 4042
Herndon, VA 20164

Dear Mr. Cluck:

This is in response to the May 30, 2006 Notice of Intent to prepare an EIS on the Cape Wind Project, request for scoping comments, and invitation for participation by cooperating agencies, 71 FR 30693.

The Service has been actively involved in the review of the Cape Wind Project since December 2001. During this period, we have identified scoping issues and information needs as outlined in the attached chronology of Service correspondence. All 19 of these documents are individually included as Service scoping comments for this NOI, copies enclosed. In addition, we include as an attachment the Service letter, dated February 28, 2006, on the Advance Notice of Proposed Rulemaking for Alternate Energy-Related Uses on the Outer Continental Shelf as an integral part of the Service scoping comments for this NOI. We suggest that MMS consider working backwards through this scoping correspondence as you develop the scope of analysis document for your DEIS. The Service's January 31, 2005 comments on the Corps DEIS are arranged by subject headings, include a discussion of the issue(s), and cite references, including earlier scoping correspondence. The chronology of Service correspondence also identifies the subject matter of each scoping document.

We realize that these documents combined are more voluminous than ordinary scoping comments for an EIS. However, the Cape Wind Project is not an ordinary project; it has been and remains one of the most controversial projects in New England. The sheer volume of our scoping comments could have and should have been reduced over the past five years had the issues we raised been adequately addressed. That is certainly true for information needs that were identified in 2002 for natural resources such as avian, benthic, and fishery resources. Had the applicant conducted the three-year radar study to identify the spatial and temporal use of the airspace by avian species and the other supporting studies recommended in Service scoping comments, the information needs for those resources would be largely satisfied. However, they

have not, and it will now take three additional years to collect the necessary baseline information identified in our previous scoping comments and in our comments on the Corps DEIS. Accordingly, we recommend that MMS devise a revised schedule for the NEPA process based on the time it will take the applicant to collect the data necessary to address scoping comments dating back to 2002 and data deficiencies identified in comments on the Corps DEIS in 2005.

In addition to the above, we recommend that the following issues be included in your scope of analysis document: 1) the potential for release of hazardous waste from the turbines and transformer station; 2) effects associated with the construction staging area(s) for the proposed project; and 3) the potential impacts associated with any new manufacturing facilities to be developed to support the proposed project.

In closing, I feel the need to note that I find it extremely frustrating that Service efforts with regard to our role as a cooperating agency on the Cape Wind project have not been more productive. Our entire focus over the past five years has been on getting the basic information necessary to make informed decisions with regard to project impacts on migratory birds and other natural resources for which the Service has Congressionally mandated responsibility. We collectively have an opportunity before us now to "do this right". I look forward to working closely with you to take advantage of that opportunity.

Questions should be directed to me or to Mr. Vern Lang of this office at 603-223-2541 or email vernon_lang@fws.gov.

Sincerely yours,

Michael J. Bartlett
Supervisor
New England Field Office

Enclosures

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
NORTHEAST REGION
One Blackburn Drive
Gloucester, MA 01930-2298

Dr. Rodney Cluck
Project Coordinator
Minerals Management Service
381 Elden Street; Mail Stop 4042
Herndon, VA 20164

JUL 26 2006

RE: Comments on the Notice of Intent to Prepare and EIS on the Cape Wind Project

The National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS) has reviewed the May 30, 2006 Federal Register Notice of Intent (NOI), which indicates a Draft Environmental Impact Statement (DEIS) will be prepared by the Department of the Interior's Minerals Management Service (MMS) for the proposed Cape Wind Project. It should be noted that NMFS provided extensive comments and served as a cooperating agency for the development of the Army Corps of Engineers (Corps) DEIS for the Cape Wind project.

The proposed project would construct and operate a wind park within Federal waters 4.7 miles offshore Cape Cod, Massachusetts. The purpose of the proposed project is to provide a utility-scale wind energy facility providing power to the New England power grid. Cape Wind Associates proposes to build 130 wind turbine generators (WTGs) on Horseshoe Shoal in Nantucket Sound. Each WTG would be mounted on a single 16-18 foot diameter monopile. The WTGs would be constructed in a grid pattern within an area of approximately 24 square miles. Each WTG would be connected by a 33 kilovolt (kV) submarine cable to an electric service platform (ESP). The ESP would transform and transmit alternating current electricity to shore through two 115 kV submarine cables. The maximum potential electric output is expected to be 454 megawatts (MW) distributed to the power grid on shore. In order to identify and address potential impacts to fishery resources and habitats as well as foreseeable impacts to existing commercial and recreational fishing activities, NMFS offers the following comments for the development of the DEIS.

Essential Fish Habitat assessment

Due to the potential for substantial adverse effects on Essential Fish Habitat (EFH) from the proposed project, an expanded EFH assessment under the federal review process should be included within the DEIS. This is a separate review mandated pursuant to the terms of the Magnuson Stevens Fishery Conservation and Management Act (16 USC 1855), although the MMS may use the DEIS as the vehicle within which to present the EFH assessment. The required contents of an expanded EFH assessment include: a description of the action; an analysis of the potential adverse effects of the action on EFH

and the managed species; the federal action agency's conclusions regarding the effects of the action on EFH; and proposed mitigation, if applicable. Other information that should be contained in the EFH assessment, if appropriate, includes: the results of on-site inspections to evaluate the habitat and site-specific effects; the views of recognized experts on the habitat or the species that may be affected; a review of pertinent literature and related information; and an analysis of alternatives to the action that could avoid or minimize the adverse effects on EFH.

Need for utility scale
As stated in the NOI, the purpose of the proposed project is to provide a "utility scale" renewable energy facility. The need for a "utility scale" project limits the analysis of a range of reasonable alternatives. The alternative to have small, distributed power generation facilities collectively adding a comparable amount of energy should be examined fully within the DEIS.

Analysis of site alternatives
The NOI notes that only offshore alternatives would be analyzed within the DEIS, and does not include upland or nearshore sites. While NMFS acknowledges that MMS authority exists solely within Federal waters, this artificially limits the reasonable range of alternatives to be analyzed within the DEIS. In our view, the fact that the applicant has proposed a project location within MMS jurisdiction, should not limit the range of alternatives solely to Federal waters. In order to fully analyze a reasonable range of alternatives as required by NEPA, nearshore and upland locations should be considered.

Fishery resources and habitats within the project area
The DEIS should fully characterize NMFS trust resources which may be adversely affected by the proposed project. This characterization should account for fishery resources, shellfish resources, and habitats located within the proposed project area. While the Corps DEIS contained commercial and recreational finfish data from NMFS and Massachusetts Division of Marine Fisheries (MADMF) surveys, this characterization was not based upon site-specific, fishery-independent finfish and shellfish resource sampling. Moreover, the use of landings data limits the evaluation to Federal and state managed species and does not account for forage species.

Temporary impacts from placement of cables within Lewis Bay and Nantucket Sound
The substrate within the proposed project area contains several areas of short and long period sand waves. Finfish resources utilize biogenic depressions and sand ridges for refuge and shelter and loss of these habitats can affect fish energy requirements. NMFS maintains that installation of submarine cables, inner-array cables, monopiles and the ESP, can adversely affect sand wave habitat. Loss of this sand ridge structure habitat can impact the forage base for larger fishery resources in the area. While recovery is expected to occur within this dynamic environment, studies have shown that recovery may be prolonged for up to one year. The lost functions and values of this habitat, from initial impact to the time of full recovery to pre-construction contours, are important to understand. The DEIS should analyze the anticipated effects of these temporary losses of habitat and the anticipated time period for recovery. For impacts that cannot be avoided,

compensatory mitigation for lost functions and values for temporary impacts should be presented within the DEIS.

Foreseeable impacts to winter flounder within Lewis Bay

According to the project description in the Corps DEIS, the 115kV submarine transmission cable will transit Lewis Bay. According to the Corps DEIS, the cable would utilize horizontal directional drilling (HDD) for a portion of the alignment in order to avoid coastal resource areas. In order for a transition from HDD to jet plow to occur, the applicant has proposed to install a cofferdam and excavate a pit within an area of 2,925 square feet of winter flounder habitat. Furthermore, the jet-plow activity seaward of the HDD exit point will continue through Lewis Bay for a distance of over one mile. As suspended sediment resulting from the jet plow activity has the potential to adversely affect winter flounder spawning and juvenile development in the area, impacts should be adequately characterized within the DEIS and efforts to avoid and minimize impacts should be discussed further.

Eelgrass

The extent of eelgrass within Lewis Bay should be described within the DEIS. Eelgrass beds have been designated as a unique category of EFH, Habitat Area of Particular Concern (HAPC), for summer flounder by the Mid-Atlantic Fishery Management Council. In addition, eelgrass beds have been designated by the US Environmental Protection Agency as "special aquatic sites" pursuant to section 404(b)(1) of the Federal Clean Water Act, due to their important role in the marine ecosystem. In order to ensure protections of eelgrass from cable activities, the extent of the bed should be delineated, and steps should be taken to avoid adverse effects resulting from direct impacts as well as from suspended sediment loading.

Permanent impact to benthic habitats from WTG's and scour mats

According to the project description within the Corps DEIS, the benthic footprint of the wind towers and associated scour mats will be 0.68 acres and 2.53 acres, respectively. These structures represent a permanent impact of 3.21 acres of benthic substrate. Compensatory mitigation for this permanent impact should be described within the DEIS.

Foreseeable impacts to fishing activities

NMFS remains concerned that the proposed project has the potential to adversely affect bottom tending fishing activities within the wind park due to the uncovering of cables. Should the inner array of cables become exposed, or move towards the surface, commercial fishing activities may be excluded from the area due to potential conflicts with trawls and other bottom-tending fishing gear. The DEIS should include a discussion of the proposed burial depths as well as an analysis of anticipated scour resulting from a range of weather conditions, including extreme conditions.

Impacts to commercial fishing vessel navigation

The DEIS should address potential impacts to fishing vessels utilizing the proposed project area. Of specific concern is that vessels utilizing trawl gears within the project area will be forced to maneuver throughout the wind park. Fishing vessels that attempt to

maneuver in alternate courses may be impacted and efficiency may be reduced. The DEIS should include an assessment of fishing gears utilized in the area, lengths of nets and lines, anticipated tow speeds, etc., to determine any adverse impacts to commercial fishing navigation.

Decommissioning of the wind park

The DEIS should include a discussion of impacts relating to the removal of cables and structures during decommissioning. In addition, the DEIS should include analysis of issues, both positive and negative, associated with leaving the structures/cables in place.

Monitoring of fishery impacts

The DEIS should include a discussion of a biological monitoring plan. Based on our concern regarding recovery of the substrate upon completion of construction, a biological monitoring plan should be presented within the DEIS. The monitoring plan should include contingencies should the anticipated recovery not occur. NMFS looks forward to coordinating with MMS and the applicant on the development of such a monitoring plan.

Compensatory mitigation

The DEIS should include a discussion of compensatory mitigation for unavoidable impacts resulting from the construction, operation and decommissioning of the wind park. While NMFS recommends that the applicant avoid and minimize adverse effects to EFH to the maximum extent practicable, compensatory mitigation may be required to offset permanent and temporary impacts on fisheries habitats. In our view, temporary and permanent adverse impacts on fishery habitats, resources and activities may occur during all phases of the proposed project. Temporary loss of functions and values – from the time of initial impact to the time of full recovery – are typically offset by compensatory mitigation. As stated above, the DEIS should analyze the anticipated effects and anticipated recovery times for marine fishery habitats. For impacts that cannot be avoided, compensatory mitigation for impacts should be proposed within the DEIS.

Cumulative effects

The DEIS should include a robust cumulative effects analysis for the proposed project. This analysis should describe the effects of the proposed project, in combination with any past, present, and reasonable foreseeable future actions, which may result in cumulative impacts on the ecosystem. Specifically, the cumulative effects analysis should include other existing, proposed, or planned energy infrastructure project within the area, and should address fishing exclusion areas and their additive effects on fishing activities, as well as the additive effects on the impacted species.

Endangered Species Act and Marine Mammal Protection Act

NMFS Protected Resources Division (PRD) oversees programs for species listed under the Endangered Species Act of 1973, as amended (ESA) and the Marine Mammal Protection Act (MMPA). Several federally listed species of whales and sea turtles are known to occur seasonally in the waters off of New England. Federally endangered Northern right whales (*Eubalaena glacialis*) and humpback whales (*Megaptera*

novaeangliae) are found seasonally in New England waters. North Atlantic right whales have been documented in the nearshore waters of Massachusetts from December through June and are likely to be present in Cape Cod Bay from December 15 – April 15 and Great South Channel from March 1 – June 30. Humpback whales feed during the spring, summer, and fall over a range that encompasses the eastern coast of the United States. Humpback whales are found off the coast of Massachusetts from March 15 – November 30. Fin (*Balaenoptera physalus*), Sei (*Balaenoptera borealis*) and Sperm (*Physter macrocephalus*) whales are also seasonally present in New England waters but are typically found in deeper offshore waters. Occurrence of these species at any of the alternative sites would be rare. It is possible that transient right or humpback whales could occur at any of the sites listed in the FR notice, including the preferred location in Nantucket Sound. However, listed whales are most likely to occur at the Nantucket Shoals and East of Nauset Beach alternative sites. The East of Nauset Beach area is also used by fin whales. The use of Nantucket Sound by large marine mammals, including the listed whales, is likely limited by the relatively shallow depths in the area.

Certain New England waters have also been designated as critical habitat for the Northern Right Whale (final rule at 59 FR 28793). The Great South Channel critical habitat is the area bounded by 41°40' N/69°45' W; 41°00' N/69°05' W; 41°38' W; and 42°10' N/68°31' W. The Cape Cod Bay critical habitat is the area bounded by 42°02.8' N/70°10' W; 42°12' N/70°15' W; 42°12' N/70°30' W; 41°46.8' N/70°30' W and on the south and east by the interior shore line of Cape Cod, Massachusetts. It appears that the East of Nauset Beach alternative site lies at least partly within the Great South Channel critical habitat area.

The sea turtles in northeastern nearshore waters are typically small juveniles with the most abundant being the federally threatened loggerhead (*Caretta caretta*) followed by the federally endangered Kemp's ridley (*Lepidochelys kempi*). Loggerheads and Kemp's ridleys have been documented in waters as cold as 11°C, but generally migrate northward when water temperatures exceed 16°C. These species are typically present in New England waters from June 1 – November 30. Federally endangered leatherback sea turtles (*Dermochelys coriacea*) are located in New England waters during the warmer months as well. While leatherbacks are predominantly pelagic, they may occur close to shore, especially when pursuing their preferred jellyfish prey. Green sea turtles *(Chelonia mydas)* may also occur sporadically in New England waters, but those instances would be rare. Sea turtles may be present while migrating or foraging at the preferred site within Nantucket Sound or at any of the alternative sites.

All marine mammals are protected under the MMPA. This includes the listed whales noted above as well as gray seals, harbor seals, harbor porpoises, common dolphins, pilot and minke whales, all of which may occur at either the preferred Nantucket Shoals site or any of the alternative sites. The East of Nauset Beach site is frequently used by minke whales. A large number of gray seals occur in Nantucket Sound, with the breeding population at Mukeget Island consisting of at least 1500 seals. If the proposed project is likely to result in the incidental take of marine mammals by harassment, an Incidental Harassment Authorization may be necessary. Please refer to NMFS Office of Protected

Resources website for more information on applying for this authorization (http://www.nmfs.noaa.gov/pr/permits/incidental.htm#iha).

The construction, operation, maintenance and decommissioning of an Offshore Wind Development project at the preferred site or at any of the alternative sites may affect the species noted above. In the EIS, MMS must fully analyze the effects of all stages of the project on these species. Based upon review of the Corps DEIS, NMFS expects that MMS will consider at least the following effects: displacement of protected species from the project site, change in species composition at the site that may affect the forage base of protected species, change in habitat structure that may affect protected species, direct and indirect effects of construction including acoustic impacts of pile driving, effects of increased vessel traffic, effects of electromagnetic and thermal emissions and the likely levels and effects of suspended solids and other pollutants. The EIS should not only describe the likely effects but analyze the impact that these effects are likely to have on protected species as well as an analysis of the cumulative impact of the project on listed species.

As you know, Section 7(a)(2) of the ESA states that each Federal agency shall, in consultation with the Secretary, insure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Any discretionary federal action that may affect a listed species must undergo Section 7 consultation. As the lead federal agency for the Cape Wind Offshore Wind Development project, MMS is responsible for determining whether the proposed action may affect any listed species and for seeking the concurrence of NMFS with that determination. If MMS determines that the project is "not likely to adversely affect" any listed species (i.e., when direct or indirect effects of the proposed project or its interdependent and/or interrelated actions on listed species are expected to be discountable, insignificant or completely beneficial) and NMFS concurs with this determination, NMFS will reply to MMS in a letter that will convey the concurrence, thus completing Section 7 consultation. If MMS determines that the project is "likely to adversely affect" any listed species (i.e., if any adverse effect to listed species may occur as a direct or indirect result of the proposed action or its interrelated or interdependent actions, and the effects are not: discountable, insignificant, or beneficial) or NMFS does not concur with MMS' "not likely to adversely affect" determination, formal Section 7 consultation, resulting in the issuance of a Biological Opinion, may be required. Any effects that amount to the take of a listed species (defined by the ESA as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct") are not discountable, insignificant or entirely beneficial. Therefore, if any take is anticipated, formal consultation is required.

MMS may prepare a Biological Assessment which analyzes the effects of the proposed project on listed species or prepare a letter which outlines which sections of the EIS constitute the agency's analysis of effects on listed species. Either document should be accompanied by a letter that includes MMS determination of effects and a request for concurrence with that determination. This package will serve to initiate Section 7 consultation and should be submitted to the attention of the Endangered Species

Coordinator at NMFS Northeast Regional Office. NMFS would then be able to conduct a consultation pursuant to Section 7 of the ESA.

Thank you for the opportunity to provide comments on this important project. Should you have questions regarding these comments, please contact Christopher Boelke at (978) 281-9131. If you have any questions regarding the MMPA or ESA, please contact Julie Crocker at (978)281-9300 x6530

Sincerely,

Peter D. Colosi
Assistant Regional Administrator
for Habitat Conservation

cc: Christine Godfrey, US ACOE
Michael Bartlett, US FWS
Robert Varney, US EPA
Elizabeth Higgins, US EPA
Paul Howard, NEFMC
Sally McGee, NEFMC
Patricia Kurkul, NMFS, NERO
Mary Colligan, NMFS, PRD
George Darcy, NMFS, SFD
Carla Sullivan, NMFS, PPI
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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OFFICE OF THE
REGIONAL ADMINISTRATOR

July 27, 2006

Dr. Rodney E. Cluck, Project Coordinator
Minerals Management Service
381 Elden Street
MS 4042
Herndon, Virginia 20164

Re: Scoping Comments for the Proposed Cape Wind Project Environmental Impact Statement

Dear Dr. Cluck:

EPA appreciates the opportunity to comment on the scope of analysis for the preparation of a Draft Environmental Impact Statement (DEIS) for the Cape Wind Associates, LLC (Cape Wind) proposal to construct a wind turbine park on Horseshoe Shoals in Nantucket Sound, Massachusetts. According to the scoping notice, the proposed wind park would consist of 130 offshore wind turbine generators that would generate a maximum of 454 megawatts of electricity. The electricity from each turbine would be transmitted to a centrally located electric service platform and would then be transmitted to the Cape Cod mainland power grid twelve miles away via two subsea 115 kilovolt transmission lines.

EPA originally offered scoping comments in April 2002 on the proposed Cape Wind project in response to a Corps of Engineers Notice of Intent. In addition, we participated as a cooperating agency during the Corps of Engineers EIS process. EPA's subsequent comments on the Corps DEIS on February 24, 2005 identified a number of deficiencies in the analysis and recommended the preparation of a supplemental EIS. Subsequently, the Energy Policy Act of 2005 established authority within the Department of Interior to manage renewable energy projects on the Outer Continental Shelf (OCS). The establishment of the Energy Policy Act gave the Minerals Management Service the lead role with respect to the analysis of the proposed project and alternatives under NEPA. EPA has participated in several meetings with the MMS since the passage of the Energy Policy Act and has agreed to participate as a cooperating agency during the development of the EIS. Our scoping comments are based on information contained in the MMS scoping notice, on the MMS website, as well as our understanding of project issues through our review of the record and past coordination with the Corps of Engineers, other federal, state, and local agencies, and the applicant.

As we indicated in our scoping comments on the Cape Wind project four years ago, EPA recognizes the environmental problems associated with the use of fossil fuel to generate electricity in New England. The region's need to invest in other cleaner sources of electricity,

including renewables, is underscored by the renewable portfolio standards in many of the New England states. Consequently, EPA New England strongly supports an increase in the amount of electricity generated in the region from appropriately sited renewable energy projects.

EPA looks forward to coordinating with the Corps and other local, state and federal interests as the MMS works to determine the appropriate scope of analysis for the project and as specific investigations are developed to gauge the level of impact associated with each alternative under consideration. Instead of generating entirely new scoping comments in response to the recent invitation to comment, we recommend that the MMS review our April 5, 2002 scoping comment letter, May 24, 2002 comments on the Corps draft scope of work for the Cape Wind EIS, and our February 24, 2005 comments on the Corps DEIS. Those comments, taken as a whole, characterize the issues we believe should be analyzed in the EIS.

Among other things, our previous comments highlighted the importance of the purpose and need statement, the development of an adequate environmental baseline from which to measure the environmental impacts of the proposed project and alternatives, the analysis of environmental impacts, and consideration of alternatives that avoid or minimize impacts. We also noted the importance of developing an adequate mitigation and monitoring plan based on the characterization of baseline conditions and analysis of project impacts. We encourage the MMS to consider those issues as it develops the scope for the EIS.

We are also writing to respond to requests made during meetings with the MMS and in the EIS scoping notice for input regarding significant issues, the range of alternatives, and mitigation measures. In particular, we support MMS's plan to consider a range of alternatives that includes smaller scale (modified project size) alternatives, phased development proposals and a reconfigured development. The examination of smaller scale alternatives in the EIS could sharpen the presentation of the benefits and tradeoffs of the proposal. We encourage the MMS to continue to coordinate with the cooperating agency group on the purpose and need statement as the discussion of alternatives in the EIS will be framed by the statement of purpose and need. We also recommend that the EIS consider a near shore alternative in state waters, such as the recently proposed wind farm in Buzzards Bay, even though such an alternative would not require MMS licensing and would be subject to its own environmental review by the Corps of Engineers under NEPA.

Thank you for the opportunity to offer these comments as part of our ongoing participation in the scoping process for the Cape Wind EIS. We look forward to continuing to work with you as a cooperating agency as you develop the EIS. Please contact Timothy Timmermann at 617/918-1025 if you have any questions about this letter or the comment letters we reference above.

Sincerely,

Elizabeth A. Higgins
Director, Office of Environmental Review

Wind Turbine Analysis for

Cape Cod Air Force Station Early Warning Radar

and Beale Air Force Base Upgraded Early Warning Radar

Spring 2007

EXECUTIVE SUMMARY

The Missile Defense Agency (MDA) analyzed the potential impact of utility class wind farms on radars.

- Utility class wind farms could have a significant impact on radars, including the missile defense early warning radars (EWRs), the PAVE PAWS radar at Cape Cod AFS, MA, and the Upgraded Early Warning Radar (UEWR) at Beale AFB, CA.
- To mitigate this impact, establish and enforce a wind farm offset zone within the effective "line-of-sight" of the radars, taking into account the direct, refracted, and diffracted signals from the radar. This effectively establishes a zone around the radar of approximately twenty-five kilometers, assuming relatively level terrain.
- Within twenty-five kilometers, further study would be required to assess the impact accounting for location within the radar's field of view and the relative height of the wind turbine.
- After establishing this offset zone, eliminate any remaining impacts on the radar by using gain control and range gating techniques.

History

Studies on the effects of windmill farms on military readiness were documented in a 2006 Report to Congressional Defense Committees. That report focused on the effects of wind farms on radars and the resulting potential impact on military readiness.

The primary historical data and research efforts were focused on air defense radars, characterized as "Primary Surveillance Radars" (PSR) and Air Traffic Control (ATC) radars. Two fixed-site missile Early Warning Radars (EWR) were mentioned in the report but not examined in detail. A testing campaign was planned and executed to establish a technical baseline on the radar cross section and Doppler behavior of a modern utility-class wind turbine that could be used to support development of future mitigation approaches.

Subsequently, the Missile Defense Agency (MDA) was requested to analyze the effect on the early warning radar (EWR) at Cape Cod Air Force Station (AFS) and the upgraded early warning radar (UEWR) at Beale Air Force Base (AFB). This report responds to that request and establishes appropriate offset distances where modern utility-class wind turbines can be constructed without adversely impacting the performance of these radars.

Missile Early Warning Radars

PAVE PAWS is an Air Force phased array radar system with two primary missions: missile warning and space surveillance. While providing surveillance, it is capable of detecting and tracking Inter-Continental Ballistic Missiles (ICBMs) and Submarine Launched Ballistic Missiles (SLBMs) that enter its field of view. After detection, the objects are continuously tracked. The second mission is to support the Space Surveillance Network, which involves the surveillance and tracking of earth satellites and identification of other space objects.

The PAVE PAWS has two faces, as shown in Figure 1, that contain elements that transmit and receive the radio frequency (RF) signals generated by the radar and reflected from the target. The array faces are tilted back 20 degrees from vertical to allow the beam to be scanned from 3 degrees above the horizon (beam center) to 85 degrees above the horizon. At this time the PAVE PAWS radar at Cape Cod AFS is not an Element of the Ballistic Missile Defense System (BMDS).

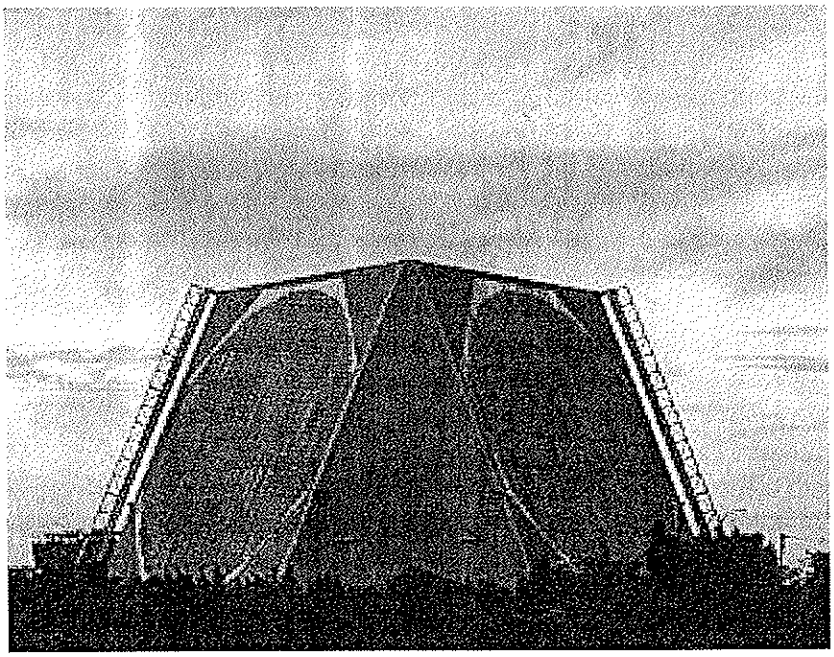

Figure 1. PAVE PAWS Radar

PAVE PAWS at Cape Cod Air Force Station

A PAVE PAWS radar is located at Cape Cod AFS, near Otis AFB. Figure 2 depicts how the PAVE PAWS radar is situated operationally with the north face of the radar covering the 120 degree sector from 347° to 107°; the south face of the radar covering from 107° to 227°. The figure also shows the twenty-five kilometer range extent.

There are two wind farms proposed near the Cape Cod AFS. One of these, known as the Hull turbines, is located, as indicated at the top of Figure 2.

(1.) Hull One: 42 deg 18 min 15.73 sec N, 70 deg 55 min, 19.80 sec W. Ground elevation 9 ft, Turbine height 150 ft with 75 ft blades.

(2.) Hull Two: 42 deg 15 min 41 sec N, 70 deg 51 min 26 sec W (approximate position, seeking verification). Ground elevation approx 25 ft, Turbine height 250 ft with 130 ft blades.

The second wind farm is known as Cape Wind™. Planned for a location near Horseshoe Shoal in Nantucket Sound, it will contain 130 wind turbines, generating 420 megawatts of electricity. Its approximate location is also indicated on Figure 2 near the bottom.

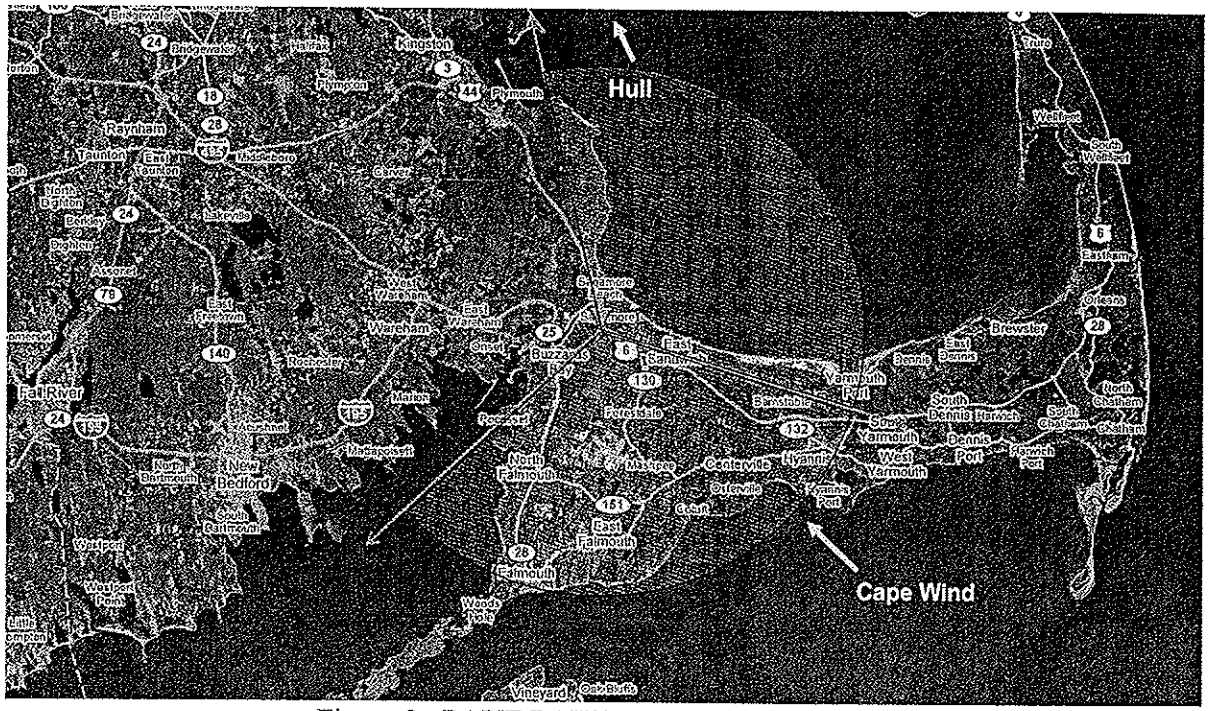

Figure 2. PAVE PAWS Location at Cape Cod

Upgraded PAVE PAWS at Beale Air Force Base

The PAVE PAWS radar at Beale AFB has been upgraded to improve its performance for the Ballistic Missile Defense missions. Consequently, it is referred to now as an Upgraded Early Warning Radar (UEWR). The Beale UEWR is located in the northern Sacramento Valley as shown in Figure 3.

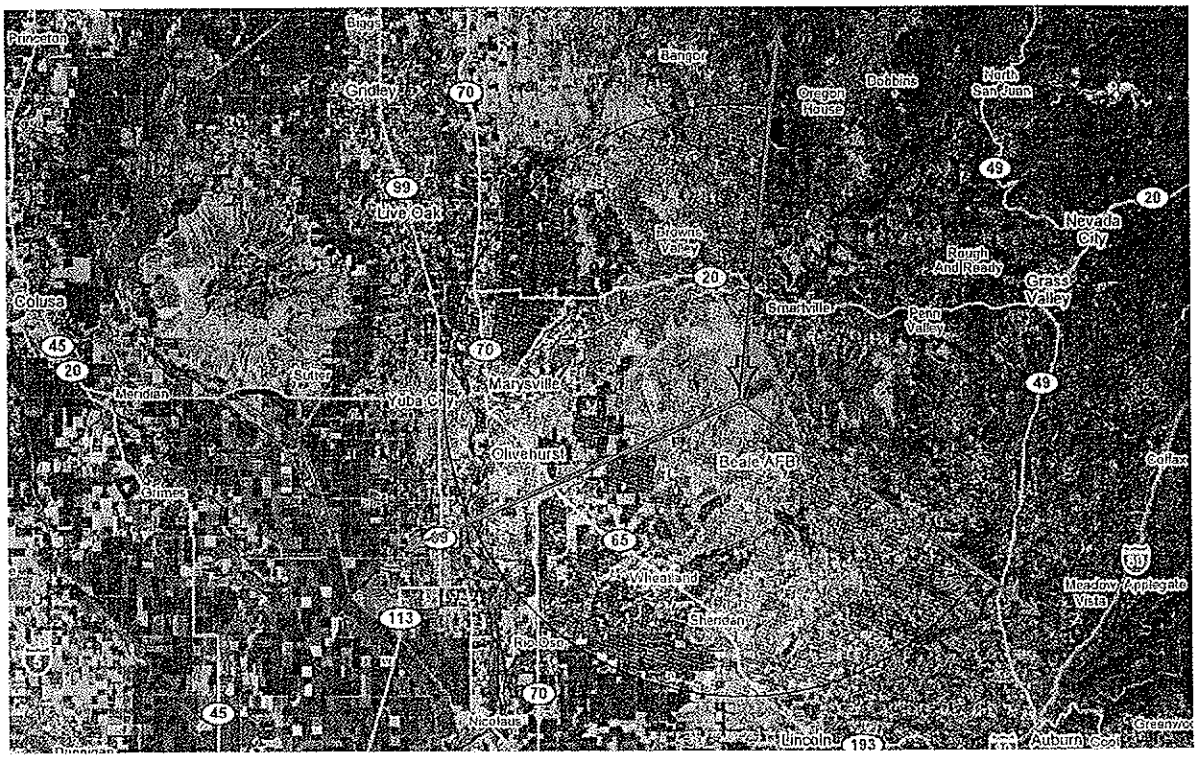

Figure 3. UEWR at Beale Air Force Base, CA

The runways of Beale can be seen immediately west of the UEWR. In the radar's line of sight, the Sutter Buttes, approximately 40 km west of the radar, provide a large radar return that is mitigated through range gating and data processing techniques which could be used to alleviate returns from wind turbines in the radar side lobes.

There are currently no wind farms in the line of sight or the immediate area of Beale AFB. However, three of the largest wind farms in the world are located in California. One of the largest is in Northern California, in Altamont Pass, south of Beale in the San Francisco Bay Area.

Impact and Mitigation of Interfering Signals

As described in the 2006 Report to the Congressional Defense Committees on The Effect of Windmill Farms On Military Readiness, the refraction effect for the frequency band of the EWRs can be approximated by employing a "4/3 earth model." In this approximation, a geometric line of sight is calculated using an effective radius for the earth equal to the actual radius of the earth multiplied by the factor 1.33. Using the 4/3 earth model, the minimum height of the main beam and the height of the bottom of the beam are shown in Figure 4.

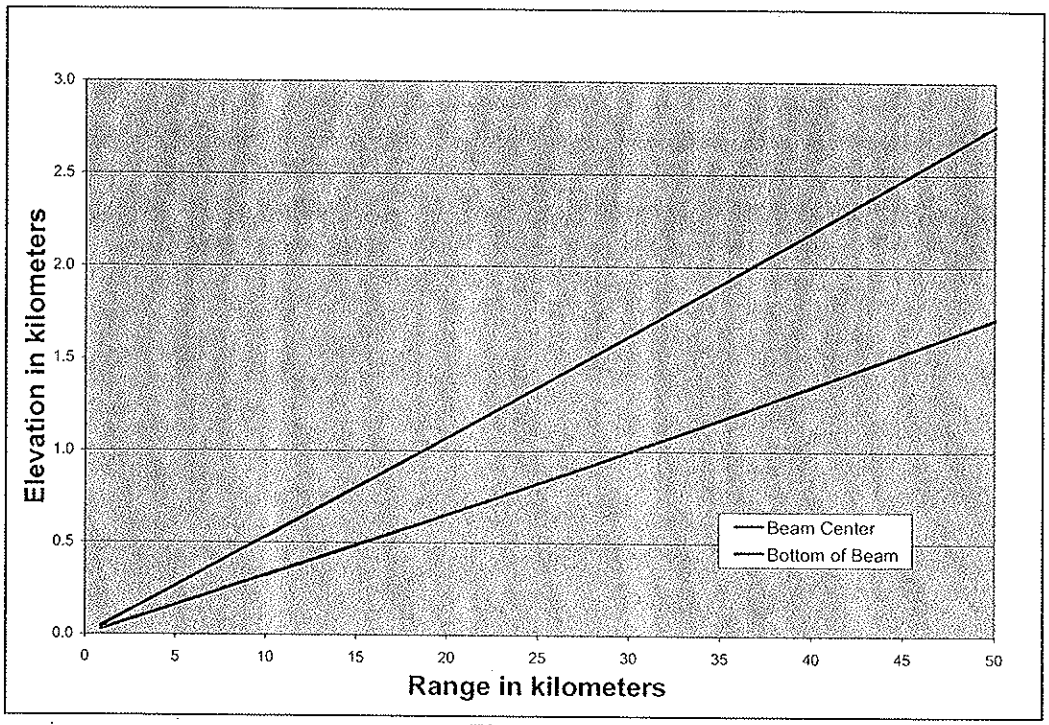

Figure 4

Wind turbines in the main beam, back lobes or side lobes of the radar, as shown in Figure 5, can impact radar performance if not mitigated.

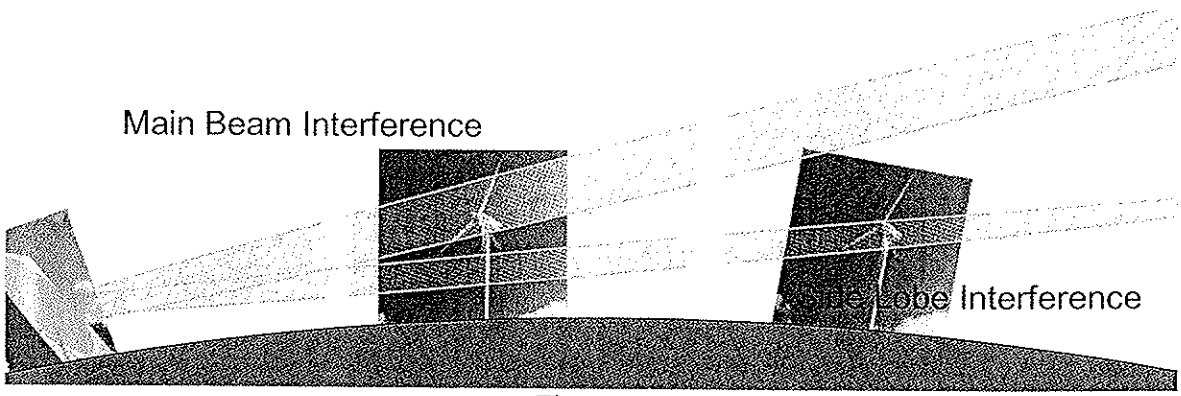

Figure 5

Objects in the path of an electromagnetic wave affect its propagation characteristics. The radar energy may be blocked and reflected (terrain masking) or diffracted around the encountered objects. This reduces the total energy of the beam beyond the objects and is not easily characterized, since the terrain and man-made structures can have a significant impact on the signal strength. This energy reduction substantiates a need to establish keepout zones in the effective line of sight of the main beam of the radar to provide effective mitigation.

The principle impact of wind turbines in the radar sidelobes are the reflected returns. If not mitigated, these could provide false targets to the radars. Since the EWRs are designed to search and track at long ranges (beyond 1000 km), only a small portion of the transmitted energy could be received from objects reflecting energy at ranges less than 100 km, where sidelobe energy may reach wind turbines. At these short ranges, the impact of the energy return from targets is mitigated by pulse eclipsing and range gating, which prevents the radar from receiving the full transmitted pulse energy. In addition, data processing techniques for automatic gain control can mitigate returns from targets close in range, as is performed on the energy reflected from the Sutter Buttes west of Beale AFB.

CONCLUSIONS AND RECOMMENDATIONS

The discussion above supports the following recommendations and conclusions applicable to placement of wind farms in the vicinity of Cape Cod AFS and Beale AFB.

- Utility class wind farms could have a significant impact on radars, including the missile defense early warning radars (EWRs), the PAVE PAWS radar at Cape Cod AFS, MA, and the Upgraded Early Warning Radar (UEWR) at Beale AFB, CA.
- To mitigate this impact, establish and enforce a wind farm offset zone within the effective "line-of-sight" of the radars, taking into account the direct, refracted, and diffracted signals from the radar. This effectively establishes a zone around the radar of approximately twenty-five kilometers, assuming relatively level terrain.
- Within twenty-five kilometers, further study would be required to assess the impact accounting for location within the radar's field of view and the relative height of the wind turbine and the radar's main beam.
- After establishing this offset zone, eliminate any remaining impacts on the radar by using gain control and range gating techniques.

04/25/2007 02116

** PUBLIC NOTICE **

The Federal Aviation Adminstration is conducting an aeronautical study concerning the following:

Aeronautuical Study No. (ASN) 2006-ANE-1082-OE

Structure:	Wind Turbine A12-HSS
Location:	Edgartown, MA
Latitude:	41-28-26.27 N
Longitude:	70-22-18.39 W
Heights:	440 feet above ground level (AGL) 440 feet above mean sea level (AMSL)

The structure described above exceeds obstruction standards. To be eligible for consideration, comments must be received on or before 2007-06-01

To access complete details regarding this determination, use View Circularized Cases on the Internet at http://oeaaa.faa.gov and search by state and ASN, or contact our office at (718) 553-2560

Signature Control No: 484476-100019890

U.S. Department of Homeland Security

United States Coast Guard

Commandant
United States Coast Guard

2100 Second Street, S.W.
Washington, DC 20593-0001
Staff Symbol: CG-3PWN
Phone: (202) 372-1566
Fax: (202) 372-1930
Email: George.H.Detweiler@uscg.mil

16670
2 August 2007

The Honorable Dirk Kempthorne
Secretary of the Interior
Washington DC 20240

C/O
Dr. Walter D. Cruickshank, Ph.D.
Director, Minerals Management Service
1849 C Street, NW
Washington, DC 20240

Dear Dr. Cruickshank:

Section 414(a) of the Coast Guard and Maritime Transportation Act of 2006 (Public Law 109-241) (the Act) requires the Commandant to specify the reasonable terms and conditions necessary to provide for navigational safety with respect to the proposed lease, easement, or right-of-way that the Secretary of the Department of the Interior may consider for an offshore wind energy facility in Nantucket Sound. The Act also requires the Commandant to provide the terms and conditions not later than 60 days before the date established by SECDOI for publication of a draft environmental impact statement (DEIS).

The reasonable terms and conditions are provided as enclosure (1). The Minerals Management Service (MMS) has indicated to us that the earliest date of publication of the DEIS will be October, 2007. We consider the Congressional-mandate of 60 days prior to publication of the DEIS to be met.

Members of my staff are available to discuss these terms and conditions with MMS' project officer as necessary. Our point of contact is Mr. George Detweiler who can be reached at the phone numbers or email address provided above.

I wish to thank you and your staff for their assistance already provided in this project. I trust that our excellent working relationship will be maintained for the Nantucket Project and be continued through any and all future projects.

Sincerely,

David P Pekoske

DAVID P. PEKOSKE
Rear Admiral, U. S. Coast Guard
Assistant Commandant for Operations
By Direction of the Commandant

Enclosure: Navigation Terms and Conditions dated 2 August 2007

U.S. COAST GUARD
NAVIGATION TERMS AND CONDITIONS FOR OPERATION
OF THE NANTUCKET SOUND WIND FARM
AS PROPOSED BY CAPE WIND, LLC
2 August 2007

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U.S. COAST GUARD
NAVIGATION TERMS AND CONDITIONS FOR OPERATION
OF THE NANTUCKET SOUND WIND FARM
AS PROPOSED BY CAPE WIND, LLC
2 August 2007

1. Authority and Purpose:

   a. Section 414(a) of the Coast Guard and Maritime Transportation Act of 2006 (Public Law 109-241) requires the Commandant of the Coast Guard to "not later than 60 days before the date established by the Secretary of the Interior for publication of a draft environmental impact statement...specify the reasonable terms and conditions... necessary to provide for navigational safety with respect to the proposed lease, easement, or right-of-way and each alternative to the proposed lease, easement, or right-of-way considered by the Secretary (of the Interior)." The Terms and Conditions contained in this document are in response to this Congressional mandate and are considered by the Coast Guard to be reasonable and the minimum necessary to provide for navigational safety should the Nantucket Sound Wind Farm (NSWF), as proposed, be permitted by the Secretary of the Interior. The provision of these Terms and Conditions to MMS does not imply or indicate that the Coast Guard summarily approves or disapproves of the Cape Wind project.

   b. Other Coast Guard authorities, including the Ports and Waterways Safety Act (PWSA) (33 U.S.C. §§ 1221 *et seq.*) and the Marine Transportation Security Act of 2002 (MTSA) (Public Law 107-295), as amended, provide broad statutory authority to the Coast Guard to manage risk on the nation's waterways, including all of the waters within Nantucket Sound. The PWSA provides that the Coast Guard may take such action as is necessary to prevent damage to or the destruction of, any structure on or in the navigable waters of the United States, and protect the navigable waters and the resources therein from harm resulting from vessel or structure damage, destruction, or loss. Under this authority, the Coast Guard may prescribe minimum safety equipment requirements for facilities, implement measures for limited, controlled, or conditional access and activity around or on such facilities, and may establish procedures for examination thereof. The MTSA, for its part, requires the Coast Guard to conduct security assessments and to ensure that adequate security measures are implemented by the vessels and facilities operating in and around the ports of the United States.

   c. These Terms and Conditions are intended to help protect mariners, the environment, and the proposed NSWF from the risks associated with navigating within and in the vicinity of the proposed facility. Failure to satisfy or implement any of the conditions prescribed herein may be cause for the Secretary of Interior or other cognizant authority to deny, suspend, or revoke the appropriate lease(s), easement(s), or right-of-way(s), permit(s) or license(s) for construction and/or operation of the NSWF, and may result in penalties for violating other applicable law or regulation.

2. Applicability:

   a. These Terms and Conditions apply only to the Cape Wind NSWF project as proposed in its Summary of Plan Materials filed with the Minerals Management Service (MMS), as amended through December 31, 2006—the only Cape Wind proposal of which the Coast Guard was aware at the time these provisions were transmitted to the Department of Interior. Any change to that proposal subsequent to the issuance of these Terms and Conditions may result in part or all of these Terms and Conditions being null or void, or may result in additional Terms and Conditions.

   b. Terms and Conditions will be developed and provided separately should an alternative to the proposal referenced in paragraph 2.a. above ultimately be submitted to the Secretary of the Interior.

3. Definitions used in these Terms and Conditions include:

   a. **Coast Guard**: Commander, Sector Southeastern New England, or his/her designated representative.

   b. **Navigation safety**: For the purposes of these Terms and Conditions, navigation safety includes marine navigation safety only. Aviation navigation safety falls under the cognizance and authority of the Federal Aviation Administration (FAA).

   c. **Nantucket Sound Wind Farm (NSWF)**: The electrical generation facility proposed to be located in the vicinity of Horseshoe Shoals, Nantucket Sound, Massachusetts as proposed by Cape Wind LLC in its Summary of Plan Materials, as amended through December 31, 2006, to MMS and commonly referred to as "The Cape Wind Project."

   d. **Wind Turbine Generator (WTG):** Includes the structures supporting the nacelles and turbine blades, data collection tower(s), electrical service and maintenance platform(s), and any other structures permanently placed in the waters of Nantucket Sound to support operation of the NSWF.

4. Design Conditions:

The NSWF shall be designed, positioned, arranged and operated in such a way that navigation risk is ameliorated and the Coast Guard determines that maritime navigation safety is maintained. This determination will be made only after the NSWF agrees to comply with these Terms and Conditions and after the analyses in subparagraph 4.d. and elsewhere throughout this document are completed. The following are specific design conditions:

a. During all phases of construction and operation, the NSWF in its entirety and each individual WTG shall be marked with private aids to navigation in accordance with guidelines established by the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) and subject to the approval of the Commander, First Coast Guard District. Each individual WTG shall be marked with clearly visible, unique, alpha-numeric identification characters. Prior to construction of the NSWF, Cape Wind Associates shall provide MMS and the Coast Guard with a proposed marking scheme and an evaluation of how the proposed private aids to navigation associated with the NSWF would impact the environment. The proposed marking scheme and evaluation must be approved in writing by MMS after consultation with the Coast Guard. Application shall be made to Commander (dpw-1), First Coast Guard District, to establish private aids to navigation for each WTG and the NSWF itself, and approval for all private aids to navigation shall be obtained before construction of the NSWF begins.

b. All WTG rotors (blade assemblies) shall be equipped with control mechanisms that can be operated from the control center of the NSWF.

(1) The WTG control mechanisms shall enable control room operators to shut down (i.e. cease movement) any or all of the WTGs within two minutes of initiating shutdown procedures.

(2) Shutdown(s) may be ordered by the Coast Guard in instances where the Coast Guard determines that navigation safety may be impacted if the WTG were to continue to operate. When so ordered, the Control Center operator shall immediately commence shutdown procedures. Normally, Coast Guard-ordered shut downs will be limited to those WTGs in the immediate vicinity of an emergency and for as short a period as is safely practicable under the circumstances, as determined by the Coast Guard.

c. Safety lines, mooring attachments (for securing vessels) and access ladders for use in emergencies shall be placed on each WTG. Plans for the design and placement of safety lines, mooring attachments and access ladders shall be submitted to MMS and the Coast Guard, and approved in writing by MMS after consultation with the Coast Guard.

d. The potential for interference with marine communications, navigation systems and radar is site specific and a function of many factors including turbine size, layout of the NSWF, number of turbines, construction material(s), topographical features, and the types of vessels impacted. It is further understood that different vessels or classes of vessels will have various types of electronic equipment or none at all.

(1) Before beginning construction of the NSWF, Cape Wind shall submit a researched analysis to MMS and the Coast Guard. The analysis must be specific to the Cape Wind proposal concerning whether or not the WTGs as designed and their location would interfere in any way with marine communications or navigation systems or produce radar reflections, blind spots, shadow areas, or other radar effects that would have a significant adverse impact on the safety of navigation. This analysis shall specifically consider the types of vessels that regularly navigate in the area of the proposed NSWF, taking into account the navigation, communications and collision avoidance equipment typically in use on those vessels.

(2) Cape Wind shall develop and submit to MMS and the Coast Guard recommended mitigation measures to minimize any adverse impacts to navigation and communications equipment identified in the analysis submitted in accordance with paragraph 4e.(1).

(3) The researched analysis and associated recommended mitigation measures will be reviewed by MMS and the Coast Guard to determine:

(a) if the identified impacts, if any, allow for an acceptable risk to navigation safety and,

(b) if the identified impacts do not allow for an acceptable risk to navigation safety, then the associated recommended mitigation measures will provide the degree of mitigation necessary for a level of navigation safety acceptable to MMS and the Coast Guard.

(4) Any recommended mitigation measures submitted by Cape Wind must be approved by MMS in consultation with the Coast Guard. The placement, construction and operation of any approved mitigation measures shall be funded by Cape Wind.

e. Changes or design modifications that could affect navigation safety require advance notice to MMS. These changes or modifications include, but are not limited to, a change in number, size, or location of WTGs or a change in construction materials or construction method. MMS will consult with the Coast Guard and must approve the proposed changes or modifications before they can take place. The notice shall address:

(1) The need for the changes or modifications.

(2) An analysis of how the changes or modifications are expected to impact navigation safety.

5. Operating Conditions:

a. **Control Center**: Prior to construction of the NSWF, Cape Wind shall submit a written plan for the control center to MMS and the Coast Guard. This plan must be approved in writing, by MMS after consultation with the Coast Guard. The plan must demonstrate that the Control Center will be adequately staffed to perform the standard operating procedures, communications capabilities, and monitoring capabilities as defined in paragraphs (1) through (4) below. The Control Center shall be staffed at all times. The plan shall include, but not be limited to, the following topics:

(1) **Standard Operating Procedures**: Method for establishing and testing WTG rotor shutdown; method(s) for notifying the Coast Guard of mariners in distress or potential/actual search and rescue (SAR) incidents; method(s) for notifying the Coast Guard of any events or incidents that may impact maritime safety or security.

(2) **Staffing**: Number of personnel intended to staff the control center to ensure continuous monitoring of WTG operations, communications and surveillance systems; hours of operation; levels of supervision, job qualification requirements; initial, on-the-job, and refresher training requirements to ensure all watchstanders maintain satisfactory levels of proficiency at all times.

(3) **Communications**: Capabilities to be maintained by the control center to communicate with the Coast Guard and mariners within and in the vicinity of the NSWF. Communications capability shall at a minimum include VHF marine radio and landline and wireless for voice and data and must include the ability to communicate with private vessels, Coast Guard vessels and aircraft while underway, and Coast Guard Sector Southeastern New England.

(4) **Monitoring**: Capabilities to be maintained by the control center to monitor in real time marine traffic within and in the vicinity of the NSWF and to monitor the status of all private aids to navigation established in accordance with paragraph 4.b above.

b. **Icebreaking:** Prior to construction of the NSWF, Cape Wind shall provide MMS and the Coast Guard with a written plan to break ice that may form within the NSWF, should such icebreaking be deemed necessary for navigation safety in Nantucket Sound by the Coast Guard or otherwise deemed prudent by Cape Wind. This plan must be approved in writing, by MMS after consultation with the Coast Guard. At a minimum, this icebreaking plan shall include:

(1) When icebreaking may be required.

(2) Provisions to ensure that ice freed from the NSWF will not impede navigation in surrounding channels.

(3) Identification of icebreaking services/resources (i.e., what company/companies will provide icebreaking services, and the capability of the company's icebreaking resources).

c. **Worksite Construction**: Prior to commencing any surface or subsurface construction activity at the site, Cape Wind shall submit to MMS and the Coast Guard a plan that describes the schedule and process for erecting each WTG, including all planned mitigations to be implemented to minimize any adverse impacts to navigation while construction is ongoing. Appropriate Notice to Mariners submissions will accompany the plan. This plan must be approved in writing by MMS after consultation with the Coast Guard.

6. Reporting Conditions:

a. Upon commencing construction of the NSWF and no later than the first calendar day of each succeeding month while construction is in progress, Cape Wind shall provide a written report to MMS and the Coast Guard which shall include:

(1) The current construction status of the project.

(2) Changes to the construction schedule or process described in the plan required by paragraph 5.c above.

(3) A description of any complaints received (either written or oral) by boaters, fishers, commercial vessel operators, professional maritime associations or organizations or other mariners regarding impacts to navigation safety allegedly caused by construction boats, barges, or other equipment. Describe any remedial action taken or planned to be taken in response to complaints received.

(4) Copies of any correspondence received by Cape Wind from other federal, state, or local agencies that mention or address navigation safety issues.

b. For each existing WTG, and not later than 30 days prior to 1 January, 1 April, 1 July, and 1 October of each year, Cape Wind shall provide MMS and the Coast Guard with its planned WTG maintenance schedule for each respective quarter. Appropriate Notice to Mariners submissions will accompany each maintenance schedule.

7. Miscellaneous Conditions:

a. To ensure sufficient opportunity for the public to receive information directly from the owners/operators of the NSWF, Cape Wind shall attend quarterly meetings of the Southeastern Massachusetts Port Safety Forum and brief the forum on the status of construction and operations, and on any problems or issues encountered with respect to navigation safety.

b. Any change to a plan or other submission required by paragraphs 4 or 5, whether prior to or during construction or operation of the NSWF, must be submitted in writing to MMS and the Coast Guard and requires the written approval of MMS, after consultation with the Coast Guard.

8. Caveats:

a. Nothing in these Terms and Conditions exempts Cape Wind from meeting any other terms, conditions, or obligations that may be imposed by Federal law or regulation, or other Federal agencies.

b. The NSWF construction and operation, including the control center and its operators, and all plans and policies related thereto, shall be subject to regular review and examination by the Coast Guard on at least an annual basis, or more frequently if circumstances dictate.

c. The Coast Guard reserves the right to amend these Terms and Conditions at any time before, during, or after construction of the NSWF should material facts or circumstances come to light that were either unforeseen or were not reasonably available at the time these Terms and Conditions were issued.

d. The Coast Guard reserves the right to reevaluate any required analyses submitted by Cape Wind in accordance with these Terms and Conditions. The Coast Guard reserves the right to amend these Terms and Conditions at any time based on its reevaluation of the submitted analyses.

STATE

Commonwealth of Massachusetts

Division of Fisheries & Wildlife

Wayne F. MacCallum, *Director*

November 15, 2001

Heather Rafferty
Environmental Science Services, Inc.
888 Worcester Street, Suite 240
Wellesley, MA 02482

Re: Site off Shore Road
Yarmouth, MA
NHESP File: 01-9640

Dear Ms. Rafferty,

Thank you for contacting the Natural Heritage and Endangered Species Program for information regarding state-protected rare species in the vicinity of the above referenced site. I have reviewed the site and would like to offer the following comments.

Our database indicates that the site intersects Priority/Estimated Habitats PH1622/WH 7288, PH 1613/WH 7286, and PH 1564/WH 439 which contain the following species:

Species	Taxon	Status
PH 1622/WH 7288		
Comet Darner (*Anax longipes*)	dragonfly	special concern
Inundated Horned-sedge (*Rhyncospora inundata*)	plant	threatened
Long-beaked Horned-sedge (*Rhyncospora scirpoides*)	plant	special concern
New England Bluet (*Enallagma laterale*)	damselfly	special concern
Plymouth Gentian (*Sabatia kennedyana*)	plant	special concern
Terete Arrowhead (*Sagittaria teres*)	plant	special concern
Wright's Panic-grass (*Dichanthelium wrightianum*)	plant	special concern
PH 1613/WH 7286		
Comet Darner (*Anax longipes*)	dragonfly	special concern
Common's Panic-grass (*Dichanthelium commonsonianum*)	plant	special concern
Mattamuskeet Panic-grass (*Dichanthelium mattamuskeetense*)	plant	endangered
Plymouth Gentian (*Sabatia kennedyana*)	plant	special concern
PH 1564/WH 439		
Long-beaked Bald-sedge (*Rhyncospora scirpoides*)	plant	special concern
Plymouth Gentian (*Sabatia kennedyana*)	plant	special concern

Natural Heritage & Endangered Species Program
Route 135, Westborough, MA 01581 **Tel:** (508) 792-7270 x 200 **Fax:** (508) 792-7821
An Agency of the Department of Fisheries, Wildlife & Environmental Law Enforcement
http://www.state.ma.us/dfwele/dfw/nhesp

Pondshore Knotweed (*Polygonum puritanorum*)	plant	special concern
Redroot (*Lachnanthes carolina*)	plant	special concern
Terete Arrowhead (*Sagittaria teres*)	plant	special concern
Water-willow Stem Borer (*Papaipema sulphurata*)	moth	threatened
Wright's Panic-grass *(Dichanthelium wrightanum*)	plant	special concern

These species are protected under the Massachusetts Endangered Species Act (M.G.L. c. 131A) and its implementing regulations (321 CMR 10.00) as well as the state's Wetlands Protection Act (M.G.L. c. 131, s. 40) and its implementing regulations (310 CMR 10.00). Fact sheets for most of these species can be found on our website at www.state.ma.us/dfwele/dfw.

This evaluation is based on the most recent information available in the Natural Heritage database, which is constantly being expanded and updated through ongoing research and inventory. Should your site plans change, or new rare species information become available, this evaluation may be reconsidered.

Please do not hesitate to call me at (508)792-7270 x154 if you have any questions.

Sincerely,

Christine Vaccaro

Christine Vaccaro
Environmental Review Assistant

Commonwealth of Massachusetts

Division of Fisheries & Wildlife

Wayne F. MacCallum, *Director*

June 17, 2002

Heather Rafferty Heater
Environmental Science Services, Inc.
888 Worcester Street, Suite 240
Wellesley, MA 02482

FILE
E159-

Re: Cape Wind Project
Yarmouth, Mashpee, MA
NHESP File: 01-9640

Dear Ms. Heater,

Thank you for contacting the Natural Heritage and Endangered Species Program for information regarding state-protected rare species in the vicinity of the above referenced site. I have reviewed the site and would like to offer the following comments.

Our database indicates that the site intersects Priority/Estimated Habitat PH 1684/WH 484, which has been delineated for the Least Tern (*Sterna antillarum*) and the Piping Plover (*Charadrius melodus*), a threatened species in Massachusetts. The project also intersects Priority/Estimated Habitat PH 1622/WH 7288, which has been delineated for the New England Bluet (*Enallagma laterale*), a species of special concern, Pine Barrens Bluet (*Enallagma recurvatum*), a threatened species, Comet Darner (*Anax longipes*), a species of special concern, Plymouth Gentian (*Sabatia kennedyana*), a species of special concern, Terete Arrowhead (*Sagittaria teres*), a species of special concern, Wright's Panic-grass (*Dichanthelium wrightianum*), a species of special concern, and the Long-beaked Bald-Sedge (*Rhyncospora scirpoides*), a species of special concern. These species are protected under the Massachusetts Endangered Species Act (M.G.L. c. 131A) and its implementing regulations (321 CMR 10.00) as well as the state's Wetlands Protection Act (M.G.L. c. 131, s. 40) and its implementing regulations (310 CMR 10.00). Fact sheets for most of these species can be found on our website at www.state.ma.us/dfwele/dfw.

This evaluation is based on the most recent information available in the Natural Heritage database, which is constantly being expanded and updated through ongoing research and inventory. Should your site plans change, or new rare species information become available, this evaluation may be reconsidered.

Please do not hesitate to call me at (508)792-7270 x154 if you have any questions.

Sincerely,

Natural Heritage & Endangered Species Program
Field Headquarters, Westborough, MA 01581 **Tel:** (508) 792-7270, ext 200 **Fax:** (508) 792-7821
An Agency of the Department of Fisheries, Wildlife & Environmental Law Enforcement
http://www.masswildlife.org

Christine Vaccaro
Environmental Review Assistant

Commonwealth of Massachusetts

Division of Fisheries & Wildlife

Wayne F. MacCallum, *Director*

September 4, 2002

Heather Rafferty Heater
Environmental Science Services, Inc.
888 Worcester Street, Suite 240
Wellesley, MA 02482

FILE

Re: Cape Wind Project
Barnstable, Mashpee, MA
NHESP File: 01-9640

Dear Ms. Heater,

Thank you for contacting the Natural Heritage and Endangered Species Program for information regarding state-protected rare species in the vicinity of the above referenced site. I have reviewed the site and would like to offer the following comments.

Our database indicates that the site intersects the following Priority/Estimated Habitats:

Species	Taxon	Status
PH 1684/WH 484		
Least Tern (*Sterna antillarum*)	bird	Special Concern
PH 1615/WH 464		
Comet Darner (*Anax longipes*)	dragonfly	Special Concern
Pine Barrens Bluet (*Enallagma recurvatum*)	damselfly	Threatened
New England Bluet (*Enallagma laterale*)	damselfly	Special Concern
American Brook Lamprey (*Lampetra appendix*)	fish	Special Concern
Eastern Pondmussel (*Ligumia nasuta*)	mussel	Special Concern
Tidewater Mucket (*Leptodea ochracea*)	mussel	Special Concern
Triangle Floater (*Alasmidonta undulata*)	mussel	Special Concern
Northern Parula (*Parula americana*)	bird	Threatened
Terete Arrowhead (*Sagittaria teres*)	plant	Special Concern
Water-willow Stem-borer (*Papaipema sulphurata*)	moth	Threatened
PH 1609/WH 416		
Plymouth Gentian (*Sabatia kennedyana*)	plant	Special Concern
Pondshore Knotweed (*Polygonum puritanorum*)	plant	Special Concern
Redroot (*Lachnanthes carolina*)	plant	Special Concern
Terete Arrowhead (*Sagittaria teres*)	plant	Special Concern
Torrey's Beak-sedge (*Rhyncospora torreyana*)	plant	Endangered
Water-willow Stem-borer (*Papaipema sulphurata*)	moth	Threatened

PH 1598/WH 7069

Comet Darner (*Anax longipes*)	dragonfly	Special Concern
Bushy Rockrose (*Helianthemum dumosum*)	plant	Special Concern
Papillose Nut-sedge (*Scleria pauciflora*)	plant	Endangered
Pondshore Knotweed (*Polygonum puritanorum*)	plant	Special Concern
Redroot (*Lachnanthes carolina*)	plant	Special Concern
Sandplain Flax (*Linum intercursum*)	plant	Special Concern
Wright's Panic-grass (*Dichanthelium wrightianum*)	plant	Special Concern

PH 1604/WH 7283

Coastal Barrens Buckmoth (*Hemileuca maia*)	moth	Threatened
Water-willow Stem-borer (*Papaipema sulphurata*)	moth	Threatened
Comet Darner (*Anax longipes*)	dragonfly	Special Concern
Pine Barrens Bluet (*Enallagma recurvatum*)	damselfly	Threatened
New England Bluet (*Enallagma laterale*)	damselfly	Special Concern
Long-beaked Bald-sedge (*Rhyncospora scirpoides*)	plant	Special Concern
Nantucket Shadbush (*Amelanchier nantucketensis*)	plant	Special Concern
Philadelphia Panic-grass (*Panicum philadelphicum*)	plant	Special Concern
Plymouth Gentian (*Sabatia kennedyana*)	plant	Special Concern
Pondshore Knotweed (*Polygonum puritanorum*)	plant	Special Concern
Redroot (*Lachnanthes carolina*)	plant	Special Concern
Short-beaked Bald-sedge (*Rhyncospora nitens*)	plant	Threatened
Slender Marsh Pink (*Sabatia campanulata*)	plant	Endangered
Terete Arrowhead (*Sagittaria teres*)	plant	Special Concern
Torrey's Beak-sedge (*Rhyncospora torreyana*)	plant	Endangered
Wright's Panic-grass (*Dichanthelium wrightianum*)	plant	Special Concern

PH 1564/WH 439

Long-beaked Bald-sedge (*Rhyncospora scirpoides*)	plant	Special Concern
Plymouth Gentian *(Sabatia kennedyana)*	plant	Special Concern
Pondshore Knotweed (*Polygonum puritanorum*)	plant	Special Concern
Redroot (*Lachnanthes carolina*)	plant	Special Concern
Terete Arrowhead (*Sagittaria teres*)	plant	Special Concern
Wright's Panic-grass (*Dichanthelium wrightianum*)	plant	Special Concern
Water-willow Stem-borer (*Papaipema sulphurata*)	moth	Threatened

These species are protected under the Massachusetts Endangered Species Act (M.G.L. c. 131A) and its implementing regulations (321 CMR 10.00) as well as the state's Wetlands Protection Act (M.G.L. c. 131, s. 40) and its implementing regulations (310 CMR 10.00). Fact sheets for most of these species can be found on our website at www.state.ma.us/dfwele/dfw.

This evaluation is based on the most recent information available in the Natural Heritage database, which is constantly being expanded and updated through ongoing research and inventory. Should your site plans change, or new rare species information become available, this evaluation may be reconsidered.
Please do not hesitate to call me at (508)792-7270 x154 if you have any questions.

Sincerely,

Christine Vaccaro

Christine Vaccaro
Environmental Review Assistant

Commonwealth of Massachusetts

Division of Fisheries & Wildlife

MassWildlife

Wayne F. MacCallum, *Director*

October 23, 2003

Rebecca Weissman
ESS Group, Inc.
889 Worcester Street, Suite 240
Wellesley, MA 02482

Re: Cape Wind Project
Barnstable and Yarmouth, MA
NHESP File: 01-9640

Dear Ms. Weissman,

Thank you for contacting the Natural Heritage and Endangered Species Program (NHESP) of the MA Division of Fisheries & Wildlife (DFW) for information regarding state-protected rare species in the vicinity of the above referenced site. I have reviewed the site and would like to offer the following comments.

Our database indicates that the following protected rare species occur within Estimated and Priority Habitats in the vicinity of the site:

Scientific name	Common Name	Taxonomic Group	State Rank
WH 7288/PH 1617			
Anax longipes	Comet Darner	Dragonfly	SC
Enallagma laterale	New England Bluet	Damselfly	SC
Enallagma pictum	Scarlet Bluet	Damselfly	T
Enallagma recurvatum	Pine Barrens Bluet	Damselfly	T
Dichanthelium wrightianum	Wright's Panic-Grass	Vascular Plant	SC
Rhynchospora inundata	Inundated Horned-Sedge	Vascular Plant	T
Rhynchospora scirpoides	Long-Beaked Bald-Sedge	Vascular Plant	SC
Sabatia kennedyana	Plymouth Gentian	Vascular Plant	SC
Sagittaria teres	Terete Arrowhead	Vascular Plant	SC
Coastal plain pondshore	Coastal Plain Pondshore	Natural Community	
WH 7286/PH 1605			
Anax longipes	Comet Darner	Dragonfly	SC
Dichanthelium commonsianum	Commons's Panic-Grass		SC
Dichanthelium mattamuskeetense	Mattamuskeet Panic-Grass		E
Sabatia kennedyana	Plymouth Gentian	Vascular Plant	SC
WH 199/PH1650			
Enallagma laterale	New England Bluet	Damselfly	SC

Original

Division of Fisheries and Wildlife
Field Headquarters, One Rabbit Hill Road, Westborough, MA 01581 (508) 792-7270 Fax (508) 792-7275
An Agency of the Department of Fisheries, Wildlife & Environmental Law Enforcement

Enallagma pictum	Scarlet Bluet	Damselfly	T
Enallagma recurvatum	Pine Barrens Bluet	Damselfly	T
Papaipema sulphurata	Water-Willow Stem Borer	Moth/Butterfly	T
Dichanthelium wrightianum	Wright's Panic-Grass	Vascular Plant	SC
Lachnanthes caroliana	Redroot	Vascular Plant	SC
Polygonum puritanorum	Pondshore Knotweed	Vascular Plant	SC
Rhynchospora scirpoides	Long-Beaked Bald-Sedge	Vascular Plant	SC
Sabatia kennedyana	Plymouth Gentian	Vascular Plant	SC
Sagittaria teres	Terete Arrowhead	Vascular Plant	SC
Coastal plain pondshore	Coastal Plain Pondshore	Natural Community	

PH 1595

Enallagma laterale	New England Bluet	Damselfly	SC
Enallagma recurvatum	Pine Barrens Bluet	Damselfly	T
Anax longipes	Comet Darner	Dragonfly	SC
Hemileuca maia	Barrens Buckmoth	Moth/Butterfly	SC
Papaipema sulphurata	Water-Willow Stem Borer	Moth/Butterfly	T
Amelanchier nantucketensis	Nantucket Shadbush	Vascular Plant	SC
Coastal plain pondshore	Coastal Plain Pondshore	Vascular Plant	
Dichanthelium wrightianum	Wright's Panic-Grass	Vascular Plant	SC
Lachnanthes caroliana	Redroot	Vascular Plant	SC
Panicum philadelphicum	Philadelphia Panic-Grass	Vascular Plant	SC
Polygonum puritanorum	Pondshore Knotweed	Vascular Plant	SC
Rhynchospora nitens	Short-Beaked Bald-Sedge	Vascular Plant	T
Rhynchospora scirpoides	Long-Beaked Bald-Sedge	Vascular Plant	SC
Rhynchospora torreyana	Torrey's Beak-Sedge	Vascular Plant	E
Sabatia campanulata	Slender Marsh Pink	Vascular Plant	E
Sabatia kennedyana	Plymouth Gentian	Vascular Plant	SC
Sagittaria teres	Terete Arrowhead	Vascular Plant	SC

WH 466/PH 1650

Charadrius melodus	Piping Plover	Bird	T
Sterna antillarum	Least Tern	Bird	SC

WH 6/WH 2074/PH 1651

Charadrius melodus	Piping Plover	Bird	T
Sterna antillarum	Least Tern	Bird	SC

WH 7510/PH 1612

Sterna hirundo	Common Tern	Bird	SC
Sterna dougallii	Roseate Tern	Bird	E

Eastern Box Turtle (*Terrapene carolina*), a state-listed species of Special Concern, also occurs in the vicinity of the site. These species are protected under the Massachusetts Endangered Species Act (M.G.L. c. 131A) and its implementing regulations (321 CMR 10.00) as well as the state's Wetlands Protection Act (M.G.L. c. 131, s. 40) and its implementing regulations (310 CMR 10.00). Fact sheets for many of these species can be found on our website at www.state.ma.us/dfwele/dfw.

Although there probably will be time of year restrictions associated with construction, we will require more detailed information about the project in order to make such an evaluation.

The upland cable route, as represented in your most recent letter, intersects WH 199/PH 1567, WH7286/PH 1605, WH 7288/PH 1617, and is located immediately adjacent to WH 7283/PH 1595. The submarine cable route is located almost entirely within WH 7510/PH 1612, designated as important foraging areas for Common and Roseate Terns. Least Terns are also found in and around Lewis Bay.

This evaluation is based on the most recent information available in the Natural Heritage database, which is constantly being expanded and updated through ongoing research and inventory. Should your site plans change, or new rare species information become available, this evaluation may be reconsidered.

Using the list of rare species provided above, we recommend that rare wildlife and/or plant surveys be conducted by qualified individuals within suitable habitats on and near the site according to scientifically accepted survey methodologies. A Rare Animal/Plant Observation Form, available at our website www.masswildlife.org, should be submitted for each species encountered. If during this site evaluation rare species are found on or near the site, then site plans and a project description should be sent to NHESP Environmental Review to determine whether a probable "take" under the MA Endangered Species Act (G.L. c. 131A) would occur. If NHESP determines that the proposed project would "take" a rare species, and the site is greater than two acres, and within a Priority Habitat site, an Environmental Notification Form should be submitted pursuant to the MA Environmental Policy Act regulations (301 CMR 11.03(2)(b)(2)). If the project site does not occur within a Priority Habitat, but rare species have recently been found on or near the site, then site plans and a site description should be submitted for MESA review. A Conservation & Management Permit may be required for work in rare species habitat.

If the project site is within Estimated Habitat for Rare Wildlife and a Notice of Intent (NOI) is required, then a copy of the NOI must be submitted to the NHESP in a timely manner, so that it is received at the same time as the conservation commission. Using the species list provided above, the Resource Areas on the site should be evaluated as important wildlife habitat for state-protected species, focusing on those areas that provide feeding, breeding, over-wintering, shelter and migration functions. The project should be evaluated for compliance with the rare species performance standard, which is that there shall be no short or long-term adverse affects to the habitat (within Resource Areas)(310 CMR 10.37 and 10.59).

If you have any questions regarding this review, please contact Tom French, Assistant Director, at ext. 163.

Sincerely,

Thomas W. French

Thomas W. French, Ph.D
Assistant Director

The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
100 Cambridge Street, Suite 900
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March 3, 2005

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ON THE
DRAFT ENVIRONMENTAL IMPACT REPORT

PROJECT NAME	: Cape Wind Project
PROJECT MUNICIPALITY	: Barnstable, Yarmouth, and Federal Waters of Nantucket Sound
PROJECT WATERSHED	: Cape & Islands
EOEA NUMBER	: 12643
PROJECT PROPONENT	: Cape Wind Associates LLC
DATE NOTICED IN MONITOR	: November 23, 2004

Summary of Findings

As Secretary of Environmental Affairs, I hereby determine that the Draft Environmental Impact Report (Draft EIR) submitted on this project adequately and properly complies with the Massachusetts Environmental Policy Act (MEPA), M.G.L. c. 30, ss. 61-62H, and with its implementing regulations, 301 CMR 11.00 (the "MEPA Regulations").

Because MEPA is the product of state law, not federal law, MEPA review and state permitting technically applies only to those portions of the project that are located within Massachusetts, including its territorial waters (generally within 3 miles of the low water mark of the shore). While the majority of the project is located in federal waters, the federal Minerals and Management Service (MMS) recently changed the Submerged Lands Act boundary of Nantucket Sound, thereby expanding Massachusetts territorial waters and state jurisdiction over an estimated 8 - 10 wind turbine generators (WTGs) within the wind farm. The Commonwealth's Ocean Sanctuaries Act (OSA), M.G.L. c. 132A, s. 15, prohibits the "construction or operation of offshore floating or electric generating stations" within the Cape and Islands Ocean Sanctuary (CIOS). I hereby find, as further discussed below, that any WTGs now located within state waters as a result of the recent boundary change must be eliminated from the project. If the project proponent chooses to relocate these WTGs into federal waters, thereby shifting the WTG array, I will require the filing of a Notice of Project Change for public review of the changes to the project and to determine what further analysis may be warranted.

While I have found the Draft EIR adequate to the extent of state jurisdiction, this

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determination does not mean that I am satisfied with every aspect of analysis in the Draft EIR[1]. I have examined the record before me, including but not limited to the Scope issued; the Draft EIR filed in response; and the numerous comments entered into the record. While many of the comments have raised valid concerns, I find that the Draft EIR has addressed the issues within MEPA jurisdiction, in accordance with Section 11.08(8)(b) of the MEPA Regulations, to a sufficient extent that the project may advance to the stage of a Final EIR. However, there are still outstanding issues within MEPA jurisdiction, as described below and in the comments received. The Final EIR must address these issues, including the need for additional analysis and mitigation measures, and respond to the substantive comments received that are within MEPA jurisdiction.

Project Description

As described in the Draft EIR, the proposed project involves the development of 130 WTGs on a grid over approximately 24 square miles of sub-tidal area in Nantucket Sound known as Horseshoe Shoals. The project will generate up to 454 megawatts (MW) of electricity. Due to the low capacity factor for wind energy projects, the average generation is expected to be approximately 170 MW of electricity. As currently proposed, each WTG will be 263 feet above mean sea level, with a total height up to 423 feet above mean sea level when rotor systems reach maximum height.

The wind-generated electricity from each of the turbines will be transmitted via a 33 kilovolt (kV) submarine transmission cable to the Electric Service Platform (ESP) located within the WTG array. The ESP will take the wind generated energy from each of the WTGs and transform and transmit the electric power to the mainland via two 115kV alternating current (AC) submarine cable circuits. The submarine cable systems will make landfall in the Town of Yarmouth.

The on-shore underground cables and portions of the submarine cables are located within Massachusetts or in the waters of the Commonwealth. The WTG array itself is primarily located in federal waters outside the Territorial Sea.

Federal and State Jurisdiction, Required Permits, and MEPA Jurisdiction

State jurisdiction ends at the limit of Massachusetts waters, 3 nautical miles from the low water shoreline. Because the turbines are in federal waters[2], they are subject to Army Corps

1 Section 11.08(8)(b) of the MEPA Regulations requires me to find a Draft EIR adequate even if certain aspects of the project or issues require additional technical or descriptive analysis, provided that "the draft EIR is generally responsive to the requirements of 301 CMR 11.07 and the Scope."

2 As noted elsewhere in this Certificate, the recent boundary change promulgated by MMS results in some WTGs within the presently proposed array to be now located in state waters. I have found that the OSA prohibits such structures from being constructed in the CIOS and therefore required these WTGs to be eliminated from the project. For jurisdictional purposes, I am presuming that

permitting and federal NEPA review. In addition, Coastal Zone Management (CZM) as part of its federal consistency review authority must find that any federal permit is consistent with the state's enforceable coastal zone policies, based on the project's potential impact to state resources or uses within the coastal zone.

The project is undergoing review pursuant to Section 11.03 (7)(b)(4) of the MEPA regulations, because the project involves development of a new electric transmission line greater than one mile in length with a capacity of 69 or more kV. The project also requires the preparation and review of a mandatory EIR pursuant to Section 11.03(3)(a)5 of the MEPA Regulations, because the project involves a new non-water dependent use of more than one acre of tidelands. The portion of the project within Massachusetts will require a 401 Water Quality Certificate and a variance from Chapter 91 from the Department of Environmental Protection (DEP); approval from the Massachusetts Energy Facilities Siting Board (EFSB)[3]; a construction permit from the Massachusetts Highway Department; and an Order of Conditions from the Barnstable and Yarmouth Conservation Commissions (and hence Superseding Order(s) from DEP if one or both local Order(s) were appealed). In addition, the Massachusetts Coastal Zone Management Office (CZM) will conduct Federal Consistency Review of the project, including the portions of the project located in federal waters. The project will require a Section 10 permit from the United States Army Corps of Engineers (ACOE). The ACOE is also the lead agency in the federal environmental review under the National Environmental Policy Act (NEPA).

Because the proponent is not seeking financial assistance from the Commonwealth for the project, MEPA jurisdiction extends to those aspects of the project that are within the subject matter of required or potentially required state permits and that have the potential to cause significant Damage to the Environment[4]. In this case, given the broad scope of the Chapter 91 and EFSB permits, MEPA jurisdiction effectively extends to all aspects of the project that are within Massachusetts. At the time of the Environmental Notification Form (ENF) filing and review, the portion of the project subject to MEPA was not believed to meet or exceed any mandatory EIR thresholds. Because of the precedent setting nature of the project and the potential for significant environmental impacts, the project was scoped for a discretionary EIR in accordance with section 11.06 of the MEPA Regulations[5].

Because MEPA (like the Cape Cod Commission Act) is the product of state law, not federal law, MEPA review (and by extension Cape Cod Commission review) technically applies only to those portions of the project that are located within Massachusetts, including its territorial

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the WTG array remains wholly in federal waters, as WTGs are categorically prohibited in state ocean sanctuaries (see Chapter 132A, section 15).

3 The EFSB is the only state agency allowed to proceed with its approvals prior to completion of MEPA Review. The EFSB issued a tentative decision approving the project on July 2, 2004. A final decision is pending.

4 As defined at 301 C.M.R. 11.02.

5 Since the review of the ENF and issuance of the Scope in 2002, DEP has now determined that the project is a non-water dependent use requiring a Variance under Chapter 91. Therefore, the project now exceeds the mandatory EIR threshold at 301 CMR 11.03(3)(a)5. I sent the proponent a letter on May 28, 2003 revising the Scope for the EIR to include a Chapter 91 variance analysis.

waters (generally within 3 nautical miles of the low water mark of the shore). I note that the proposed WTG array is located outside of Massachusetts and, therefore, is not subject to state regulatory requirements. CZM has broader jurisdiction because federal law (pursuant to the federal Coastal Zone Management Act) specifically delegates review authority over projects in federal waters to the Coastal Zone Management Office of the adjacent coastal state, provided that the state has a federally approved Coastal Zone Management Plan.

Nonetheless, despite the jurisdictional limitations on MEPA review, the proponent agreed at the commencement of the MEPA process to provide information under MEPA (within the meaning of Section 11.05(8) of the MEPA regulations) as it relates to the entire project, including the WTG array in federal waters. This information will also assist CZM in its federal consistency review process. I have therefore set forth requirements below for additional information and analysis that must be included in the Final EIR.

Coordinated Review

In addition to the state MEPA review, the project is undergoing review pursuant to the National Environmental Policy Act (NEPA) and review by the Cape Cod Commission (CCC) as a Development of Regional Impact (DRI). The proponent has committed to filing one set of documents that fulfill the requirements of NEPA, MEPA, and CCC. The Draft Environmental Impact Statement prepared by the Army Corps of Engineers, as the lead agency for NEPA purposes, also served as a Draft EIR for state MEPA purposes. Both NEPA and MEPA regulations allow, and encourage, the preparation of joint EIS/EIR documents. MEPA and CCC have a formal process for coordinated EIR/DRI review pursuant to a Memorandum of Understanding between the agencies. While MEPA, the ACOE, and the CCC are coordinating the review process, each agency retains its independent jurisdiction and decision making authority.

The MEPA Office, which is not required to hold public hearings during review of a project, participated in all four ACOE public hearings on the Draft EIS/Draft EIR, and the CCC public hearing to afford the public maximum opportunity for input. Also, I requested and the project proponent agreed to an extended comment period to align with the close of ACOE's 105-day comment period.

As noted at the outset of this review process, I believe coordinated review is a good government practice, both in terms of allowing for maximum public and agency understanding of the project and to ensure that review by regulatory agencies is as efficient as possible. I hereby authorize and strongly encourage the preparation of a joint Final EIS/Final EIR for the proposed project. If the ACOE prepares a Supplemental Draft EIS, I urge the proponent to delay any state filing to align with the Final EIS review process.

Public Policy and Purpose of MEPA Review

Many commenters have written in opposition and requested that I deny the project because of potential impacts on Nantucket Sound and the lack of a state or federal siting process for offshore wind farms. Many have written in support and urge expedited approval based on benefits such as increased renewable energy, cleaner air, and energy independence. MEPA is not a zoning process, nor is it a permitting process. Rather, it is a process designed to ensure public participation in the state environmental permitting process, to ensure that state permitting agencies have adequate information on which to base their permit decisions and their Section 61 Findings[6], and to ensure that potential environmental impacts are described fully and avoided, minimized, and mitigated to the maximum feasible extent.

Cape Wind is arguably the most significant precedent setting project currently proposed in the United States. The proposed use of offshore waters has highlighted current gaps in the laws and ability of both the state and federal government to proactively manage our important ocean resources. State and federal ocean waters are held in trust for the public, yet we have historically allowed use of ocean resources on a "first come, first serve" basis. As a result of new technologies becoming available and also the reduced opportunities for land-based development, Massachusetts has seen an increasing number of offshore development proposals. Proposals in recent years off the Massachusetts coastline include natural gas pipelines, offshore LNG delivery and gasification systems, offshore sand mining, wave energy facilities, aquaculture facilities, fiber optic cables, and offshore wind farms.

Rather than the current "first come, first serve" approach, we must proactively protect our important ocean resources. Massachusetts has always been on the forefront of ocean governance. Massachusetts was the first of the original colonies to codify the public trust doctrine, later incorporated into the Public Waterfront Act, M.G.L. c. 91, ss. 1-63 (Chapter 91), in 1865. From 1970 - 1976, the legislature created five Ocean Sanctuaries in the Commonwealth's Territorial Waters, affording these special areas a higher level of protection and increased standards for review of proposed projects. Most recently, Governor Romney and I commissioned an Ocean Management Task Force to develop recommendations for improved stewardship of ocean resources in light of increased demands on ocean resources and growing user conflicts. The Task Force issued its report in March, 2004 setting forth sixteen recommendations in the areas of governance, management tools, scientific understanding and outreach.

To implement the Task Force recommendation for a comprehensive planning framework for use of state waters, the Governor has developed and will soon file legislation authorizing

6 In accordance with M.G.L. c. 30, section 61, any Agency that takes Agency Action on a Project for which the Secretary required an EIR shall determine whether the Project is likely, directly or indirectly, to cause any Damage to the Environment and make a finding describing the Damage to the Environment and confirming that all feasible measures have been taken to avoid or minimize the Damage to the Environment.

resource management planning for state ocean waters. The legislation will authorize ocean resource management planning, with strong municipal and citizen input and participation. It streamlines governance of ocean resources by coordinating state agency responsibilities. This legislation also acknowledges the need, and provides the ability, to improve the Commonwealth's coordination to plan cooperatively with federal agencies for activities occurring in federal waters that may impact resources in state waters.

In September 2004, the U.S. Commission on Ocean Policy made similar recommendations at the federal level, and reported that "a comprehensive offshore management regime is needed that enables us to realize the ocean's potential while safeguarding human and ecosystem health, minimizing conflicts among users, and fulfilling the government's obligation to manage the sea in a way that maximizes long-term benefits for all the nation's citizens."

Despite the aforementioned regulatory gaps and siting concerns associated with offshore wind power, I have stated repeatedly (see EOEA #12532, #12992-96, #13143, and #13176, #13229) that I strongly support the development of renewable energy in the Commonwealth, and I reiterate that strong support here. As I have noted in previous decisions, the Massachusetts coastal zone and mountain regions have the potential to support significant development of wind energy resources. Wind energy represents an indigenous source of virtually emissions-free power. However, as with all other power sources, wind power has potential drawbacks. Potential impact on wildlife is an important consideration, as is the highly visible nature of wind turbines (modern wind turbines are large and the best wind fields are often in the most visible and scenic of places, such as Nantucket Sound). The placement of wind turbines in ecologically sensitive areas can also raise concerns with site-specific construction and operational impacts (for example, to the benthic communities in off-shore locations, or the ecology of surrounding forests in mountainous locations).

I believe that an ambitious program of renewable energy development is in the interests of the citizens of Massachusetts, and that the Commonwealth has an obligation to its citizens to promote development of renewable energy. Wind power is and will continue to be an important component of the renewable energy mix[7].

At a global and national level, the potential for climate change, global climate disruption, and rapid sea level rise create an urgent need for sustainable alternatives to hydrocarbon combustion. At a regional level, development of an indigenous renewable energy market will help diversify New England's energy mix[8], improve regional air quality, and create a hedge against price fluctuations in gas and oil prices. At the local level, Cape Wind estimates that it

7 Biomass and landfill gas comprised 36% and 56% respectively of new renewable generation in the New England region in 2003, while new wind generation represented less than 1% (see DOER Annual RPS Compliance Report for 2003). While wind generation is expected to grow significantly in the region in the coming years, biomass and landfill gas will continue to represent significant portions of the renewable energy mix.

8 Natural gas contributed to 4% of electrical production in New England in 1993. By 2000, that figure had increased to 20%, and by 2005 the Massachusetts Division of Energy Resources projects that New England will rely on natural gas for 37% of its electrical generation.

will meet 75% of the Cape and Islands energy demand and, according to the EFSB tentative decision, will reduce in the near term regional air emissions by approximately 4480 tons of SO_2, 1323 tons of NO_x, and 1,062,554 tons of CO_2, and would reduce Massachusetts near term air emissions by approximately 1792 tons of SO_2, 529 tons of NO_x, and 425,022 tons of CO_2 annually.

At a state level, development of renewable energy will help Massachusetts ensure compliance with the Commonwealth's legally mandated Renewable Energy Portfolio Standards (RPS), M.G.L. c. 25A, s. 11F and 225 CMR 14.00, and commitments for reduction of greenhouse gases made in the Governor's 2004 Climate Protection Plan. The Commonwealth has adopted air quality goals to reduce emissions of greenhouse gases to 1990 levels by 2010; to reduce greenhouse gas emissions to 10% below 1990 levels by 2020; and ultimately to reduce greenhouse gas emissions by 75%-85% to achieve sustainability and climate stability.

I remain committed to ensuring that Massachusetts remains a leader on ocean governance and implements its stated and binding policy commitments to renewable energy. At the same time, I must ensure that all renewable energy projects subject to MEPA are held to an appropriately high standard and that proponents of wind power development take all feasible measures to avoid, minimize, and mitigate impacts from their projects. I will further ensure that both the impacts and benefits of wind power receive appropriate and thorough study in Massachusetts.

Final EIR Issues

General

The Final EIR should contain a copy of this Certificate and a copy of each comment received. The proponent should circulate the Final EIR at a minimum to those parties submitting written comments on the Draft EIR, and to any state agency from which the proponent will seek permits or approvals.

The Final EIR may incorporate by reference those portions of the Draft EIR that do not require further analysis. The Final EIR should address the issues outlined below and the substantive issues raised in the comments received.

Permitting and Planning Consistency

The Final EIR should include a brief discussion of each state permit or agency action required for the project. The Final EIR should demonstrate that the project could meet any applicable performance standards of each permit.

Alternatives

WTG Array

The alternatives analysis in Section 3 of the Draft EIR presents a number of alternatives for comparative purposes as required in the Scope. This section does respond in a general way to the scope of the Draft EIR under MEPA and compares the impacts of coal, oil, and natural gas generating plants capable of producing 454 MW of electricity at capacity. The Final EIR should aim to establish a clearer baseline for consideration of the alternatives. The Draft EIR also provides a comparison of alternate renewable energy technologies. This section provides an overview of the various forms of renewable energy generating technologies and discusses their relative impacts. However, the Final EIR should contain a concise, quantitative summary of each of the technologies studied to allow a simple comparison to be made.

The Draft EIR provides an analysis of four alternative sites, including the proponent's preferred alternative of Horseshoe Shoals. The four alternate sites include Nantucket Sound (Horseshoe Shoals), South of Tuckernuck, Massachusetts Military Reservation and a combination site consisting of offshore facilities near New Bedford and a reduced facility at Horseshoe Shoals. ACOE initially developed a list of 17 potential sites and used a set of screening criteria to narrow down the alternatives to undergo more detailed study. Issues raised for each site were listed to provide the relative merits and/or detriments of these sites.

Although a number of alternatives are presented in the Draft EIR there are issues that must be addressed in the Final EIR. For example, the Draft EIR does not support the statement that "under the No-Action Alternative, or if the permit is denied, it is likely that commercial development of offshore wind power in the United States, at a comparable size and scale of that proposed by the Applicant, will not advance significantly." The Final EIR should include the No Action alternative and a discussion of the status of other renewable energy projects (solar, small hydro, biomass, land based wind, etc.) and how they would impact the regional situation for RPS compliance. I encourage the proponent to consult with the Department of Energy Resources, which collected data and performed analysis on this topic, that should be incorporated into the Final EIR.

The Draft EIR describes (page 3-29) "generally accepted planning guidelines" for the wind power industry. Those guidelines state that while approximately 20 acres of land are required to generate 1 MW of power, a smaller area is needed for an offshore facility because of the relative smoothness of an open water surface and the absence of topographical features. Specifically, the guidelines cite a 1.2:1 ratio for land and offshore project sites. Therefore, according to these guidelines, an offshore site would require approximately 16.7 acres to generate 1 MW of power; for a project generating 454 MW, the required area of open water should be approximately 7,582 acres, or slightly less than 12 square miles.

Based on this analysis, it appears that the footprint of the array may be considerably larger than necessary. This conclusion is supported by comparing the spacing between turbines at the Horns Rev facility off the coast of Denmark with that proposed for the Cape Wind project. The Draft EIR did not evaluate alternatives that sought to lessen impacts by using a smaller array

footprint. Indeed, all of the offshore sites considered in the Draft EIR (Table 3-5) that have a capacity greater than 200 MW are based on an available watersheet of 24 square miles, including those that have higher wind speeds, and presumably could generate the same amount of power with fewer turbines. The applicant may have proposed a larger-than-necessary spacing between turbines in an attempt to reduce impacts, especially to navigation. However, based on data presented in the Draft EIR, I do not find a basis for concluding that greater spacing between WTGs reduces environmental impacts, and may instead spread these impacts over a greater area of Nantucket Sound.

As stated above, the Draft EIR does not include any alternate configurations for the turbine array at Cape Wind's preferred alternative. The proponent must address alternative configurations at this site in the Final EIR. A fundamental exercise in evaluating alternatives is to vary the configuration of the project to understand the relative benefits/detriments to the public interest of each configuration, irrespective of the desires of the proponent. This may be of particular importance for a project such as Cape Wind's where the visual impact is of concern to many members of the public and where changes in spacing, layout and/or distance from shore may alter the visual impression of the project. The proponent must evaluate in the Final EIR configurations in the following ways to explore the relative impacts of different configurations:

1. *Reduced number of turbines or phased-in construction.* To be a useful exercise in informing the public and permitting agencies in the relative impacts of the project, the analysis should include a project with a significantly reduced facility and/or a phased-in approach to installation. A smaller project would likely have proportionally smaller detriments and benefits but would allow decision makers to determine whether the economies of scale enjoyed when building a large facility weigh favorably with the relative impacts. If it is uneconomic to construct a smaller facility or employ phased-in construction, the Final EIR should clearly articulate why, so that the public may fully understand why the project is the size proposed.

2. *Alternate Configurations.* The current arrangement of turbines places the facility 4.7 miles from Point Gammon and 6 and 6.5 miles from Cotuit and Craigville Beach respectively. The facility is approximately 9 miles from Martha's Vineyard and approximately 14 miles from Nantucket. If the proposed facility is to remain at its current size, it is imperative that the alternatives analysis explores functional alternatives in project configuration and assesses their impacts. The Final EIR should evaluate the following: a) a configuration that maintains the size of the facility but places the turbines further away from shore; b) whether alternate turbine spacing would be more preferable than that currently proposed for the project; and c) what potential might exist for a maintaining the number of turbines, but instead utilizing a mix of turbine sizes.

The Final EIR should consider comments received relative to navigation safety when updating alternative configurations for the turbines. The proponent should consult with the U.S. Coast Guard and the Steamship Authority to strive to provide a suitable distance for placement of

the turbines from established navigation channels and ferry routes. The Final EIR should also demonstrate that protection is afforded to prevent large ship and tanker collisions with the turbines proposed adjacent to the Nantucket Sound Main Channel.

In addition to alternative configurations at the preferred location, the Final EIR should reevaluate the South of Tuckernuck Island alternative at a greater level of detail with respect to engineering design and environmental resources, so that a more instructive comparison of shallow water and deeper water sites can be undertaken. A significant portion of the South of Tuckernuck Island site appears to lie in waters less than 75 feet, which is within the range of the North Sea and Long Island Sound projects; and the site is described as sheltered to some extent from open ocean waves due to the position of Nantucket to the east. The Final EIR should also contain clarification of the wind classification of the Nantucket Sound and South of Tuckernuck alternatives. In Table 3-5, the Nantucket Sound sites are given wind classification values of 5 and the South of Tuckernuck Alternative a value of 6; however, in section 3.4.3.3.2, which compares the economics of the alternatives, both sites are stated to have wind classification values of 6.

Cable

The Draft EIR presented four approaches for the interconnection of the wind farm. These four approaches include connecting the wind farm: (1) to NSTAR's 115 kV Barnstable Switching Station; (2) to NSTAR's 115 kV Harwich Substation; (3) to NSTAR's 115 kV Pine Street Substation in New Bedford; and (4) to a new 115 kV substation on Martha's Vineyard, then proceeding on to the mainland. The Draft EIR also identified four criteria for selecting an approach to interconnecting the wind farm to the grid: (1) proximity of the electric power system to the wind farm; (2) ability of the electric power system to accept the wind farm's full output; (3) suitability of voltage levels for delivery of the output; and (4) availability of multiple transmission lines at the tie-in point.

The EFSB Tentative Decision finds that while each of the project approaches could provide a reliable interconnection with the regional transmission grid, the best interconnection point would be the Barnstable Switching Station, which is the major bulk substation on Cape Cod, and is connected to the grid by six separate transmission lines. Therefore, the preferred approach presented in the Draft EIR is the Barnstable Interconnect. The preferred approach would interconnect the wind farm with the grid at NSTAR's 115 kV Barnstable Switching Station via an approximately 18- to 24-mile transmission line, 9 to 12 miles of which would be submarine cable[9].

The Barnstable Switching Station is located south of Route 6 off Mary Dunn Road in

9 As presented in the Draft EIR, 6.6 miles of cable are in state waters. The total length of the cable and impacts in state waters is now increased as a result of MMS' boundary change. The Final EIR should provide updated calculations as a result of this change.

Barnstable. Six 115 kV lines emanate from the Barnstable Switching Station, including three that run to the west, two that run to the east, and one that runs to the south. The distance from landfall to the Barnstable Switching Station ranges from approximately 5.9 miles (for the New Hampshire Avenue landfall in Yarmouth), to approximately 14.2 miles (for the Mashpee Town Landing landfall). If the alternative route were used, a new riser station would need to be constructed in the NSTAR ROW in Mashpee, to connect the proposed transmission lines to the existing NSTAR 115 kV line and to the new overhead transmission lines.

As described in the Draft EIR, the environmental impacts associated with the Barnstable Interconnect would consist predominantly of temporary impacts associated with the construction of the marine and underground facilities. The Final EIR should contain mitigation for these temporary impacts, which could be achieved through the design of the facilities and through optimization of the route. The Draft EIR concluded that the Barnstable Interconnect would have fewer temporary impacts since it is the shortest project alternative.

Chapter 91/Public Trust/Ocean Sanctuaries

As mention above, at least six and one-half miles of the cable will travel through submerged tidelands of the Massachusetts Territorial Sea and, therefore, is subject to the jurisdiction of Chapter 91 and its implementing regulations at 310 CMR 9.00. Pursuant to 310 C.M.R. 9.32(1)(a), new non-water dependent structures are not permittable over flowed tidelands, and therefore would require a variance from Chapter 91 and 310 C.M.R. 9.00. DEP has thus determined that the portion of the submarine cable located in state waters is a non water-dependent use of tidelands, and will therefore require a variance from Chapter 91 and 310 C.M.R. 9.00.

In June 2003, DEP clarified the licensing status of the cable, and defined it as a non-water dependent infrastructure facility (NWDIF) subject to the performance criteria at 310 CMR 9.55 and requiring a variance issued by the Commissioner in accordance with the provisions at 310 CMR 9.21. The project proponent recently submitted to DEP a Chapter 91 application for a water-dependent project license, which would not require a variance, asserting that the cables should be characterized as either an infrastructure crossing facility, pursuant to 310 CMR 9.12(2)(d) or an infrastructure facility that is dependent on marine transportation, pursuant to 310 CMR 9.12(2)(c). DEP will continue to categorize the project as a NWDIF requiring a variance. A formal determination on the pending license application will not be made until a final Certificate of adequacy is issued under MEPA. The Chapter 91 regulations require that if a variance is reasonably foreseeable the information required to be submitted to be considered eligible for a variance should be included in the EIR (310 CMR 9.21(2)(c)).

In this case, a request for a variance must be submitted and approved to obtain a non-water dependent license for the project (310 CMR 9.21(2)). The Final EIR should include the following information to aid in this determination:

1. the specific regulatory provisions from which the proponent will seek variances;
2. alternative designs, locations, or construction methods that would allow the project to proceed without a variance (the EIR should also explain why these alternatives are unreasonable);
3. the detriments to public interests in waterways due to the project, and proposed means by which the proponent will minimize these impacts;
4. proposed measures to compensate for any remaining detriments to public interests in waterways; and
5. the overriding public interest served by the project, with provision of adequate supporting documentation.

The Draft EIR did not specifically identify which section of the regulations the proponent seeks a variance from, and the Final EIR should clarify this issue. The Final EIR should also address the standards for NWDIF at 310 C.M.R. 9.55, including analysis of impacts to maritime commerce, industry, recreation, and associated public access; living marine resources and water quality; and public views, visual quality of the shoreline environment, and historic and cultural resources near waterways.

The Commissioner of DEP may exercise the discretionary authority to grant a variance request, following a public hearing pursuant to 310 CMR 9.21(1), if he makes the following findings:

(a) there are no reasonable conditions or alternatives that would allow the project to proceed in compliance with 310 CMR 9.00;
(b) the project includes mitigation measures to minimize interference with the public interests in waterways and that the project incorporates measures designed to compensate the public for any remaining detriment to such interests; and
(c) the variance is necessary to accommodate an overriding municipal, regional, state or federal interest.

The Commissioner's authority to issue a variance is discretionary and provides the ability to consider the full range of potential benefits and detriments of a proposed project. Given the precedent setting nature of this project, I believe that both the benefits and detriments need to be viewed in this context. DEP has indicated that they will continue to utilize the MEPA process and comments of other state agencies with jurisdiction over coastal and marine resources, including CZM, DCR, DFW, and DMF. These agencies, in addition to federal agency commenters and members of the public, have provided extensive comments requesting additional information in a number of areas including water quality, wildlife, fisheries, visual and historic impacts. The Final EIR should address these concerns, as further articulated below, to inform the Chapter 91 process.

The proponent should also propose mitigation for potential detriments to waterway interests. Historically, project proponents have provided compensation in the form of fees and other amenities that benefited the general public's and the affected communities' interests and

which had a nexus to waterway resources including, for example, sea floor mapping, public open space improvements, and improving public access to the shoreline and water sheet at other locations. The proponent should consult with state agencies and affected communities on appropriate compensatory measures and present proposals in the Final EIR.

Ocean Sanctuaries Act

Under the Ocean Sanctuaries Act, OSA, M.G.L. c. 132A, ss. 13-16 and 18 (OSA), and its implementing regulations at 302 CMR 5.00, the five ocean sanctuaries, including the CIOS, "shall be protected from any exploitation, development, or activity that would seriously alter or otherwise endanger the ecology or the appearance of the ocean, the seabed, or subsoil thereof, or the Cape Cod National Seashore."

The proposed WTG array, as originally proposed, would be located outside of the jurisdiction of the CIOS, and in fact outside of the territorial waters of the Commonwealth of Massachusetts. The federal MMS recently modified the boundary of the Commonwealth based upon the identification of so-called "asterisk rocks." As a result, a portion of the proponent's preferred alternative, approximately 8-10 WTG's, now falls within the boundary and jurisdiction of the Commonwealth and, in turn, within the CIOS and subject to the requirements of the OSA.

As stated earlier, Section 14 establishes a set of guiding principles. In addition, Section 15 of OSA prohibits within the CIOS the "building of any structure on the seabed or under the subsoil" as well as "the construction or operation of offshore or floating electric generating stations." Section 16 of OSA, however, modifies the above-mentioned prohibition to allow for certain limited activities. The first of the permitted activities allows for the following:

> the planning, construction, reconstruction, operation and maintenance of industrial liquid coolant discharge and intake systems and all other activities, uses and facilities associated with the generation, transmission, and distribution of electrical power, provided that all certificates, licenses, permits and approvals required by law are obtained therefore, ...

With respect to serving the public's energy needs, the DCR views this exemption to allow (if the impacts are properly mitigated and permitted) a range of activities, otherwise prohibited by Section 15 of OSA, such as electric transmission cables and natural gas pipelines, that support electric generating facilities located outside of an ocean sanctuary. However, DCR does not believe that this exemption stretches so far as to allow the construction of an actual offshore electric generating facility within an ocean sanctuary. Such a reading of the exemption would, in effect, swallow and render meaningless the entire prohibition in Section 15 of the Act concerning the construction and operation of offshore electric generating stations within the CIOS. The exemption in Section 16 should be read together with the Section 15 prohibition of offshore generating facilities within the CIOS to allow "all *other* activities, uses and facilities *associated*

with the generation, transmission, and distribution of electrical power" or, in other words, to allow all other such electrical power related activities except the construction and operation of the generating facility itself within the CIOS. DCR does not believe that this, or any other exemption in Section 16, should be read to implicitly allow and overcome the otherwise express prohibition on offshore electric generating facilities and structures attached to the seabed within the CIOS. As such, DCR has determined, and I concur, that the OSA prohibits the construction of any electric generating facilities, including WTGs, that would fall within the CIOS.

I hereby find that any WTGs now located within state waters as a result of the recent boundary change must be eliminated from the project. If the project proponent chooses to relocate these WTGs into federal waters, thereby shifting the WTG array, I will require the filing of a Notice of Project Change for public review of the changes to the project and to determine what further analysis may be warranted.

With respect to the cable located in state waters, DCR views this activity as potentially eligible for the exemptions in Section 16, such as the above-described exemption concerning electric power related activities, as well as exemptions regarding (1) the laying of cables approved by the department of telecommunications and energy, and (2) projects that are authorized under Chapter 91, deemed to be of public necessity and convenience, and can obtain other approvals as needed. In determining whether the cable is of public necessity and convenience, DCR and other state agencies will consider:

1. the financial and/or technical ability of the person proposing the project to build and maintain the project properly;
2. whether the facility or use, if any, existing at the time the agency approval is requested is inadequate;
3. whether either the public, which may be represented by several individuals or a representative group, demonstrates a need for the facility or use or that appropriate state or local public officials deem the facility or use necessary for the public's safety or welfare;
4. whether the proposed facility or use will serve the public interest;
5. whether the proposed facility or use will seriously alter or otherwise endanger the ecology or appearance of the ocean, the seabed or subsoil thereof, or the Cape Cod National Seashore; and
6. the extent to which existing uses or facilities will be affected by the proposed facility or use.

The FEIR should provide a detailed discussion as to how the project meets the applicable provisions of the OSA. DCR will continue to participate in the MEPA and Chapter 91 licensing processes to ensure that the applicable provisions of the OSA are addressed.

Federal Consistency

As noted above, CZM is authorized through the federal Coastal Zone Management Act to review federal actions[10] that are within or can reasonably be expected to affect the resources or land or water uses of the Massachusetts coastal zone. CZM reviews projects for consistency with its federally-approved enforceable policies and provides a consistency finding to federal agencies prior to a federal action, in this case the ACOE's Section 10 Permit under the Rivers and Harbors Act. CZM's jurisdiction extends over all aspects of the project that may reasonably affect the resources or uses of the Massachusetts Coastal Zone to the extent the activity implicates federally-approved enforceable coastal policies. CZM provided extensive comments on the Draft EIS/Draft EIR. The Final EIR should address the specific comments of CZM, and provide sufficient information to facilitate the federal Consistency Review. The Final EIR should should update the analysis in the Draft EIS/Draft EIR in light of CZM's comments and address the applicable specific policies of the Massachusetts Coastal Zone Management Plan, including: Energy Policy #1; Energy Principle #1; Habitat Policy #1; Coastal Hazard Policies #1 and #2; Ports Policy #3; Public Access Policy #1; Ocean Resources Policies #1, #2, and #3; and Growth Management Principle #1. Additionally, the Final EIR should address the topics below to assist CZM in its federal consistency review.

Environmental Impacts/Air Quality

The Draft EIR demonstrates that the proposed project would result in public health benefits and air quality improvements by reducing emissions from other fossil fuel based energy sources. However, I strongly suggest that the proponent revise its air quality analysis to better characterize these benefits in a more precise manner. The Final EIR should be prospective in nature and based on a dispatch model that integrates realistic assumptions about conventional and renewable energy growth, electricity imports/exports, and fuel prices to project emission benefits in the years that the project would be in operation. An example of a study using this methodology was conducted by LaCapra Associates for the Massachusetts Technology Collaborative in February 2003 and is entitled, "Electric Sector Emissions Displaced due to Renewable Energy Projects in New England." The air quality analysis should also include potential local impacts on the Cape and Islands.

Avian Impacts

The Draft EIR states that there will be no long-term population impacts from a low level of avian mortality; however, it will add to the cumulative impacts from all of the other sources of avian mortality. Several species of seabird are in strong decline, so even minimal mortality could have serious consequences for the population.

The Draft EIR contains a wealth of information relative to avian issues. However, EPA, US Fish & Wildlife Service (USFW), Massachusetts Division of Fisheries and Wildlife (DFW),

10 For purposes of federal consistency review, federal actions include any federal license or permit, federal funds, or direct activities of a federal agency.

Mass Audubon and other advocacy organizations have raised concerns about potential avian risk from the project and deficiencies in the Draft EIR. I share these concerns. I will continue to consult with the ACOE, state and federal resource agencies, and the proponent concerning the appropriate level of additional study and analysis. I strongly encourage further consultation with EPA, USFW, DFW, and Mass Audubon in refining the methodology for sampling and analysis to assess the potential impacts from the WTGs. At a minimum, the Final EIR should include the information outlined below.

The Final EIR should provide sufficiently detailed information on bird use of the Sound. The Final EIR should include the Mass Audubon fieldwork that has been conducted to date and additional fieldwork scheduled to provide three years of survey work. Analysis of this data should be included in the Final EIR.

The Draft EIR does acknowledge the large evening roost of Long-tailed Ducks in Nantucket Sound and an inability to quantify and locate the roost precisely due to the crepuscular nature of the species' activities. However, the Draft EIR does not adequately characterize the presence or behavior of the Long-tailed Ducks in Nantucket Sound. Further data on access, egress and evening roosting areas in and around Nantucket Sound should be included in the Final EIR to characterize the presence of Long-tailed Ducks in Nantucket Sound.

The Final EIR must reanalyze the Roseate Terns radar data presented in the Draft EIR. Additional surveys are needed during periods when the Roseate Terns are arriving at and departing from Nantucket Sound and the proposed project site area. This information will help determine flight heights and directions.

The Final EIR should include at least one year of additional radar data to examine migratory passerines during spring and fall migrations. Information is needed on annual variation in numbers and timing, and the heights at which they pass over the project site during a variety of weather conditions.

The Final EIR should reanalyze the radar data on bats to provide information on the use of the Sound as a flyway by migratory bats. The Final EIR should include an objective analysis and discussion of bird mortality at wind farms.

Further assessment of collision risk for birds passing through the project area should be conducted, utilizing all available data. Given the uncertainty surrounding this analysis, risk should be presented as a range of probabilities. The Draft EIR's data collection techniques for avian impacts have resulted in discrepancies. For example, the Final EIR should address the discrepancy between the number of targets observed by radar in the rotor swept zone (127,697) and the number of birds counted (365) in the rotor swept zone during 46 aerial surveys from 2002 to 2004. The Final EIR should contain additional data to adequately characterize baseline conditions and to predict potential impacts from the proposed project.

The Final EIR should propose in detail a post-construction monitoring plan to continue assessment of avian movements and track collisions with structures. The Final EIR must also include mitigation designed to significantly enhance breeding activities to offset mortality. For example, an element of the mitigation might include the establishment of an ongoing fund to support the acquisition and permanent protection of breeding bird habitat. The Final EIR should provide a detailed discussion on mitigation for avian impacts.

Rare Species

In addition to potentially affecting rare birds, the project may have impacts on the habitat of the Grey Seal, a state Species of Special Concern, and other potential impacts on marine mammals. These include several species of state-endangered and federally-endangered whales known to transit Nantucket Sound, and sea turtles. The Draft EIR provides little site-specific data on the use of Nantucket Shoals by threatened and endangered marine mammals and sea turtles (including the Loggerhead, Kemp's Ridley and Leatherback).

The aggregation of fish and the proliferation of blue mussels and crabs around each structure may serve as an enticement, specifically to sea turtles. Consequently, trawlers, as well as recreational fishermen and charter boats, may be more inclined to trawl near these structures. This focused fishing effort and boat traffic may increase the risk of boat collisions and/or impacts from fishing gear to sea turtles and marine mammals. The Final EIR should incorporate the biological assessments required under the Endangered Species Act and address the potential impacts more thoroughly. If impacts to rare species or their habitat are unavoidable, as determined in consultation with NHESP, mitigation should be proposed.

To minimize damage to rare species from noise, the proponent has committed to post an observer during the initial phases of construction, suspend construction activities if protected marine mammals are found within 500 meters of the site, and use a soft start-up during monopile installation. The proponent should consider establishing a safety zone during the installation of the monopiles. This safety zone would ensure marine mammals do not approach the area where 180 decibels or greater noise is expected. Every effort should be made to limit construction during periods of peak protected marine mammal migration.

Fisheries Impacts

The Massachusetts Division of Marine Fisheries (DMF) provided data to the proponent that characterized general characteristics of finfish and decapod crustacean resources throughout the sound. While this data is valuable for understanding large-scale, Sound-wide trends in resources, the DMF resource survey does not adequately survey site-specific or annual characteristics of finfish and decapod crustacean ecology. The Draft EIR did not present site-specific data to supplement the DMF data to better describe ecological characteristics of the

project area. It is difficult to assess the baseline conditions needed to understand potential changes associated with the project without site specific data.

Specifically, the assessment of commercial and recreational shellfisheries is based on broadscale landings data and does not provide sufficient detail to assess impacts associated with the construction of the project. The Draft EIR relies on DMF research trawl data, which is intended to gather information on finfish and is not an appropriate method to assess shellfish abundance or to evaluate shellfish resources in the area. A targeted resource survey should be conducted to assess the distribution and abundance of commercial and recreational shellfish species, in addition to non-target shellfish species. In order to provide the means to identify potential impacts and measures to avoid impacts to shellfish, the proponent should work with DMF to design the survey. The proponent should also reexamine the resource characterizations developed from state and federal finfish data in consultation with fisheries agencies to accurately represent conclusions. Using accurate data, the proponent should also reevaluate the resource and use characterizations, assessment impacts and site comparisons of the project area and at least one alternative site.

The Draft EIR does not contain a benthic habitat map that characterizes the project site in sufficient detail. A survey of the benthic habitat in the project area will provide more insight into the extent of the impacts to the important habitats in the project area such as eelgrass beds, seaweed, sand waves, and rocky outcroppings. The proponent should develop this information to help assess the design and route of project elements in order to avoid important habitat areas. This information can be used in conjunction with a sediment transport model to assess indirect impacts to the project on the benthic habitat. The absence of detailed habitat information makes it difficult to evaluate impacts to distinct habitat types. The Final EIR should contain a more detailed benthic habitat mapping analysis that identifies eelgrass beds, shellfish habitat, sand waves, and other habitat types in the project area, including the path of the transmission cables and the location of monopiles and associated structures. The proponent should consult with DMF and CZM in developing this information.

The monopiles and scour protection will add a substantial area of new artificial habitat to Nantucket Sound. The addition of hardened structures to the seafloor and through the water column and the associated changes to the distribution and abundance of marine organisms is an example of the "reef effect." The addition of this new habitat type may introduce species that are adapted to such environments in Horseshoe Shoals, where no such habitat currently exists. Another result may be that the species that under natural conditions are broadly distributed across Horseshoe Shoals will instead aggregate around these monopile structures. An additional factor is the large footprint of the WTG array and the cumulative effects of such a large number of pilings over an extensive area of Nantucket Sound. The Final EIR must address whether the effect is diminished because of the spacing between the WTGs or whether this will serve to increase the area of biological change.

While the Draft EIR acknowledges that the monopiles will create a vertical hard surface habitat that does not currently exist, the potentially significant changes in the distribution and abundance of marine species in Nantucket Sound are not described. It may not be possible to comprehensively document this effect by any other means than post-construction monitoring; however, the Final EIR should contain a more substantial review and discussion based on the current literature of the possible changes resulting from habitat change. This information should be included in the Final EIR to assess possible impacts and determine whether habitat changes can be avoided or mitigated.

The Draft EIR discounts any significant obstruction to fishing activity; however, the monopiles and scour mats may preclude certain types of fishing, such as weirs and mobile gear. In addition, if an exclusion zone around each WTG is determined to be necessary or is functionally imposed by the incompatibility of the structure and certain gear types, then fishermen's access to these fishing grounds will be diminished. The Final EIR at a minimum must provide additional discussion related to possible limited fishing activities and discuss how to address these exclusion zones.

Aquatic Vegetation

The Draft EIR states that the route of the transmission line was chosen to avoid impacts to submerged aquatic vegetation, primarily eelgrass. The Draft EIR contained data from the Mass GIS website on statewide eelgrass distribution and supplemented that with the proponent's consultant's survey in July 2003. Information from this survey is not presented in the Draft EIR. The Final EIR should contain, at a minimum, the results of this survey, a map detailing the transmission line route with the vegetation mapped by the consultant and discussion of the methods used.

The Draft EIR states that the closest the transmission line comes to existing eelgrass is 70 feet. The EPA has commented that 70 feet is not a sufficient buffer distance to assume that no impact will occur. To minimize impacts from construction vessels to eelgrass, the EPA has advised that the proponent should mark off the edge of the eelgrass meadow with buoys and implement a "no wake" zone for construction vessels for 200 feet from the edge of the meadow. The proponent should consult with state and federal resource agencies to construct a scope of these eelgrass surveys before they are conducted. It is important for the applicant to demonstrate that impacts to eelgrass have been avoided and minimized before a compensatory mitigation plan for unavoidable impacts is developed. I encourage the proponent to develop a Before Action Control Impact (BACI) design, which has been implemented for other recent projects (Hubline and Nantucket electrical cable line) and include this information in the Final EIR.

Visual

The Massachusetts Historical Commission (MHC) had identified numerous historic

resources within the project viewshed. The resources are sufficiently well spaced and geographically representative of the project area as a whole such that analyzing the visual impacts on historic resources captures a good sense of the overall visual impacts of the project.

The preferred site for the wind farm is centrally located within this overall viewshed, which is a popular recreational resource used for a variety of water-related activities. On shore, the Draft EIR (Table 3-26) identifies a total of 259 specific public recreation sites along the Nantucket Sound shoreline, located at distances ranging from a low of 4.8 miles (Point Gammon, Yarmouth) to a high of 17.6 miles (at Morris Island, Chatham) from the closest edge of the preferred wind farm site. Among other things, these sites include numerous properties within National Register-listed or eligible historic districts or that contain individual structures that are listed or eligible for listing. The WTG structures are expected to be visible to varying degrees at all of these public recreation sites, as well as from most of the extensive privately-owned shoreline abutting Nantucket Sound – all of which lies within a 27-mile radius of Horseshoe Shoals, the theoretical maximum range of visibility for a 420 foot structure located at sea, as seen from a point 10 feet above sea level (based on standard visibility charts, as estimated by the applicant and reported in the EFSB, page 185).

NOAA data over a 22-year period indicates that visibility can be expected to be less than .25 miles at some point during the day on a total of 98 days each year, and less than 2 nautical miles an average 8.5% of the year. The collection of photo renderings provides a useful starting point for an assessment of visual impact. It demonstrates that virtually all of the turbine towers will be visible from shoreline vantage points up to 14 miles distant from the facing perimeter of the project site, with "the greatest Project visibility and visual contrast expected to occur at distances of less than 8 miles, within which all the WTGs will be visible within the field of view....[and] the grid pattern of the turbine layout will be also be visible..."(p.3-202).

MHC has determined that the preferred alternative for the proposed project will have an adverse effect on the following historic properties: the Nobska Point Light Station (Falmouth); the Cotuit Historic District, the Col. Charles Codman Estate, the Wianno Historic District, the Wianno Club, the Hyannis Port Historic district, and the Kennedy Compound (all in Barnstable); the Monomy Point Light House (Chatham); the West Chop Light Station (Tisbury); the East Chop Light Station and the Dr. Harrison A. Tucker Cottage (both in Oak Bluffs); the Edgartown Village Historic District, the Edgartown Harbor Lighthouse, and the Cape Poge Light (Edgartown); and the Nantucket Great Point Light and the Nantucket National Historic Landmark District (Nantucket). The adverse effect includes the introduction of visual elements that are out of character with the historic properties and the alteration of the setting of the historic properties (36 CFR 800.5(a)(2)(iv and v)). The proponent should work with MHC and develop suitable mitigation measures to offset these findings and present this information in the Final EIR.

With respect to judging the *significance* of the visual impacts identified in the respective simulations, the Draft EIR appears to rely primarily on the results of a limited Visual Impact

Assessment (VIA) required by the federal National Historic Preservation Act, in which a professional architectural historian also concluded that the project would have an adverse effect on two historic properties, four historic districts, and ten individual historic properties (page 5-204). There is no apparent attempt to employ a broader framework for evaluation, with the only additional discussion consisting of a brief statement on page 5-203 to the effect that the observation of greatest impact at 8 miles or less is "consistent with European studies that indicate a distance of 9.3 miles may be the maximum limit of visual significance along the coast and within a seascape." This seems to imply that a simple distance cutoff can be employed in determining the extent to which the appearance of the ocean will be altered significantly as a result of the proposed wind farm.

Although the proposed project is certainly most prominent in the photo simulations prepared for viewpoints within this range (nos. 5,6,7,8,and 19), it cannot be concluded that both visibility and visual contrast diminish substantially at points beyond, because all but one of the renderings prepared for these "far-field" viewpoints are either lacking strong back or front lighting from the sun, are partially screened by intervening landforms, or otherwise manifest less than ideal viewing conditions (such as overcast, haze, or "sky washout"). This is not in keeping with the worst-case approach on which the simulation program as a whole was based, and suggests that additional renderings are needed for the viewpoints in question (nos. 20, 22-24, 26, and 1), to better illustrate the "far-field" appearance of the wind farm under conditions of greatest visibility and visual contrast. The Final EIR should contain new simulations prepared according to the same specifications for at least two additional viewpoints, to represent sections of the Cape Cod shoreline lying between 14 and 18 miles from the outer perimeter of the project site (and therefore not encompassed by the 12 simulations presented in the Draft EIR). Table 3-26 indicates that several public recreation sites in Harwich and Chatham are in the Horseshoe Shoals viewshed and within this distance range, and I encourage the proponent to choose the two sites with the most open, unobstructed views of the wind farm be selected for preparation of new photo renderings. The Final EIR should also contain the computation of values for two basic parameters:

1. the amount of ocean-facing shoreline (in miles, and as a percent of the total within Nantucket Sound) located within three categories of distance from the wind farm perimeter: 0-6 miles (a near-field distance), 6-12 miles (a mid-field distance), and 12-18 miles (a far-field distance, to the farthest reaches of the Sound but still well within the maximum theoretical limit of visibility of the turbine towers); and
2. the arc (in degrees, and as a percent of the full seascape view) that describes the horizontal extent to which wind farm structures will be noticeable against the water horizon, for all of the separate viewpoints and grouped again according to the three distance categories stated above.

Historic/Archaeological Impacts

As noted above under visual impacts, the EIR should assess visual impacts on the various historic districts and properties identified by MHC in the project viewshed. In addition, the EIR should evaluate any impacts on historic resources along the overland cable route.

Areas in the eastern portion of the preferred alternative that exhibit moderate to high sensitivity for containing prehistoric archaeological deposits, in the form of ancient intact landscapes, or paleosols, could contain archaeological materials from Native American settlements. Further archaeological survey should be conducted using vibratory coring and intensive subsurface testing to determine the presence of Native American deposits.

Noise

The Draft EIR concludes that the wind field will comply with the state's noise regulations, but that temporary impacts may result from project construction, particularly pile driving. Section 6.0 of the Draft EIR indicates that acoustical measurements would be taken during project construction (Section 6.2.1) and post-construction (Section 6.3.2), to verify compliance with any conditions imposed as a result of the review. However, other than the Preferred Alternative, the application does not appear to have measured or modeled acoustical impacts for alternate project configurations or locations. The Final EIR should examine whether other configurations would result in different or reduced impacts. The Final EIR should also analyze acoustic refraction where "sound is channeled into a moderately thick layer of air above the water, and levels can be 10 –20 decibels (dB) higher downwind than otherwise would be expected."

The Final EIR should also include additional information of the effects of noise in the marine environment, including the following:

1. reference to studies regarding underwater noise at overseas installations such as recent European studies that seem to indicate a greater intensity of underwater sound from pile driving and cable setting than that described in the Draft EIR;
2. a discussion of behavioral responses of different species to different types and intensities of underwater noise should be provided;
3. a nighttime baseline for ambient noise levels, which should be collected and used as a benchmark for measuring incremental increases and total ambient noise levels during construction and operation.

Land Alteration

The scope of the EIR required that the proponent quantify the amount of land disturbed, both land under water/salt marsh and uplands/inland wetlands. The landforms of Nantucket, Martha's Vineyard, and the south side of Cape Cod are the product of natural distribution of sediment within Nantucket Sound. Horseshoe Shoals is shallow and dynamic, and contains a significant volume of sand; an alteration to the project area may have a significant impact to the

sediment transport system in Nantucket Sound. Tidal, and to a lesser extent wind-driven, currents move sand into and out of these areas daily; these processes are accelerated during storm events. Changes to this system may have widespread effects, potentially affecting benthic habitat and changing erosion and accretion patterns in the coastal zone.

The Coastal Hazard Policy #2, which guides CZM's review of projects that may affect sediment transport, requires an analysis of a project's potential to alter wave or tidally generated sediment transport at the project site or on adjacent downcoast areas. The policy states that "[o]f particular concern are significant adverse changes in depositional patterns and natural storm damage prevention or buffering functions." I concur with CZMs request that the proponent develop and undertake an oceanographic modeling study to develop a better understanding of sediment transport pathways for all of the options in the alternatives analysis, as well as for Nantucket Sound in general and any potential impacts of the proposed project to those sediment transport pathways.

The Draft EIR estimate of scour effects around individual monopiles and over buried electrical cables understated the potential effects. The monopiles and scour protection will add a substantial area of new artificial habitat to Nantucket Sound. The Final EIR should evaluate the scour mats proposed for installation because the Draft EIR does not provide data on the performance of these mats at Cape Wind's test tower. This data could be helpful in determining if these structures are effective and whether there are adverse impacts associated with them.

The project area's dynamic sedimentary environment with wind-driven and tidal currents is also likely to cause scour below the proposed burial depth of the cables. Exposed cables pose a significant hazard to fishing and navigation. The proponent should develop a large-scale oceanographic model to characterize Nantucket Sound sediment transport and likely scour. The model would help to accurately characterize the likely scour so that the cable burial depth can be determined properly.

After consultation with CZM, I am not convinced that the proposed scour protection is appropriate. The plastic filaments attached to the mats are non-biodegradable and, even with a maintenance plan in place to assure the integrity of each mat unit, will eventually dislodge and disperse within the marine environment. The proposed mats will contain a total of approximately 588 million four-foot long plastic filaments. A rate of loss of only 1% represents 5.8 million pieces of marine debris in Nantucket Sound. The Final EIR should evaluate the need for the scour control at the base of the monopiles using the oceanographic modeling described above. Since the monopiles are proposed to be driven to a depth of 80 feet, it is unclear that they will become unstable if the amount of erosion is only 6-8 feet. If modeling and/or engineering calculations determine that scour protection is necessary, I recommend the use of riprap or similar materials, recognizing that this will require the proponent to recalculate habitat impacts.

Wetlands/Drainage

The Draft EIR included a reasonably scaled map that delineated wetland boundaries and buffer zones present in the project area. However, the Draft EIR does not discuss plans to comply with stormwater management requirements of the Cape Cod Commission's Regional Policy Plan. Potential impacts consist of encroachment into several 100-foot wetland buffers during the cable installation. The Final EIR should contain information on how stormwater will be managed along the cable route during and after construction and how the project will comply with the Regional Policy Plan. Information detailing plans on how direct and infiltrate runoff will be kept outside of the Yarmouth Water Supply Wells must also be included. The Final EIR should explain in more detail the significance of each wetland area to the interests enumerated in the Wetlands Protection Act.

Water Quality

The Final EIR should address the water quality impacts of the project, including impacts from the proposed jet plow method of embedding the submarine cables. The Final EIR should also discuss impacts at the landfall site, and maximize the use of horizontal directional drilling in this area to minimize impacts.

The Draft EIR describes the components of two discrete cable systems comprised of 115 kV dielectric AC cables bundled together with a companion fiber optic cable. The proposed installation method for these cables is jet plow embedment. The Draft EIR describes the transition of the seabed cables to upland at New Hampshire Avenue in Yarmouth. The proposal calls for the emplacement of four 18-inch High Density Polyethylene (HDPE) pipes to house the cables that will attach to an upland electrical vault at the end of New Hampshire Avenue. The proponent proposes to use Horizontal Direct Drilling (HDD) technology, including the temporary construction of a cofferdam, to effect this transition. The construction of the temporary cofferdam is estimated to require dredging of approximately 840 cubic yards of sediments, which is described in the Draft EIR to be disposed of at a permitted upland location. A 401 Water Quality Certificate submission will be required for monitoring HDD operations to prevent incidents of inadvertent returns of the drilling media due to fractures and an emergency operational plan to address containment and minimization of the effects of such an incident during drilling. The Final EIR should also address the manner in which the proponent intends to avoid impacts to nearshore navigation during the construction process. The proponent should consider backfilling the area that is excavated at the transition point between the submarine cable and the HDD cable, so as to nearly replicate the sediment transport attributes of the benthic area prior to dredging. The key elements of the dredge plan and related mitigation measures should be described in the Final EIR.

The Draft EIR does not provide specific information regarding the potential impacts to water quality and marine resources in the event of a discharge of any of the 40,000 gallons of dielectric fluid that will be contained in the transformers on the ESP. The Draft EIR does not

include federally required pollution prevention/remediation plans, including an Oil Spill Response Plan, Spill Prevention Control and Countermeasure Plan, Stormwater Pollution Prevention Plan, and an Operations and Maintenance Plan. If such a spill were to occur, it would significantly damage the marine environment of Nantucket Sound, including state resources within the Massachusetts Coastal Zone. This information should be submitted in the Final EIR. At a minimum, the Final EIR should provide an update on the status of these plans, information pertaining to the specific type of oil proposed to be utilized by the project, and an analysis of the potential environmental impacts in the hypothetical event of a release.

Decommissioning Plan

The Final EIR should include a more thorough plan to remove the turbines, towers, cables, and other infrastructure in the event that the project ceases operation. The Final EIR should include additional detail on how the decision to decommission would be made and who would make the decisions concerning it. The Final EIR should address the length of time and potential construction period impacts if implementation of the decommissioning plan were required. In addition, the description regarding the financial instrument for bonding decommissioning should be expanded by including a review of the current market for bonding of wind power projects and the bond market's willingness to underwrite this emerging industry.

Construction Period

The Final EIR should include a further analysis of construction period impacts including further discussion on the proposed use of hazardous materials described in the Draft EIR.

Comprehensive Environmental Monitoring Program

I recommend that proponent, in consultation with the ACOE and resource agencies, form a technical advisory group to develop the necessary comprehensive environmental monitoring program for this project to assure that large scale adverse changes are not occurring. The components of this monitoring plan should address recovery of impacted habitats and the changes in use of the project site by threatened and endangered species.

Comments and Circulation

The Final EIR should include a copy of each comment received. The Final EIR need not reproduce every form letter, but should include one "template" from each form letter category. The Final EIR should respond to the substantive comments received, including the substantive issues raised in the form letters. The proponent should circulate a hard copy of the Final EIR to each state agency from which the proponent will seek permits or approvals. The proponent should also circulate a copy of the Final EIR to those submitting individual written comments.

To save paper and other resources, I will allow the proponent to circulate the EIR in CD-ROM format to individual commenters, although the proponent should make available a reasonable number of hard copies available on a first come, first served basis, to accommodate those without convenient access to a computer. In the interest of broad public dissemination of information, the proponent should send a notice of availability of the EIR (including relevant comment deadlines, locations where hard copies may be reviewed and electronic copies obtained, and appropriate addresses) to those who submitted form letters, if (e-mail) addresses are available. This notification may take the form of electronic notification, as most form letters were submitted via e-mail.

Mitigation

The Final EIR should include a summary of all mitigation measures to which the proponent has committed, and should include Proposed Section 61 Findings for use by the state permitting agencies.

March 3, 2005
Date

Ellen Roy Herzfelder

ERH/ACC/acc

See Appendix 1 for list of MEPA comments received on the Cape Wind Draft EIR.

Appendix 1

Comments received on the Cape Wind Draft EIR[11]:

7/1/04	Cape Cod Chamber of Commerce
7/19/04	George Wheeler
7/29/04	Susan Nickerson, Exec. Dir., Alliance to Protect Nantucket Sound
8/6/04	Susan Nickerson, Exec. Dir., Alliance to Protect Nantucket Sound
8/11/04	Massachusetts Historical Commission
8/11/04	Whitman G. Stephens
8/12/04	Read K. McCaffrey , Patton Boggs LLP Attorneys at Law
8/13/04	David H. Martin, Greenpeace Canada
8/18/04	John C. Stoll
8/19/04	Diana Rodgers
8/20/04	Patrick and Janet Hamilton
8/23/04	Clifford G. Carroll
8/23/04	Peggy Clifford
8/27/04	Susan Nickerson, Exec. Dir., Alliance to Protect Nantucket Sound
8/28/04	Teresa H.
8/30/04	Anthony Bowen
8/30/04	Senator Robert A. O'Leary
8/30/04	Jean Stevens
9/1/04	Donald R. Craig
9/1/04	Diedre Matthews, Energy Facilities Siting Board
9/15/04	Susan L. Nickerson, Exec.Dir., Save Our Sound
9/20/04	Mrs. Marjorie M. Mogensen
9/20/04	Ruth Weissberger
9/20/04	Mrs. Johanna Vasquez
9/20/04	Thomas J. Sullivan
9/29/04	Sarah Pellman
9/22/04	Senator Robert A. O'Leary
9/30/04	Yarmouth Board of Selectmen
10/5/05	Sue Nickerson, Exec. Dir., Alliance to Protect Nantucket Sound
10/8/04	Chatham Health and Environment Department
10/8/04	Walter and Janet Selens
10/12/04	Karen Emery
10/13/04	Susan Nickerson, Exec. Dir., Save Our Sound
10/18/04	Diedre Matthews, Energy Facilities Siting Board
10/22/04	Susan L. Nickerson, Exec. Dir., Save Our Sound
10/23/04	Falmouth Selectmen and Administrator Office
10/24/04	Nancy B. Branode
10/25/04	Marine Fisheries Advisory Commission

[11] I note that many reviewers submitted comments to ACOE and not MEPA. I have reviewed these comments, including the transcripts from the public hearings, as I am authorized under 301 CMR 11.08(2), and they have factored into this decision to the extent that the issues raised fall within MEPA jurisdiction.

10/25/04	Sue Nickerson, Save Our Sound
10/29/04	Susan L. Nickerson, Save Our Sound
11/4/04	A. Arnold and R. Permut, RESOLVE and staff to NWCC
11/4/04	Massachusetts Technology Collaborative
11/8/04	Center for Coastal Studies
11/8/04	James J. Boutilier
11/8/04	Peter Wenzel
11/8/04	Karen Iannone
11/8/04	Mark DeCicco
11/8/04	Sloan Kulper
11/8/04	Susan Nickerson, Save Our Sound
11/9/04	Susan Nickerson, Ecec. Dir., Save Our Sound
11/04	B. Fulton
11/04	Gerard J. Lowther
11/04	Guile and Judy W. Wood
11/04	Dorothea F. Dee
11/9/04	Kevin Botelho
11/9/04	Heather Bingham
11/9/04	Sarah Mortimer
11/9/04	Sam Bourne
11/9/04	Amanda Rotondo
11/9/04	Eric James
11/9/04	James Osbaldeston
11/9/04	Peter MacDonald
11/9/04	Thomas Kozachek
11/9/04	Nevin Shanabrook
11/10/04	Julie Wright
11/10/04	Edward Pyne
11/10/04	Lois A. Levin
11/1/0/04	Dan James
11/10/04	Anoure Fenstermaker
11/10/04	Virginia Davis
11/10/04	Don Kreps
11/11/04	Kenneth F. Cadran
11/11/04	John Gehring, M.D.
11/11/04	Mike Hawley, Sullivan & Worcester
11/11/04	Gerard Cahalane
11/11/04	David Rockwood
11/11/04	Sherrie S. Cutler, ECODESIGN, Inc.
11/11/04	Ethan Allen
11/11/04	Robert Cook
11/11/04	Stephen Wall
11/11/04	Amy Macdonald
11/11/04	Neil Halin
11/12/04	Doris Marston
11/12/04	Shepard Williams/Landscape Architect

11/12/04	Robert D. Paul
11/12/04	Jeffrey Perrott
11/12/04	Harwich Office of the Selectmen
11/12/04	Alva Hare
11/13/04	Gail and Robert Hesse
11/13/04	Greg Yurok
11/13/04	Greg Bar
11/14/04	Mary H.V. Turner
11/14/04	Michael Fields
11/14/04	Jack Ubersax
11/14/04	Alice Fardy
11/15/04	Dorothy Britton
11/15/04	Andrew Hinterman
11/15/04	Muriel Thomas
11/15/04	James Nugent
11/15/04	Noah Greenberg
11/15/04	Guy Sturgis
11/16/04	John Muggeridge
11/16/04	Shareen Davis, Save Our Sound
11/16/04	Sandra Atwood
11/16/04	Robert Burkert
11/16/04	Alva Hare
11/16/04	Dinda Evans
11/16/04	Andrew Heafitz
11/16/04	Rich Raiche
11/16/04	Sam White
11/16/04	Jamws C. Hart
11/16/04	David Kramer
11/16/04	Michael Marks
11/16/04	Wedge Bramhall
11/16/04	Nadine Laporte
11/16/04	Guy Clements
11/16/04	Georgia Neill
11/16/04	Scott Goetz
11/16/04	Jodie Roussell
11/16/04	Jonathan Hren
11/16/04	Keith Loring
11/16/04	Sloan Kulper
11/17/04	Joseph D. Bianchi, P.E. (Consulting Engineers)
11/17/04	Richard Bumpus
11/17/04	Tucker Dolge
11/17/04	Steven Malkus
11/17/04	Carl Ristaino
11/17/04	C T Fetscher
11/17/04	Mitch Walker
11/17/04	Peter Manning

11/17/04	Kristin Deason
11/17/04	Mary L. Cole
11/17/04	Brian Summers
11/17/04	Brendan Taylor
11/17/04	Jesse Lemuel Fields, Jr.
11/17/04	Robert Joyal
11/17/04	Jason Richer
11/17/04	Frederick Faller
11/17/04	Jeanne Carey
11/17/04	Susanne Greene
11/17/04	Matt and Lisa Lampiasi
11/18/04	Mary Reardon
11/18/04	Dan Schulte
11/18/04	Richard Bridges
11/18/04	Dominic Bua
11/18/04	Seth Yurdin
11/18/04	Edward Sabina
11/18/04	Drew Hudson
11/18/04	Judith Sibert
11/18/04	Kathleen Reid
11/18/04	Nikolaus Horster
11/18/04	Michael Tivnan
11/18/04	Tobias Linnett
11/18/04	Michael Andelman
11/18/04	Russell Roberson
11/18/04	Garret Mott
11/19/04	Carol Lynch
11/19/04	Anne Bloomfield
11/19/04	Robert Davis
11/19/04	H. Jack Apfelbaum
11/19/04	Naomi Tina Segal
11/19/04	Sophia Bahlkow
11/19/04	Alva Hare
11/19/04	Frank Leslie
11/19/04	Vinod John
11/19/04	Richard Brady
11/20/04	Krystal Boyd
11/20/04	Linda Marler
11/21/04	Robert C. Stevenson
11/21/04	Andrew Bonanno
11/21/04	Alix Nelson-Frick
11/21/04	Arnold Katz
11/22/04	Jennifer Ancker
11/22/04	Charles Wilder
11/22/04	Paul Thompson
11/22/04	Harriet Schley

11/23/04	Kenneth J. Ritchie
11/23/04	David A. Beck, P.E.
11/23/04	Lance McKee
11/23/04	Michael S. Ashford
11/23/04	Margaret Liversidge
11/24/04	Christine Gyovai
11/24/04	Alexis Burns
11/24/04	Paul Wallace
11/24/04	Edward Perper
11/24/04	Reed Muehlman
11/24/04	Mary Buck
11/25/04	Kathy Fisher
11/26/04	Todd Schwebel
11/27/04	Rachel Giambrone
11/28/04	Conrad Schuessler
11/29/04	Sherrie S. Cutler, ECODESIGN, Inc.
11/29/04	Dr. Bruce Reid
11/29/04	Nola Assad
11/29/04	Mary Lawrence
11/29/04	Matthew Schnee
11/29/04	Janel Sterbentz
11/30/04	Amy McGuire Kates
11/30/04	Pamela Foster
11/30/04	Sammy Hood
11/30/04	Gregory Cadieux
12/1/04	Christine Duvivier
12/1/04	Bryan Burns
12/1/04	Brian Mullins
12/1/04	John Rowell
12/1/04	Roland Peterson
12/1/04	Robert Brown
12/1/04	Sean Conta
12/2/04	Jed Thorp, Clean Water Action
12/2/04	Klaus Guttmann
12/2/04	Michael Jennings
12/2/04	Peter Haviland
12/2/04	Stephen L. O'Donnell
12/2/04	Joel Goober
12/2/04	Richard L'heureux
12/3/04	R. G. Lampke
12/3/04	Kenneth Neuhauser
12/3/04	Robert Steinberg
12/3/04	Andrew Shaw
12/3/04	Kim Slack
12/3/04	John Lawrence
12/3/04	Robert Aron, PhD

12/3/04	Brian Matheny
12/3/04	Cynthia Lindgren
12/3/04	Lauryn Slotnick
12/4/04	Russ Chenoweth
12/4/04	Erik Hoffner
12/4/04	Anthony Murphy
12/4/04	Carl Hevert
12/4/04	Russ Chenoweth
12/5/04	Burton Bryan
12/5/04	Peter Wildermuth, Jr.
12/6/04	John Buckley
12/6/04	William J. Leonard
12/6/04	Paul LeVie
12/6/04	Elsa and John Bengel
12/6/04	William Tuthill
12/6/04	Philip Anderson
12/6/04	John Fiqueras
12/6/04	Richard Bullock
12/6/04	William Bambery
12/6/04	Michele Wolfson
12/6/04	Thomas Wolfson
12/7/04	Timothy Gardner
12/7/04	Richard Pleffner
12/7/04	Jean E. Petty
12/7/04	Eric Chivian
12/7/04	Kevin Gillespie
12/7/04	Carly Stewart
12/7/04	Francis Gallagher
12/7/04	Michael Brossi
12/7/04	Marcia Chapman
12/7/04	Ray Costello
12/7/04	Charlette Rooker
12/7/04	Frank Powdermaker
12/7/04	Joseph Apicella
12/7/04	Pablo Vega
12/8/04	Joseph & Mary Masci
12/8/04	Charles Remington
12/8/04	Amy Dickie
12/8/04	Elizabeth Levy
12/8/04	Asa Foss
12/8/04	Mark O'Neil
12/8/04	Earl Krause
12/8/04	Ian Todreas
12/8/04	Joaquina Gallagher
12/8/04	Martijn Mollet
12/9/04	John Nitzke

12/9/04	Abby Wood
12/9/04	Roy Simoes
12/9/04	Kevin O'Connell
12/9/04	Stephen Lagace
12/9/04	Ben Greenberg
12/10/04	Laura Roberson
12/10/04	Aram Salzman
12/10/04	Eugene Kalwa, Ph.D.
12/10/04	The Woods Hole Research Center
12/10/04	Edward Greer
12/10/04	Joshua Wood
12/10/04	James Neinecke
12/10/04	Scott Hiller
12/10/04	Aaron Such
12/10/04	Paul Carvisiglia
12/10/04	Eric Wiberg
12/10/04	Matt Tuzzolo
12/10/04	Brita K. Stendahl
12/10/04	Susan Williams
12/10/04	Thomas Sullivan
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12/11/04	Lewis S. Dabney
12/11/04	Howard Van Vleck
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12/11/04	Colleen Donovan
12/11/04	James D. Spillane
12/12/04	Peter Dankens
12/12/04	Lauren Olmsted
12/12/04	Abhishek Sard
12/12/04	Matthew O'Connor
12/13/04	Jody Dow/Republican State Committee
12/13/04	George W. Rich, Marketing International, Inc.
12/13/04	Elisabeth Drake
12/13/04	Dave Peterson
12/13/04	Christopher Friend
12/13/04	John Jahoda
12/13/04	Erica Bowman
12/14/04	Tybe Goldberg
12/14/04	Jonathan Snow
12/15/04	Lori Segall
12/15/04	Chris Allen
12/15/04	Gregory Lee

12/15/04	Jade Hausman-Belinsky
12/15/04	Sarah Palko
12/16/04	Green Decade/Cambridge
12/16/04	Ann Valtsakis
12/16/04	James Verzino
12/17/04	Alva Hare
12/17/04	Angie Heiser
12/17/04	James Rodgers
12/18/04	Robert Hellstrom
12/19/04	Leah Tofte-Dorr
12/20/04	Clay and Priscilla Rich
12/20/04	Peter Wallis
12/20/04	Mary Jane Walsh
12/20/04	Rachel Rose
12/21/04	William Leavitt
12/22/04	Alva Hare
12/22/04	Dorothea Skorski
12/25/04	Chris Laughton
12/25/04	Matilda Urie
12/26/04	Carl K. Borchert, Chapter Director Clean Power Now Nantucket
12/26/04	Robert Werner
12/28/04	David Chase, Jr.
12/28/04	Stephen Lagace
12/28/04	Ann Rose
12/29/04	Michael Bicho
12/30/04	Stephen Lagace
12/30/04	Frederick N. Martin
1/1/05	Jeff Trask
1/2/05	Amy Hannah Anderson
1/2/05	Fannettte Sawyer
1/3/05	Joseph Sweeney
1/3/05	Bernard L. Short
1/5/05	Scott Johnson
1/5/05	Jason Hyatt
1/5/05	Jonathan Bonanno
1/5/05	Noah Greenberg
1/5/05	Naomi Tina Segal
1/5/05	Rod Funston
1/5/05	Cameron Wobus
1/5/05	Eric Emmons
1/5/05	Nicole Wobus
1/5/05	James C. Hart
1/5/05	Noah Macy
1/5/05	Aaron LeBeau
1/6/05	Keith Loring
1/6/05	Sean Dugre

1/6/05	John Costa
1/6/05	Nathaniel Dummer
1/6/05	Donald Finocchio
1/6/05	Kevin Strohmenger
1/7/05	William Kriege
1/8/05	Eleftherios Pavlides
1/8/05	Cynthia C. Norkin
1/9/05	Lauryn Slotnick
1/10/05	John Anderson
1/10/05	Richard Lawrence, Education Coordinator, Self Reliance Corp.
1/10/05	Veronica Erdmann
1/10/05	Maurice Cion
1/10/05	Ginny Callan
1/11/05	Tedd Saunders
1/11/05	Ken Marien
1/11/05	Christopher Riegle
1/11/05	Peggy Blass
1/12/05	Jacob Litoff
1/12/05	George Pitman
1/13/05	George M. Woodwell, Director, Woods Hole Research Center
1/14/05	Nancy Free
1/16/05	John Griffin
1/16/05	Patricia Rackowski
1/16/05	M. Elizabeth Ellis
1/16/05	Robert Geswell
1/16/05	William Straw
1/17/05	Arthur S. Pugsley
1/17/05	Edward Grant
1/17/05	Lois Grossman
1/17/05	Eleanor Manire-Gatti
1/17/05	Thomas Wolfson
1/17/05	William Vitalini
1/17/05	Christopher Seebald
1/17/05	Paul Graham
1/17/05	William Indresano
1/17/05	Sean Mulligan
1/17/05	Patrick Sutton
1/17/05	Michael Dalterio
1/17/05	Roger Ernst
1/17/05	James Nugent
1/17/05	John Rowell
1/17/05	Emily Martin
1/17/05	Margaret Bakker
1/17/05	Antonio Macedo
1/17/05	Carrie Semmler
1/17/05	Tim Hagopian

1/17/05	Carl Livorsi
1/17/05	Michael Hewes
1/17/05	James Lawrie
1/17/05	Seth Teller
1/17/05	Brendan Cavanaugh
1/17/05	Mike Humphrey
1/17/05	Edward E. Gage, Jr.
1/17/05	Catherine Townsend
1/17/05	Joseph_David Cohen
1/17/05	Ann Hickey
1/17/05	fEdward Grant
1/18/05	John DiMascio Watertown Citizens/Common Sense Government
1/18/05	Michelle Lheureux
1/18/05	Robert J. Willis,, Jr., PE
1/18/05	Rudy Vale
1/18/05	Dafydd Nicholas
1/18/05	Christopher Kennedy
1/18/05	Carl Nielsen
1/18/05	Ron Vale
1/18/05	Patricia Becker
1/18/05	Jonathan Keller
1/18/05	Peter Bromer
1/18/05	Thomas Leue
1/18/05	Teresa Rael
1/18/05	Peter Mancini
1/18/05	Michael Shea
1/18/05	Prof. Michael J. Dalterio
1/19/05	Susan L. Nickerson, Save Our Sound
1/19/05	Cornelius J. and Joyce Lee Donovan
1/20/05	Alva Hare
1/20/05	Richard Flanagan
1/20/05	Dr. C. T. Fetscher
1/20/05	Tristram W. Metcalfe, III
1/21/05	Robert R. Holt, Ph.D.
1/21/05	Eileen Chieco
1/21/05	Gary Brock
1/22/05	Deven Smith-Clarke
1/22/05	Helen Kessler
1/23/05	Stephen Lagace
1/23/05	Harold Johnson, Jr.
1/23/05	Karen Iannone
1/23/05	Shira Wohlberg
1/24/05	Cornelius S. Martin
1/24/05	Dr. Eric Olson, Ph.D.
1/24/05	John W. Harris, Jr.
1/24/05	Alva Hare

1/24/05	Edward K. McIntyre, Ph.D.
1/24/05	Ainsley Chew
1/25/05	Amy Pollock
1/25/05	Alva Hare
1/25/05	Gregory Lee
1/25/05	Jesse Robinson
1/26/05	Alva Hare
1/26/05	David Sassoon
1/27/05	Ellen Gray
1/27/05	Carolyn and Walter Bishop
1/27/05	Alva Hare
1/27/05	Dr. Patricia a. Gozemba
1/28/05	Alva Hare
1/28/05	Alva Hare
1/29/05	Nikki Zapol
1/31/05	Martha Cochran
2/1/05	Hartley Hoskins
2/1/05	Frank Bilotta
2/1/05	Bob Hayman
2/1/05	Carl Livorsi
2/1/05	William Bambery
2/1/05	David Marcus
2/1/05	Leslie Whelan
2/1/05	Eleanor Manire-Gatti
2/1/05	Eric Emmons
2/1/05	Lauryn Slotnick
2/1/05	Robert Fabian
2/1/05	Timothy Rourke
2/1/05	Catherine Duffy
2/1/05	Richard C. Patton
2/1/05	Carl Livorsi
2/1/05	William Bambery
2/1/05	David Marcus
2/1/05	Leslie Whelan
2/1/05	Eleanor Manire-Gatti
2/1/05	Eric Emmons
2/1/05	Lauryn Slotnick
2/1/05	Robert Fabian
2/1/05	Timothy Rourke
2/2/05	Steve Falvey
2/2/05	Shareen Davis Monomoy Trap Company – Stage Harbor
2/2/05	Ernest Eldredge, owner Chatham Fisheries, Inc. – Stage Harbor
2/2/05	Stephen O'Keefe
2/2/05	Jim Widmer
2/2/05	Catherine Kelley
2/2/05	Andrew Freinkel

2/2/05	Richard F. Mullin, P.E.
2/2/05	Steve Gaskin
2/2/05	Roland Peterson
2/2/05	Nelson Conchinha
2/2/05	Steve Gaskin
2/2/05	Laurene Gerrior
2/2/05	Mark Herzberg
2/2/05	Jeffrey S. Dukes
2/2/05	Walter and Marylu Raushenbush
2/3/05	Alfred Gaechter, Chair, Truro Board of Selectmen
2/3/05	James and Diane Triant
2/3/05	James DeLorenzo
2/3/05	Frank John
2/3/05	Smith David
2/3/05	George B. Ella
2/3/05	Richard Smyers
2/3/05	Bonnie Howland
2/3/05	Mark Wirtanen
2/3/05	Elizabeth Hendrix
2/4/05	Chatham Weirs, Inc.
2/4/05	Mass Energy Consumers Alliance
2/4/05	Paul Labbe
2/4/05	Dan Clark
2/4/05	Valerie Jeffers
2/4/05	Terry Gallagher
2/4/05	Michael Hewes
2/4/05	R. J. Jensen
2/4/05	Hansjoerg Stern
2/4/05	Roland Peterson
2/4/05	Deborah Block-Schwenk
2/4/05	Dr. Elizabeth Hendrix
2/4/05	Hansjoerg Stern
2/4/05	Gregg E. Ludvigson, Wind, Snow & H20 & Sound Auctions
2/4/05	Robert Chew
2/5/05	Alice Fardy
2/5/05	Thomas K. Burgess and Anna E. C.M. Burgess-Berbee
2/5/05	Vicki Nikitin
2/5/05	Jeffrey Schwartz
2/5/05	Judy Sharman Cannaday
2/5/05	Barbara Durkin
2/5/05	Robert W. Chew, President, Solar Wrights, Inc.
2/6/05	Susan Tierney
2/6/05	Sherrie S. Cutler, A.I.A., ECODESIGN, Inc.
2/6/05	Karen Fox
2/7/05	Sheridan Carey
2/7/05	Stephen R. Mahoney

2/7/05	Norma Rose Brandt
2/7/05	Joseph_David Cohen
2/7/05	William Saltonstall
2/7/05	Roger Ernst
2/7/05	Roger Race
2/7/05	Seymour Schwartz
2/7/05	William Tuthill
2/7/05	Christopher Ellis
2/7/05	Peter Vanderwarker
2/7/05	Berl Hartman
2/7/05	Glenn D'Alessio
2/7/05	Jack D. Ubersax
2/8/05	Lesley H. Miller
2/8/05	Kenneth H. Molloy, P.E.
2/8/05	Richard H. Sommers, Ph.D.
2/8/05	Senator Robert A. O'Leary
2/8/05	Jillian Douglass
2/8/06	Mike Murray
2/8/05	Elizabeth Urie
2/8/05	Todd Kennelly
2/8/05	Robert A. Sampson
2/8/05	Victor Colantonio
2/8/05	Madeline Pearlmutter
2/9/05	Carroll Communications
2/9/05	Julius L. Marcus
2/9/05	Diedre S. Matthews, Director, Energy Facilities Siting Board
2/9/05	Erich Bender
2/9/05	Katherine Scott
2/9/05	Carol F. Harley
2/9/05	James Eastman
2/9/05	Robert Bothwell
2/10/05	Charles W. Kleekamp, P.E., Ret. Info. Director, Clean Power Now
2/10/05	Robert C. Lawton, Jr., Yarmouth Town Administrator
2/10/05	Faye E. LaVallee
2/10/05	Anita Lord
2/10/05	Richard Boucher
2/10/05	Kevin Corcion
2/10/05	Edward J. Palma
2/10/05	Geralding Kerrigan
2/10/05	Brenna Melvin
2/10/05	Carmel Melling
2/10/05	Ann Valtsakis
2/10/05	Edward J. Palma
2/10/05	Geralding Kerrigan
2/11/05	Robert A. diCurcio
2/11/05	Christopher Northrop

2/11/05	Georgia Neill
2/11/05	Pete Cawley
2/12/05	John C. Jahoda, Ph.D.
2/13/05	Jacob Litoff
2/13/05	Linda Broughton
2/14/05	Emily and Robert Norton
2/14/05	Kenneth H. Bates, Director, Popponesset Beach Association, Inc.
2/14/05	Robert J. Davis
2/14/05	Connie Phillips
2/14/05	Dana Blickstein
2/14/05	Chris Holley
2/14/05	Eric LePage
2/14/05	Suzanne Keating
2/15/05	Louise Russell
2/15/05	Gregory C. Smith, President, Save Popponesset Bay, Inc.
2/15/05	Martin M. Scanlon, Scanlon Financial Services
2/15/05	Suzanna Nickerson
2/15/05	Adam Markham, Executive Director, Clean Air-Cool Planet
2/15/05	Lynne F. O'Brien
2/15/05	Vernon Lang, Assistant Secretary, US Fish & Wildlife Service
2/15/05	Mark Campbell, P.E.
2/15/05	Elizabeth Stockwell
2/15/05	Robert Pavia, Jr.
2/15/05	Heather Stockwell
2/15/05	Erich Bender
2/16/05	Sarah Giaccai
2/16/05	Michael and Barbara Durkin
2/16/05	Kenneth H. Molloy, P.E.
2/16/05	Sean M. Duggan
2/16/05	Robert B. Antonelli
2/16/05	Nijole Uzpurvis
2/16/05	Dwight Fowler
2/16/05	Mary Blue Magruder
2/16/05	Peter Cook
2/16/05	Kathryn Jones
2/16/05	Noah Thomas
2/16/05	John Dyer
2/16/05	Paul Fratic
2/16/05	Kathy Fisher
2/16/05	Noah Greenberg
2/16/05	Marc Viera
2/16/05	David Rivera
2/16/05	Harold Morpeth
2/17/05	Petition in Support of the Cape Wind Energy Project
2/17/05	Gary R. Brown, President, Barnstable Town Council
2/17/05	Victor Colantonio

2/17/05	Rita Cuker
2/17/05	Harold S. Kramer
2/17/05	B. Durkin
2/17/05	Sandy Nickerson
2/17/05	Sandy McDonald
2/17/05	Joan Peterson
2/17/05	Marlene Bartos
2/17/05	Wylie Collins
2/17/05	Clifton Eaton
2/17/05	Mary Dewhirst
2/17/05	James Betts
2/17/05	Rosemary Gismondi
2/17/05	Chad Wawrzyniak
2/17/05	Janis Faucher
2/17/05	Mary Dewhirst
2/17/05	John Godfrey
2/17/05	Cathy Boles
2/17/05	Betty Werman
2/17/05	Mary Lou Ranicki
2/17/05	Tracy Sylvester
2/17/05	D. Hill
2/17/05	Sam Milton
2/17/05	Peter Yauch
2/17/05	Krista Finigan, CBR, CRS,GRI
2/17/05	Merith Weisman-Ross
2/18/05	Michael T. Eckert, American Council on Renewable Energy
2/18/05	Town and County of Nantucket
2/18/05	James F. Manwell, PhD, Dir., UMA-Mechanical/Ind. Engineering
2/18/05	Lynn Nadeau
2/18/05	The Rundall Family
2/18/05	Robert C. Lawton, Jr., Yarmouth Town Administrator
2/18/05	Statement signed by 1500 workers at TUE-CWA – (In Support)
2/18/05	Martha McCann
2/18/05	Leighton F. Peck, Jr.
2/18/05	Kathy Gross
2/18/05	Mike Taylor
2/18/05	Matt McLoughlin
2/18/05	William Schwartz
2/18/05	Richard Lheureux
2/18/05	Daryll Boles
2/18/05	Rosalie Porter
2/18/05	Teresa McGinn Bois
2/18/05	Deborah Donnelly
2/18/05	Joshua Force
2/18/05	Paul Franza
2/18/05	Sean Macy

2/18/05	David Kirk Lewis
2/18/05	Berl Hartman
2/18/05	Carter Wilding-White, Solar Works, Inc.
2/18/05	Ed Greer
2/18/05	Bob Cote
2/18/05	Rustin McIntosh
2/18/05	Philip D. Knowles
2/18/05	Dr. Gene R.H. Fry, Energy Consultant
2/19/05	Henry MacLean, AIA, Timeless Architecture
2/19/05	Capt. Jack Hamm
2/19/05	Robert A. Fiore
2/19/05	Jim Locke
2/19/05	Carol Jonas
2/19/05	Catherine Duffy
2/19/05	Rosalie Mascioli
2/19/05	Matt Turcotte
2/19/05	Frederick Faller
2/19/05	Alexi Rundall
2/19/05	Alisa Epstein
2/19/05	Jacob Sheatsley
2/19/05	Laurence Gray
2/19/05	Caroline Howe
2/19/05	John Hamm
2/19/05	James E. Liedell, V.P. of Clean Power Now
2/19/05	Phil Smith
2/19/05	Barbara Durkin
2/20/05	Jody Howard on Behalf of HealthLink
2/20/05	John Vitagliano
2/20/05	Robert Bloch
2/20/05	John Souza, Jr.
2/20/05	Jacqueline A. Barney
2/20/05	Karen Kotvas
2/20/05	Edmund T. Welch
2/20/05	Lowell Gray
2/20/05	Robert A. Inglis
2/20/05	Chuck Woodring
2/20/05	John Vitagliano
2/20/05	Ben Dowling
2/20/05	Timothy Rourke
2/20/05	Andrew Magruder
2/21/05	Jeffrey A. Parker
2/21/05	Abigail C. O'Brien
2/21/05	Matthew A. Palmer, P.E., Clean Power Now
2/21/05	Greg Wade
2/21/05	Gayle Ashton
2/21/05	Tracy Gibbons, Ph.D.

2/21/05	Anthony Gargiulo
2/21/05	Phillip V. Cavallo
2/21/05	Ronna Klein
2/21/05	Janet S. Andrews, MD
2/21/05	Melissa Carlson
2/21/05	Scott Elsasser
2/21/05	Ben Gordesky
2/21/05	Peter J. Hawes
2/21/05	Soren Jensen
2/21/05	J. Michael Walker
2/21/05	David Kopans
2/21/05	John C. DeFoe
2/21/05	Tom Hartley
2/21/05	Terrence Joyce
2/21/05	Wade Greene
2/21/05	Bob Van Amburgh
2/21/05	Debra Lombard, The RETEC Group
2/21/05	Matthew Agen
2/21/05	Nancy Wiesner
2/22/05	Edmund T. Welch
2/22/05	Jaci Barton, Executive Director, Barnstable Land Trust
2/22/05	John P. DeVillars
2/22/05	Bruce H. Walton
2/22/05	Senator Jarrett T. Barrios
2/22/05	Elizabeth G. Taylor, Subcommittee Chair, Cape Cod Comm.
2/22/05	Timothy W. Fulham
2/22/05	Daniel J. Morast, President, International Wildlife Coalition, Inc.
2/22/05	William Tuthill
2/22/05	Rachael Dube
2/22/05	Todd Hooker
2/22/05	Kate Adams
2/22/05	Megan Kershaw
2/22/05	William Henry
2/22/05	Robert Garrison
2/22/05	Matt Root
2/22/05	Nancy West
2/22/05	Sherrie S. Cutler, Ecodesign, Inc.
2/22/05	Fred Kozak
2/22/05	Edward L. Peirson
2/22/05	Nicholas D. Peirson
2/22/05	Richard F. Mullin, P.E.
2/22/05	Susan M. Scolles
2/22/05	Lois I. Wrightson
2/22/05	Karim Basta
2/22/05	Hugh MacKenzie
2/22/05	Cathryn F. Brower

2/22/05	Susan B. McAllister
2/22/05	Nicholas A. Lawler
2/22/05	Gayle Ashton
2/22/05	Robert A. Warren, III
2/22/05	Jeffrey Bassett
2/22/05	Howard C. Llewellyn
2/22/05	Barbara Durkin
2/22/05	Paul Badamo, Assistant V.P., The Debt Exchange, Inc.
2/22/05	Lee Rand Burne
2/22/05	Susan McPherson
2/22/05	Derek Haskew
2/22/05	David McCarron
2/22/05	Thomas Sherry
2/22/05	Katy Nicholson, Energy Justice Network
2/22/05	Rachael Dube
2/22/05	Tom Rossmassler
2/22/05	Todd Hooker
2/22/05	Megan Kershaw
2/22/05	Kate Adams
2/22/05	Matt Root
2/22/05	Nancy West
2/22/05	Richard Keleher
2/22/05	William Tuthill
2/22/05	Rachael Dube
2/22/05	Todd Hooker
2/22/05	William Henry
2/22/05	Robert Garrison, Nantucket Aquaculture
2/22/05	Art Handy, American Lung Association of Rhode Island
2/22/05	Klaus Kleinschmidt, PE, Consul. Eng. In Acoustics/Noise Control
2/22/05	Matthew A. Palmer, PE, Ecec.Dir., Clean Power Now
2/22/05	Prof. Jean Wineman, The University of Michigan
2/22/05	Lauri Murphy
2/22/05	Marc Breslow, Ph.D., Mass Climate Action Network
2/23/05	Martin McAdam, General Manager – North America, Airtricity
2/23/05	Frank Blount, Chairman, N.E. Fishery Management Council
2/23/05	Seth Kaplan, Senior Attorney, Conservation Law Foundation
2/23/05	Philip Warburg, Conservation Law Foundation
2/23/05	Peter G. Norton, Chairman, Brewster Board of Selectmen
2/23/05	Laura A. Johnson, President, Mass Audubon
2/23/05	Read K. McCaffrey, Patton Boggs LLP
2/23/05	Rebecca J. Harris, PhD, Tufts University
2/23/05	Representative Anne M. Paulsen
2/23/05	Deborah Donovan, Union of Concerned Scientists
2/23/05	Jed Thorp, (Clean Water Action)
2/23/05	Sarah Hedges, Alliance to Protect Nantucket Sound
2/23/05	Susan Nickerson, Alliance to Protect Nantucket Sound

2/23/05	John McHale
2/23/05	Paul J. Diodati, Director, Division of Marine Fisheries
2/23/05	Ed White
2/23/05	Julie A. Wright, PhD, Boston University Medical Center
2/23/05	Anne Larson and Malcolm Brown
2/23/05	Eric Gehring
2/23/05	Mark Rodgers
2/23/05	Paul Marquis
2/23/05	Allison Rescigno
2/23/05	Dorothy Allen
2/23/05	William Dunlay , P.E.
2/23/05	Anne Grady
2/23/05	Tara Strachan
2/23/05	Betsy Boyle
2/23/05	David Wilson
2/23/05	Richard Coffin
2/23/05	Gray Watson
2/23/05	John Stempien
2/23/05	Alec Clowes
2/23/05	Alma Greene
2/23/05	Pamela Carle
2/23/05	Dave Cohen
2/23/05	Pasquale (Pat) Polillo
2/23/05	Anne Marie Babineau
2/23/05	Ben Berry
2/23/05	Peter Adams
2/23/05	Kathy Fisher
2/23/05	Rob Garrity
2/23/05	Edward Pryor
2/23/05	Julie Kelleher
2/23/05	Nancy Cronan
2/23/05	Lesley Miller
2/23/05	Karen Longeteig
2/23/05	Peter Schlesinger
2/23/05	Steven MacLeay
2/23/05	Craig Munger
2/23/05	Robert Juliano, Chairman, Bd of Directors for Dennis COC
2/23/05	Frederick M. Miller
2/23/05	Jonathan Tauer, Pioneer Valley Green Building
2/23/05	Russell Whittaker
2/23/05	Sam White
2/23/05	Donald E. Stevens
2/23/05	David G. Bennett, Worcester Polytechnic Institute
2/23/05	Batty Werman
2/23/05	Judith Winters
2/23/05	Andrew Stern

2/23/05	Donna Vello
2/23/05	Rebecca Schwarz
2/23/05	Kathryn Shedrick
2/23/05	Kelley DesRoches
2/23/05	James Langseth
2/23/05	Bruce Crabtree
2/23/05	George M. Chapman, Rector, St. Paul's Church
2/23/05	Natalie Castellanos
2/23/05	Jeff Dearman
2/23/05	Deborah Kerr
2/23/05	John LaVigne
2/23/05	Richard Milardo
2/23/05	Gary Flomenhoft
2/23/05	Harriet Goldin
2/23/05	Nancy S. Lovejoy
2/23/05	David Jacobson
2/23/05	Bruce Hambro
2/23/05	Nathan C. Ketchel
2/23/05	Peter D. Kelley
2/23/05	Donald Harrison
2/23/05	Carol and David Knapton
2/23/05	Mark Osborne
2/23/05	Anju Rajani
2/23/05	Nathaniel Dummer
2/23/05	Janet Erickson
2/23/05	John Lennox
2/23/05	Matthew Budinger
2/23/05	William Matthews
2/23/05	Elizabeth Ellen Michaud
2/23/05	Bryan Sheehan
2/23/05	Glenn D'Alessio
2/23/05	Brian Crounse
2/23/05	Vinaya Saksena
2/23/05	Matthew Moreau
2/23/05	Tyler Neill
2/23/05	Harriet Schley
2/23/05	Laura Wasserman
2/23/05	Eileen Foster
2/23/05	Steven J. Scannell
2/23/05	Glen A. Berkowitz
2/23/05	Lloyd Bennett, Account Executive, Northern Wind, Inc.
2/23/05	Susan Carroll
2/23/05	Jim Eastman
2/23/05	James Luft
2/23/05	Ara Charder
2/23/05	Eileen M. Hughes

2/23/05	Susan Doliner
2/23/05	Don Schwinn
2/23/05	Kim Robinson
2/23/05	Paul Hegarty
2/23/05	Janet and Richard Hart
2/23/05	Ray Simas
2/23/05	Megan Hansen
2/23/05	Moira Rodgers
2/23/05	Anne Marie Babineau
2/23/05	Ben Berry
2/23/05	Kathy Fisher
2/23/05	Rob Garrity
2/23/05	Edward Pryor
2/23/05	Julie Kelleher
2/23/05	Nancy Cronan
2/23/05	Lesley Miller
2/23/05	Karen Longeteig
2/23/05	Steven MacLeay
2/23/05	Craig Munger
2/23/05	Andrew Stern
2/23/05	Barbara Dennis
2/23/05	Donna Vello
2/23/05	Kathryn Shedrick
2/23/05	Kelley DesRoches
2/23/05	James Langseth
2/23/05	Bruce Crabtree
2/23/05	Jeff Dearman
2/23/05	Deborah Kerr
2/23/05	John LaVigne
2/23/05	Richard Milardo
2/23/05	Gary Flomenhoft
2/23/05	Harriet Goldin
2/23/05	Nancy S. Lovejoy
2/23/05	David Jacobson
2/23/05	Bruce Hambro
2/23/05	Peter D. Kelley
2/23/05	Donald Harrison
2/23/05	Carol and David Knapton
2/23/05	Mark Osborne
2/23/05	Nathaniel Dummer
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2/23/05	Matthew Budinger
2/23/05	William Matthews
2/23/05	Glenn D'Alessio
2/23/05	Brian Crounse
2/23/05	Vinaya Saksena

2/23/05	Matthew Moreau
2/23/05	Tyler Neill
2/23/05	Harriet Schley
2/23/05	Pamela Carle
2/23/05	Pasquale (Pat) Polillo
2/23/05	Allison Rescigno
2/23/05	Mark Rodgers
2/23/05	Ed White
2/23/05	Anne Grady
2/23/05	Tara Strachan
2/23/05	Betsy Boyle
2/23/05	David Wilson
2/23/05	Richard Coffin
2/23/05	Gray Watson
2/23/05	John Stempien
2/23/05	Alex Clowes
2/23/05	Alma Greene
2/23/05	John Baldwin
2/23/05	Elizabeth Syrovy
2/23/05	Eleanor S. Doyle
2/23/05	Regina Weichert
2/23/05	Chris Cox
2/23/05	Dr. Christopher M. Ely
2/23/05	Paul Cain
2/24/05	Susan Nickerson, Save Our Sound (addendum to 2/23/05)
2/24/05	Sarah Hedges - Petition as public testimony
2/24/05	Laura Wasserman
2/24/05	Chilmark Town Offices
2/24/05	Mark Rasmussen, Exec. Dir., The Coalition for Buzzards Bay
2/24/05	Bette Mikonis Troy
2/24/05	Stephen V. Raleigh, President and CEO, S.V. Raleigh Corporation
2/24/05	John Coequyt, Greenpeace
2/24/05	Laurie Jodziewicz, American Wind Energy Association
2/24/05	S. Young and J. Almy, The Humane Society of the United States
2/24/05	J. Almy, The Humane Society of the United States (appendix)
2/24/05	Frank Gorke, Masspirg
2/24/05	Seth Kaplan, Conservation Law Foundation
2/24/05	Jim Clark, J.F. White Contracting Company
2/24/05	Keith Dewey,AIA,LEED AP,Dewey + Assoc., Fairwind Vermont
2/24/05	Jay Wickersham, FAIA, Noble & Wickersham
2/24/05	Dr. Loretta J. Mickley
2/24/05	Susan L. Nickerson, Save Our Sound (rev. Executive Summary)
2/24/05	James B. McCaffrey, Director, Sierra Club
2/24/05	Maggie Geist, Executive Director, APCC
2/24/05	Susan Snow-Cotter, Acting Director, CZM
2/24/05	Robert W. Varney, Regional Administrator, US EPA

2/24/05	Peter Church, Acting Director, DCR
2/24/05	Susan A. Kennedy, Acting NEPA Coord., US Dept. of Commerce
2/24/05	David Veator, General Counsel, MHD
2/24/05	Philip Weinberg, Associate Commissioner, DEP
2/24/05	Thomas W. French, Ph.D., Assistant Director, F&W/NH&ESP
2/24/05	William Frantzen
2/24/05	M.C. Gillette, Capt, USN (Ret.)
2/24/05	John Lawrence
2/24/05	Wesley Gundersen
2/24/05	The Rev. Ann H. Franklin
2/24/05	Bernadette Buck
2/24/05	Edward Young
2/24/05	Gary Tuthill
2/24/05	Kimberly Bellemore
2/24/05	Liz Argo
2/24/05	Kurt Teichert
2/24/05	Kellie Hoyt
2/24/05	Aaron LeBeau
2/24/05	Michael Dettelbach
2/24/05	Peter R. Bromer
2/24/05	Daniel Prowten
2/24/05	Jean Mangiafico, Environment Committee, LWVCCA
2/24/05	Cindy Keegan
2/24/05	Julian Astbury
2/24/05	R.J.Angelini and L.M. Poyant, Hyannis Area COC
2/24/05	Angela Carney
2/24/05	Anna Edey, Solvivia
2/24/05	Jack Ubersax
2/24/05	Linda Decker
2/24/05	Ted D. Conna
2/24/05	Jonathan Hren
2/24/05	Dan Ciarcia
2/24/05	Andrew C. Kadak
2/24/05	Darien Gardner
2/24/05	Susan Altman
2/24/05	Lara Berkoski
2/24/05	Dennis Jackson
2/24/05	Gray Harrison
2/24/05	Robert W. Scott
2/24/05	Jack Sheehan
2/24/05	Jane Logan, CPCU
2/24/05	Andrea LaFrance
2/24/05	Glenn Wattley (3)
2/24/05	Sandy Taylor, Alliance to Protect Nantucket Sound/SOS
2/24/05	Gary Conway
2/24/05	Henry C. Farnham

2/24/05	Beverley Evans
2/24/05	Donald Mroz, Ph.D.
2/24/05	Ann B. Canedy, Barnstable Town Council Precinct 1
2/24/05	Edward (Ned) Macomb
2/24/05	Susan Abbott
2/24/05	Nils Shenholm
2/24/05	Paula Walach-Industrial Electrician
2/24/05	Scott Hutchins
2/24/05	David Brancazio
2/24/05	Allan McAlpine
2/24/05	Helen Snively
2/24/05	James Mavor
2/24/05	Tod Minotti
2/24/05	Harvey Schaktman
2/24/05	Katy Freytag
2/24/05	Virginia Stewart
2/24/05	Peter Buck
2/24/05	Christopher Huston
2/24/05	Eric Levy
2/24/05	Stephen Moore
2/24/05	Rev. Dr. Deborah L. Clark
2/24/05	Marcia Chapman
2/24/05	Keith Chapoman
2/24/05	Meg Wilcox
2/24/05	Rich Phelan
2/24/05	Sara Schley
2/24/05	The Rt. Rev. Steven Charleston, Episcopal Divinity School
2/24/05	B. Michael Phillips, Episcopal Divinity School
2/24/05	Lee Slap
2/24/05	George Williams, Dir. Of Food Service, Episcopal Divinity School
2/24/05	James Kinney
2/24/05	Michael Schermerhorn, V.P., Eastport Trading Co.
2/24/05	Peter C. Thorp
2/24/05	Glenn Wattley
2/24/05	Jim and Camilla Richman
2/24/05	J. Bruce Gabriel
2/24/05	Royden C. Richardson, Barnstable Town Councillor
2/24/05	Carter Page
2/24/05	Robert P. Gorman
2/24/05	Richard Brand
2/24/05	Egil D. Croff
2/24/05	Ken Kuntz
2/24/05	Barbara Gates
2/24/05	Jon and Catherine Seibold
2/24/05	JoAnne and Toby Hynes
2/24/05	Howard Bernstein

2/24/05	Yi Ching Fedkenheuer, Admin. Asst., Sierra Club
2/24/05	Jon Kataisto
2/24/05	Benneville Strohecker, Original Fantasies for Children
2/24/05	Mark Meenan
2/24/05	Donna Bonin
2/24/05	Susanne Hale
2/24/05	The Rev. Robert T. Brooks, Grace Church in Providence
2/24/05	Anthony and Doreen Marinelli
2/24/05	Laurie Robertson-Lorant, Ph.D.
2/24/05	Joe Hackler
2/24/05	Kit Kennedy, NRDC
2/24/05	Jed Thorp, Clean Water Action
2/24/05	Matt Adey
2/24/05	Peter McNeany
2/24/05	Helen MacCallum
2/24/05	Eric Packer
2/24/05	Mary and Michael Murray
2/24/05	Richard Gregg
2/24/05	Michael Gray, Climate Change Action Brookline (CCAB)
2/24/05	Janie Booth
2/24/05	Chris Hoch
2/24/05	Rachel Ingersoll
2/24/05	Ken Marien
2/24/05	Allan Hutchinson
2/24/05	Kimberly Cullinane
2/24/05	Maggie Geist, Exec. Dir., Association to Preserve Cape Cod
2/24/05	Thomas Bourgeois
2/24/05	Gregory Anderson
2/24/05	Brent Putnam
2/24/05	Jeff Remson
2/24/05	Michael Albro
2/24/05	Mark Rasmussen, The Coalition for Buzzards Bay
2/24/05	Richard Lawrence
2/24/05	K. Dun Gifford (2)
2/24/05	Chris Harnish
2/24/05	Alan Nogee
2/24/05	Dan Johnson
2/24/05	Wayne Ysaguirre
2/24/05	Andi Waisman
2/24/05	Laura Catanzaro
2/24/05	Marcell Graeff
2/24/05	Peter Brooks
2/24/05	Andrew Bowersox
2/24/05	Brian Lannigan
2/24/05	Abigail Krich
2/24/05	Susan Williams

2/24/05	Anna Sommer
2/24/05	Gale Klun
2/24/05	Tim Hagopian
2/24/05	Lauren Bell
2/24/05	Robert Perry
2/24/05	Robert H. Russell
2/24/05	Rolf Kluever
2/24/05	David Damroth
2/24/05	G. Clements
2/24/05	Guy Clements
2/24/05	Rachel Boehr
2/24/05	Joan Muller
2/24/05	Bernard Gallagher
2/24/05	Robert Sullivan
2/24/05	Christopher R. Powicki
2/24/05	Michelle Costante
2/24/05	Jack Beinashowitz
2/24/05	Laura Krich
2/24/05	Joshua May
2/24/05	Paul Gaffuri
2/24/05	Morris Purnell
2/24/05	Anna Manatis
2/24/05	Bill Reyelt
2/24/05	Jonathan Marsh
2/24/05	Robert Reynolds
2/24/05	Daniel Goldman
2/24/05	Laura Taylor
2/24/05	Dan Clark
2/24/05	Henry G. duPont
2/24/05	Thomas J. Wineman
2/24/05	Marcos Luna
2/24/05	Susan Abbott
2/24/05	Nils Shenholm
2/24/05	Scott Hutchins
2/24/05	David Brancazio
2/24/05	Allan McAlpine
2/24/05	Helen Snively
2/24/05	James Mavor
2/24/05	Tod Minotti
2/24/05	Harvey Schaktman
2/24/05	Katy Freytag
2/24/05	Peter Buck
2/24/05	Christopher Huston
2/24/05	Eric Levy
2/24/05	Jonathan Hren
2/24/05	Soren Jensen

2/24/05	Darien Gardner
2/24/05	Lara Berkoski
2/24/05	Dennis Jackson
2/24/05	Howard Bernstein
2/24/05	Jon Kataisto
2/24/05	Mark Meenan
2/24/05	Donna Bonin
2/24/05	Susanne Hale
2/24/05	Matt Adey
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2/24/05	David Damroth
2/24/05	Guy Clements
2/24/05	Rachel Boehr
2/24/05	Robert Sullivan
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2/24/05	Laura Krich

2/24/05	Joshua May
2/24/05	Morris Purnell
2/24/05	Anna A. Manatis
2/24/05	Jonathan Marsh
2/24/05	Robert Reynolds
2/24/05	Daniel Goldman
2/24/05	Marcia Chapman
2/24/05	Keith Chapoman
2/24/05	Sara Schley
2/24/05	John Lawrence
2/24/05	Wesley Gundersen
2/24/05	Bernadette Buck
2/24/05	Edward Young
2/24/05	Gary Tuthill
2/24/05	Kimberly Bellemore
2/24/05	Kellie Hoyt
2/24/05	Michael Dettelbach
2/24/05	Peter R. Bromer
2/24/05	B. Klim Erslev
2/24/05	Angela Carney
2/24/05	James Kinney

Late comments received:

2/18/05	David Hill, Fox Sports Television Group (Rec. 2/28/05)
2/20/05	Ross Gelbspan, Author, Marc Breslow, Ph.D., MCAN Director (Rec. 2/28/05)
2/21/05	Fanny Moran (Rec. 2/28/05)
2/21/05	Pat Donelan (Rec. 2/25/05)
2/22/05	Brona Simon MHC, (Rec.3/3/05)
2/22/05	Sherris S. Cutler, AIA, ECODESIGN, Inc.(Rec. 2/28/05)
2/22/05	D. Bruce Langmuir, Chair, First Parish of Sudbury(Rec.2/28/05)
2/22/05	Judith Deutsch and Elizabeth Rust, Co-Chairs, Faith in Action Committee, First Parish of Sudbury (Rec. 2/28/05)
2/22/05	Capt. Bob Nelson (Rec. 2/28/05)
2/22/05	Howard C. Llewellyn (Rec. 2/28/05)
2/22/05	Dr. Robert Donahue, Flagship Wharf (Rec. 2/28/05)
2/22/05	Dan Kuhs, VP, Maritime Trades Council (Rec. 2/28/05)
2/24/05	William Frantzen, Stephen Gould Corp. (Rec.3/1/05)
2/24/05	Murray Johnson, DMD,MS, Cape Pediatric Dental Associates (Rec.3/3/05)
2/24/05	John Lennox (Rec.3/1/05)
2/25/05	Jonathan Keller (Rec. 2/25/05)
2/25/05	Rugh G. Hennig (Rec. 2/25/05)
2/25/05	Peter Kelly-Detwiler (Rec.2/25/05)
2/25/05	Jonathan Betsch (Rec. 2/25/05)

2/25/05	Emily Abbott (Rec.2/25/05)
2/25/05	Dims11 (Rec. 2/25/05
2/25/05	Dr. Robert M. Donahue (Rec. 2/25/05)
2/25/05	Murray Johnson, DMD, MS (Rec. 2/25/05
2/25/05	Charles V. McDermott (Rec.2/25/05)
2/25/05	John Powers (Rec.2/25/05)
2/25/05	Sherrie S. Cutler (Rec.2/25/05)
2/25/05	Neil Good (Rec.2/25/05)
2/25/05	John and Diane Brooks (Rec.2/25/05)
2/26/05	Kim Cree (Rec.2/25/05
2/26/05	Cathy Fisher (Rec.2/26/05)
2/26/05	Christopher Butts (Rec2/25/05)
2/26/05	John Blittersdorf (Rec.2/25/05)
2/27/05	Marcelo Vinces (Rec.2/25/05)
2/27/05	Robert Bernal (Rec.2/25/05)
2/28/05	Lawrence Hott (Rec.2/26/05)
2/28/05	Matt Wormser (Rec.2/28/05)
2/28/05	Dorothy Allen (Rec.2/28/05)
3/1/05	Laurie Robertson-Lorant, Ph.D. (Rec. 3/1/05)
3/1/05	John Burger (Rec.3/1/05)
3/1/05	Norman Baker (Rec.3/1/05)
3/2/05	Ryszard Czerminski (Rec.3/2/05)
3/2/05	G. James Davis (Rec.3/2/05)
3/1/05	Shirley A. Fisher (Rec.3/1/05)

various dates e-mail form letters[12] as follows:

"Opposing Opinion..."
"Supporting Opinion..."
"I Support..."
"I Oppose..."
"Request for Assistance..."
"Request for Extension..."
"Save Our Sound...."
"Wind Park project on Horseshoe Shoal..."
"Newspaper Articles..."
"Unknown if they are For/Against..."
"Letters, postcards from the Students of Massachusetts (Enviro Citizen)..."
"Save Our Sound – Addendum to submission on public opposition

[12] I have also received numerous form emails that are not listed by name on this document, rather these comments are grouped by category. All comment letters received may be reviewed in the MEPA Office.

The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114-2524

MITT ROMNEY
GOVERNOR
KERRY HEALEY
LIEUTENANT GOVERNOR
STEPHEN R. PRITCHARD
SECRETARY

Tel. (617) 626-1000
Fax. (617) 626-1181
http://www.mass.gov/envir

August 8, 2005

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ON THE
NOTICE OF PROJECT CHANGE

PROJECT NAME	: Cape Wind Project
PROJECT MUNICIPALITY	: Barnstable, Yarmouth, and Federal Waters of Nantucket Sound
PROJECT WATERSHED	: Cape & Islands
EOEA NUMBER	: 12643
PROJECT PROPONENT	: Cape Wind Associates LLC
DATE NOTICED IN MONITOR	: July 9, 2005

Pursuant to the Massachusetts Environmental Policy Act (G.L. c. 30, ss. 61-62H) and Section 11.10 of the MEPA regulations (301 CMR 11.00), I have reviewed the Notice of Project Change (NPC) submitted on this project and hereby determine that it **continues to require** the preparation of an Environmental Impact Report (EIR). I am also **requiring amendments** to the existing scope for the Final EIR to address the substantive issues presented in the Notice of Project Change.

As described in the Draft EIR, the proposed project involves the development of 130 wind turbine generators (WTGs) on a grid over approximately 24 square miles of sub-tidal area in Nantucket Sound known as Horseshoe Shoals. The project will generate up to 454 megawatts (MW) of electricity. Due to the low capacity factor for wind energy projects, the average generation is expected to be approximately 170 MW of electricity. As currently proposed, each WTG will be 263 feet above mean sea level, with a total height up to 423 feet above mean sea level when rotor systems reach maximum height. The wind-generated electricity from each of the turbines will be transmitted via a 33 kilovolt (kV) submarine transmission cable to the Electric Service Platform (ESP) located within the WTG array. The ESP will transform energy received from the WTGs and transmit electric power to the mainland via two 115kV alternating current (AC) submarine cable circuits. The submarine cable systems will make landfall in the Town of

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Yarmouth. The on-shore underground cables and portions of the submarine cables are located within Massachusetts or in the waters of the Commonwealth.

The current NPC involves the relocation of turbines from state waters to federal water due to changes in the state territorial 3-mile limit as determined by the Minerals Management Service (MMS). As noted in the Certificate on the Draft EIR, MMS recently changed the Submerged Lands Act boundary of Nantucket Sound, thereby expanding Massachusetts' territorial waters seaward. This shift caused ten of the proposed WTGs to lie within newly delineated state waters. Pursuant to the Draft EIR Certificate, the proponent was required to file an NPC describing a modification to the proposed WTG array that complies with the Commonwealth's Ocean Sanctuaries Act (OSA), M.G.L. c. 132A, s. 15. The OSA generally prohibits the "construction or operation of offshore floating or electric generating stations" within the Cape and Islands Ocean Sanctuary (CIOS).

The NPC additionally describes the relocation of another 20 turbines for reasons unrelated to the boundary change. The NPC states that these changes seek to avoid impacts to underwater archaeological resources, and to minimize impacts to fishing gear by relocating turbines to shallower water along the northwestern portion of Horseshoe Shoal.

The boundary change results in the new inclusion of approximately one linear mile of undersea cable within Massachusetts' territorial waters. The length and location of the cable have not changed from that presented in the combined state and federal Draft EIR/ Environmental Impact Statement (EIS), but they now fall under state and MEPA jurisdiction.

The project originally underwent MEPA review in November 2001. The proponent voluntarily filed (within the meaning of Section 11.05 (8) of the MEPA regulations) an Environmental Notification Form (ENF) to allow MEPA review of the entire project and committed to both harmonizing the timetables and filing one set of documents that fulfill the state and federal environmental reviews. These commitments ensure that the impacts of the project will receive full disclosure in the state, federal and regional review processes, and they ultimately will facilitate the federal consistency review. The Massachusetts Coastal Zone Management (CZM) as part of its federal consistency review authority must find that any federal permit is consistent with the state's enforceable coastal zone policies, based on the project's potential impact to state resources or uses within the coastal zone. My predecessor required the preparation on an EIR in a Certificate on the ENF dated April 22, 2002.

In November 2004 the proponent submitted a combined state and federal Draft EIR/EIS. After careful review of the Draft EIR and extensive comments from agencies, interested parties, and the public that cumulatively – and, in many cases, individually – addressed every facet of the project, my predecessor issued a issued a Certificate on the Draft EIR on March 3, 2005 to guide development of the Final EIR. The Draft EIR Certificate is comprehensive in subject matter and geographic reach. It requires the proponent to develop a substantial amount of additional

information to characterize, and assess potential impacts to, the environment of the full project, including all project elements in state and federal waters.

This NPC does not introduce new project elements, but instead proposes, in response to requirements of the Draft EIR Certificate, to redistribute existing elements within the overall project area. I therefore find that the March 3, 2005 scope from the Draft EIR Certificate, amended with the required modifications below, remains appropriate guidance for the project.

AMENDED SCOPE

The Final EIR should include a full discussion of the proposed changes, and an updated description of the project in light of the proposed changes. The analyses and additional information requested in the Draft EIR continue to be necessary for MEPA review of this project. This required information should now be provided in the context of the revised WTG array being proposed. Where necessary, new baseline data for the project should be provided, including benthic habitat impacts and mapping of the new turbine locations, impacts on fishing activity (commercial and recreational) and navigation. The Final EIR must include precise GPS coordinates and charts laying out the full WTG array, revised visual renderings and archaeological impacts based on the new configuration. The configuration described in the NPC must be the basis for the analysis of impacts and comparisons of alternative footprints and locations requested in the Draft EIR scope. The Final EIR must include a detailed description of the impacts associated with the additional portion of the undersea cable now within Massachusetts' territorial waters.

The Final EIR should also include a response to the substantive comments received on the NPC (in addition to responses to the comments received during the 2005 review of the Draft EIR).

August 8, 2005
Date

Stephen R. Pritchard

ERH/ACC/acc

Comments received:

7/11/05 – Jean Rudnick
7/12/05 – Kenneth H. Molloy
7/12/05 – Michael A. Kaneb
7/13/05 – Anthony P. Gargiulo

7/14/05 – Ted Giletti
7/15/05 – Victor T. Mastone – BUAR
7/26/05 – Cape Cod Commission
7/21/05 – MHC
7/19/05 – Stephanie and Harald Stavnes
7/20/05 – David Bergeron – MA Fishermen's Partnership, Inc.
7/25/05 – Glenn G. Wattley
7/27/05 – James R. Gomes, Environmental League of Massachusetts
7/28/05 – Coastal Zone Management
7/28/05 – Paul J. Diodati, Director, - Division of Marine Fisheries
7/28/05 – Mark Amorello, Chairman – Division of Marine Fisheries
7/28/05 – Jo-Ann Taylor – Martha's Vineyard Commission
7/29/05 – Cindy Lowry, Director – OPTI
7/29/05 – Sharon B. Young – The Humane Society of the U.S.
7/29/05 – Jonatha Yeo, Director – DCR/Division of Water Supply Protection
7/29/05 – Conservation Law Foundation
7/29/05 - Robinson & Cole - Alliance to Protect Nantucket Sound, Inc.
7/27/05 – Thomas W. French, Ph.D., Division of Fisheries & Wildlife
7/28/05 – Dr. Quincy Mosby, DBA , Barnstable Airport Manager

E-mail comments received:

7/8/05 – Kathleen M. Russ
7/13/05 – Stacia J. Harney
7/13/05 – Cathryn F. Brower
7/13/05 – J. Bruce Gabriel
7/13/05 – Richard L. Cooper
7/13/05 – Emil J. Mikols
7/13/05 – J. Papa
7/13/05 – Vic and Margaret Mankiewicz
7/13/05 – Dwight G. Geha
7/13/05 – Amy M. Kates
7/13/05 – Tom Noonan and Kathleen Casey
7/13/05 – Joan and David Hill
7/13/05 – Richard F. Mullin
7/13/05 – Steve O'Keefe
7/13/05 – Mrs. Tangley L. DeLaney
7/13/05 – James J. Boutilier
7/13/05 – Michele G. Stirling – (2 e-mail letters)
7/13/05 – Deborah and Richard Altschuler
7/13/05 – Beth B. Maples
7/13/05 – Gerda Reid
7/13/05 – Andrea Mitchell

7/13/05 – Edward J. Fleming
7/13/05 – Dr. Bruce Reid
7/13/05 – Ted Giletti
7/13/05 – Gerard D. Desautels
7/14/05 – Tony Becker
7/14/05 – Richard Ulian
7/14/05 – Jonathan C. Herndon
7/14/05 – Elizabeth A. Digney
7/14/05 – Natalie Gennett
7/15/05 – Joseph P. Stanley, Jr.
7/15/05 – Anelia and James Adams
7/15/05 – Robert Bloch
7/15/05 – David W. Cash
7/15/05 – Bill Abbott
7/16/05 – Warren Nickerson
7/18/05 – Jerremiah W. O'Connor, Jr.
7/18/05 – Karim Basta
7/18/05 – Lise Olney
7/19/05 – Dr. Christopher M. Ely
7/19/05 – Elizabeth M. Kountze
7/21/05 – Timothy Burke
7/21/05 – David Olsson
7/22/05 – Donna L. Orth
7/22/05 – Sherrie S. Cutler, Ecodesign, Inc.
7/23/05 – Robert M. Donahue
7/28/05 – Arthur Pugsley
7/29/05 – Heidi Ricci – Mass Audubon

"The change described in Cape Wind's 6/30/05 NPC, etc" – 413 Yellow Post Cards received.

"I am concerned that Cape Wind's proposal to move 30 of its 130 turbines, etc." – 496 White Cards received.

ESS Group, Inc.

MEPA Notice of Project Change

Cape Wind Energy Project

PREPARED FOR

Cape Wind Associates LLC
75 Arlington Street, Suite 704
Boston, MA 02116

PREPARED BY

ESS Group, Inc.
888 Worcester Street, Suite 240
Wellesley, Massachusetts 02482

Project No. E159

June 30, 2005

ESS Group, Inc.

Engineers
Scientists
Consultants

888 Worcester Street
Suite 240
Wellesley
Massachusetts
02482
p 781.431.0500
f 781.431.7434

June 30, 2005

Secretary Ellen Roy Herzfelder
Executive Office of Environmental Affairs
Attention: MEPA Office, Anne Canaday
100 Cambridge Street
Suite 900
Boston, Massachusetts 02114

Re: Notice of Project Change
Cape Wind Energy Project
EOEA #12643 / USACE #NAE-2004-338-1

Dear Secretary Herzfelder:

On behalf of Cape Wind Associates LLC. (CWA), please find attached a Notice of Project Change (NPC) for the Cape Wind Energy Project. This NPC is being submitted as required by your Certificate on the Cape Wind DEIR (March 3, 2005).

As you are aware due to recent changes in the Submerged Lands Act boundary of Nantucket Sound by the federal Minerals Management Service, the 3 nautical mile (nm) state territorial boundary has been relocated further into Nantucket Sound. As a result, 10 of CWA's proposed turbine locations, and one additional mile of the 115 kV submarine transmission cable fall within the newly determined state waters.

This NPC describes the relocation of the 10 turbines to federal waters beyond the 3 nm limit, and the additional impacts associated with the one mile of cable.

Pursuant to 301 CMR 11.10(6) we respectfully request that you consider the changes described in the attached NPC, and determine that they are insignificant in terms of environmental consequences.

Thank you for your consideration of this request, and please do not hesitate to contact me at 781-489-1148 if you should have any questions.

Sincerely,

ESS GROUP, INC.

Terry L. Orr
Project Manager

Attachment: Notice of Project Change

C: Craig Olmsted: Cape Wind Associates LLC.
Col. Thomas L. Koning: U.S. Army Corps of Engineers

MEPA Notice of Project Change

Cape Wind Energy Project

Prepared For:

Cape Wind Associates LLC
75 Arlington Street, Suite 704
Boston, MA 02116

Prepared By:

ESS Group, Inc.
888 Worcester Street, Suite 240
Wellesley, Massachusetts 02482

ESS Project No. E159

June 30, 2005

Commonwealth of Massachusetts
Executive Office of Environmental Affairs ■ MEPA Office

For Office Use Only *Executive Office of Environmental Affairs*
MEPA Analyst:
Phone: 617-626-

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: Cape Wind Project		EOEA #: 12643
Street: Nantucket Sound, New Hampshire Avenue, Berry Avenue, Higgins Crowell Road, Willow Street, and NSTAR Electric 115 kV Right-of-Way		
Municipality: Barnstable, Yarmouth, and Nantucket Sound	Watershed: Cape & Islands	
Universal Tranverse Mercator Coordinates: NAD83	Latitude: 41°30.50 Longitude: 70°19.13	
Status of project construction: 0 %complete		
Proponent: Cape Wind Associates LLC		
Street: 75 Arlington Street, Suite 704		
Municipality: Boston	State: MA	Zip Code: 02116
Name of Contact Person From Whom Copies of this NPC May Be Obtained: Terry Orr		
Firm/Agency: ESS Group, Inc.	Street: 888 Worcester Street, Suite 204	
Municipality: Wellesley	State: MA	Zip Code: 02482
Phone: 781-489-1148	Fax: 781-431-7434	E-mail: windcomment@essgroup.com

In 25 words or less, what is the project change? The project change involves the relocation of turbines from state waters to federal waters due to changes in the state territorial 3-mile limit as determined by MMS survey (2/2005).
See full project change description beginning on page 3.

Date of ENF filing or publication in the Environmental Monitor: The ENF was filed with the MEPA office on November 15, 2001 and was published in the Environmental Monitor on November 24, 2001 (Monitor Volume No. 5-72). A Certificate was issued on April 22, 2002.

Was an EIR required? ☒Yes ☐No; if yes,
was a Draft EIR filed? ☒Yes (Date: November 15, 2004 and published in the Environmental Monitor on November 23, 2004) ☐No
was a Final EIR filed? ☐Yes (Date:) ☒No The FEIR is being completed
was a Single EIR filed? ☐Yes (Date:) ☒No
Have other NPCs been filed? ☐Yes (Date(s):) ☒No

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

PERMITS / FINANCIAL ASSISTANCE / LAND TRANSFER

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

There are no new or modified state permits, financial assistance or land transfers proposed. The information that was presented in the DEIR on November 15, 2004 is current.

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

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

Are you requesting a change to a Scope in a previously issued Certificate? ☐Yes ☒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	• 3-mile Limit to Landfall – ~116 acres • Landfall to ROW – ~4.9 acres • ROW to BSS – ~5.8 acres • All Temporary Impacts	• 3-mile Limit to Landfall – ~17.5 acres • Landfall to ROW – 0 acres • ROW to BSS – 0 acres • All Temporary Impacts	• 3-mile Limit to Landfall – ~133.5 acres • Landfall to ROW – ~4.9 acres • ROW to BSS – ~5.8 acres • All Temporary Impacts
Acres of land altered	• 3-mile Limit to Landfall – ~116 acres • Landfall to ROW – ~4.9 acres • ROW to BSS – ~5.8 acres • All Temporary Impacts	• 3-mile Limit to Landfall – ~17.5 acres • Landfall to ROW – 0 acres • ROW to BSS – 0 acres • All Temporary Impacts	• 3-mile Limit to Landfall – ~133.5 acres • Landfall to ROW – ~4.9 acres • ROW to BSS – ~5.8 acres • All Temporary Impacts
Acres of impervious area	0	0	0
Square feet of bordering vegetated wetlands alteration	0	0	0
Square feet of other wetland alteration	• Land Under Ocean (w/in 3-mile Limit) – ~5,051,529 SF • LSCSF – ~8,400 SF • 200' Riverfront Area – ~3,360 SF • All Temporary Impacts	• Land Under Ocean (w/in 3-mile Limit) – ~764,940 SF • LSCSF – 0 SF • 200' Riverfront Area – 0 SF • All Temporary Impacts	• Land Under Ocean (w/in 3-mile Limit) – ~5,816,469 SF • LSCSF – ~8,400 SF • 200' Riverfront Area – ~3,360 SF • All Temporary Impacts
Acres of non-water dependent use of tidelands or waterways	0	0	0

STRUCTURES			
Gross square footage	N/A	N/A	N/A
Number of housing units	N/A	N/A	N/A
Maximum height (in feet)	N/A	N/A	N/A
TRANSPORTATION			
Vehicle trips per day	N/A	N/A	N/A
Parking spaces	N/A	N/A	N/A
WATER/WASTEWATER			
Gallons/day (GPD) of water use	N/A	N/A	N/A
GPD water withdrawal	N/A	N/A	N/A
GPD wastewater generation/ treatment	N/A	N/A	N/A
Length of water/sewer mains (in miles)	N/A	N/A	N/A

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? ☐Yes ☒No

3. impacts on Estimated Habitat of Rare Species, Vernal Pools, Priority Sites of Rare Species, or Exemplary Natural Communities? ☐Yes ☒No

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

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

(c) the significance of the proposed changes, with specific reference to the factors listed 301 CMR 11.10(6), and

(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).

Most Recently Reviewed Project Description:

As described in the Draft EIR (EOEA#12643), and reviewed by the Secretary of Environmental Affairs in

her Certificate issued March 3, 2005, the proposed project involves the development of 130 wind turbine generators (WTGs) arranged in a 0.34 nautical mile (nm) (629 meters) by 0.54 nm (1000 meters) grid pattern in the sub-tidal area in Nantucket Sound known as Horseshoe Shoal (see Figure 1). The project will generate up to 454 megawatts (MW) of renewable power. Each of the WTGs will be a height of 246 feet above mean lower low water (MLLW), with a total overall height up to 417 feet above MLLW when rotor blades reach their maximum vertical position.

The wind-generated electricity from each of the turbines will be transmitted via a buried 33 kilovolt (kV) submarine transmission cable to an Electric Service Platform (ESP) located within the WTG array. The ESP will then transform and transmit the electric power to the Cape Cod mainland via two 115 kV alternating current (AC) buried submarine cable circuits. The 115 kV cable systems will make landfall in the Town of Yarmouth (Lewis Bay). The proposed submarine cable system route is approximately 12.2 miles in length (6.6 miles within the Massachusetts 3-nautical mile territorial limit) from the ESP to the landfall location in Yarmouth. From this landfall, an upland transmission system will be installed in an underground conduit system within existing roadways and rights-of-ways (ROW) for approximately 5.9 miles where it will ultimately connect at the Barnstable Switching Station (see Figure 2).

The on-shore underground cables and that portion of the submarine 115 kV cable system located within Massachusetts territorial waters (within 3 nm of the low water mark of the shore), a total of 12.5 miles of cable system, are within MEPA jurisdiction (Jurisdictional). The WTG array, ESP and inner-array 33 kV cables are located beyond the 3 nm territorial water boundary and therefore in federal waters subject to US Army Corps of Engineers permitting and federal NEPA review (Non-Jurisdictional).

Jurisdictional Project Changes and Request for "Insignificant" Determination:

Subsequent to the publication and issuance of the Draft EIR in November of 2004, the federal Minerals Management Service (MMS) determined that the Submerged Lands Act boundary of Nantucket Sound was to be revised based on recent survey. The effect of the change expanded the 3 nm state territorial boundary further into Nantucket Sound, resulting in 10 proposed turbine locations and an additional 1 mile of the 115 kV submarine cable system, falling within the newly determined state waters (Figure 3).

In response to the boundary change and in compliance with the Secretary's Certificate (March 3, 2005) and the Massachusetts Energy Facilities Siting Board's Final Decision (May 11, 2005[1]) approving the 115 kV transmission cables (that portion of the project within state jurisdiction), the Proponent has relocated the 10 proposed turbine sites effected by the boundary change to locations in federal waters (Figure 4).

Although there has been no material change to the jurisdictional components of the Project (i.e. the 115 kV transmission line within the 3 nm limit), this Notice of Project Change is being submitted in order to comply with the Secretary's Certificate (March 3, 2005) which required its filing if the proponent relocated proposed turbine sites into federal waters.

Prior to the recent boundary change by MMS, the components of the project within state lands and water (as proposed in the ENF and the Draft EIR) consisted of the 115 kV transmission cable only. All other components (WTGs, ESP and inner-array cabling) were located in federal waters. Following the boundary change and the proponent's relocation of 10 turbine sites, the situation is unchanged: only the 115 kV transmission cable remains jurisdictional, and all other components are sited in federal waters subject to federal NEPA jurisdiction.

Pursuant to 301 CMR 11.10(6), the Secretary shall consider a number of factors in determining whether a change in a project might significantly increase environmental consequences, including:
a) Expansion of the Project of 10% or more.

1 "Condition (A): No wind turbines will be built in state waters." Pg. 133.

There has been no material expansion of the Jurisdictional components of the project. As a result of the realignment of the 3 nm boundary, one additional mile of the transmission line now falls within state jurisdiction. This represents an approximately 8% increase in the jurisdictional component of the project (from the original 12.5 miles to 13.5 miles).

b) *Generation of further impacts (generally an increase of 25% or more).*
There will be an approximately 13.8% increase in impacts as a result of the change in the 3 nm boundary.

c) *Change in project schedule.*
At this time there has been no change from the proposed project schedule presented in the Draft EIR.

d) *Change of the Project Site.*
There has been no material change to the location of the jurisdictional component of the project (i.e.; the 115 kV transmission cable system). It remains substantially the same as presented in the Draft EIR and approved by the Massachusetts Energy Facilities Siting Board in its Final Decision (May 11, 2005).

e) *New Application for a permit, new request for Financial Aid or a Land Transfer.*
No such applications or requests have been made.

f) *Changes that would prevent or delay net benefits to environmental quality and resources, or public health.*
The anticipated benefits to air quality, and public health from the operation of the project will not be prevented or delayed as a result of the change.

g) *For a Project involving a lapse of time, changes in ambient environment.*
No lapse of time is involved.

When the above factors are considered, it is clear that there has been no significant change to the jurisdictional portion of the project, and it is requested that the Secretary deem the change to be **insignificant** in terms of its environmental consequences. Additionally, the Draft Section 61 Findings previously submitted in the Draft EIR remain current.

Non-Jurisdictional Project Changes:

In order to assist the Massachusetts Coastal Zone Management Office (CZM) with their federal consistency review, the following information is presented concerning project components located in federal waters.

Project changes that affect non-jurisdictional components of the project include the relocation of a number of turbine sites (see Figure 5). In addition to the 10 turbine sites which have been relocated as a result of the change in the state territorial boundary, 20 other turbine sites have been relocated in order to avoid or minimize impacts as identified through studies or agency/public comments. These include:

- Avoidance of areas determined through marine archeological study to be archeologically sensitive for potential submerged prehistoric or historic resources. In some instances this required the shifting of sites 100-300 feet along the established grid transects, and in other instances the turbine site was relocated to an alternative location.
- In order to minimize or avoid impacts to commercial fishermen who use mobile gear, a number of proposed turbine sites that were in deeper water along the eastern portion of the array have been relocated to shallow water locations in the northwestern portion of Horseshoe Shoal. Commercial fishermen who use mobile gear had identified the deeper water as an area they frequent.
- At the request of the US Coast Guard, several of the southernmost turbines have been relocated from sites adjacent to the Main Channel, to sites in the northwestern portion of Horseshoe Shoal, an area with significantly less deep-draft commercial vessel traffic.

Overall Impacts from Jurisdictional and Non-Jurisdictional Project Changes:

- The relocation of turbines results in a reduction in the overall project area footprint, and changes in the WTG distances from shore (see Figure 6).
- Marine navigation impacts have been reduced or avoided. The relocation of turbines from the northeastern portion of the area addresses concerns that a potential congestion point was being created between the Bishop and Clerks and the northeastern-most turbine. The relocation of several turbines from along the southern edge of the project has increased the minimum distance from the northern edge of the Main Channel to the closest turbine to approximately 1,200 feet, further reducing the chances for any impacts to deep-draft commercial vessels transiting the Main Channel. Turbines have been relocated into the northwestern portion of Horseshoe Shoal, which is presently marked with USCG buoys and lights to warn mariners of shallow waters, and once in place will act as Aids to Navigation, likely replacing the USCG lights and buoys.
- Impacts to areas identified as archeologically sensitive for potential submerged prehistoric or historic resources have been avoided.
- Visual impacts are likely to be the same or less as the result of the combination of factors. While some turbines will be closer to land in some locations (see Figure 6), the turbines within the field of view from the Cape Cod mainland has been significantly narrowed.

ATTACHMENTS & SIGNATURES

Attachments:
1. Secretary's most recent Certificate on this project
2. Plan showing most recent previously-reviewed proposed build condition
3. Plan showing currently proposed build condition
4. Original U.S.G.S. map or good quality color copy (8-1/2 x 11 inches or larger) indicating the project location and boundaries
5. List of all agencies and persons to whom the proponent circulated the NPC, in accordance with 301 CMR 11.10(7)

Signatures:

6-29-05	6/27/05
Date Signature of Responsible Officer or Proponent	Date Signature of person preparing NPC (if different from above)
Craig Olmsted	Terry Orr
Name (print or type)	Name (print or type)
Cape Wind Associates, LLC	ESS Group, Inc.
Firm/Agency	Firm/Agency
75 Arlington Street, Suite 704	888 Worcester Street, Suite 240
Street	Street
Boston, MA 02116	Wellesley, MA 02482
Municipality/State/Zip	Municipality/State/Zip
617-904-3100 ext 119	781-489-1148
Phone	Phone

Figures

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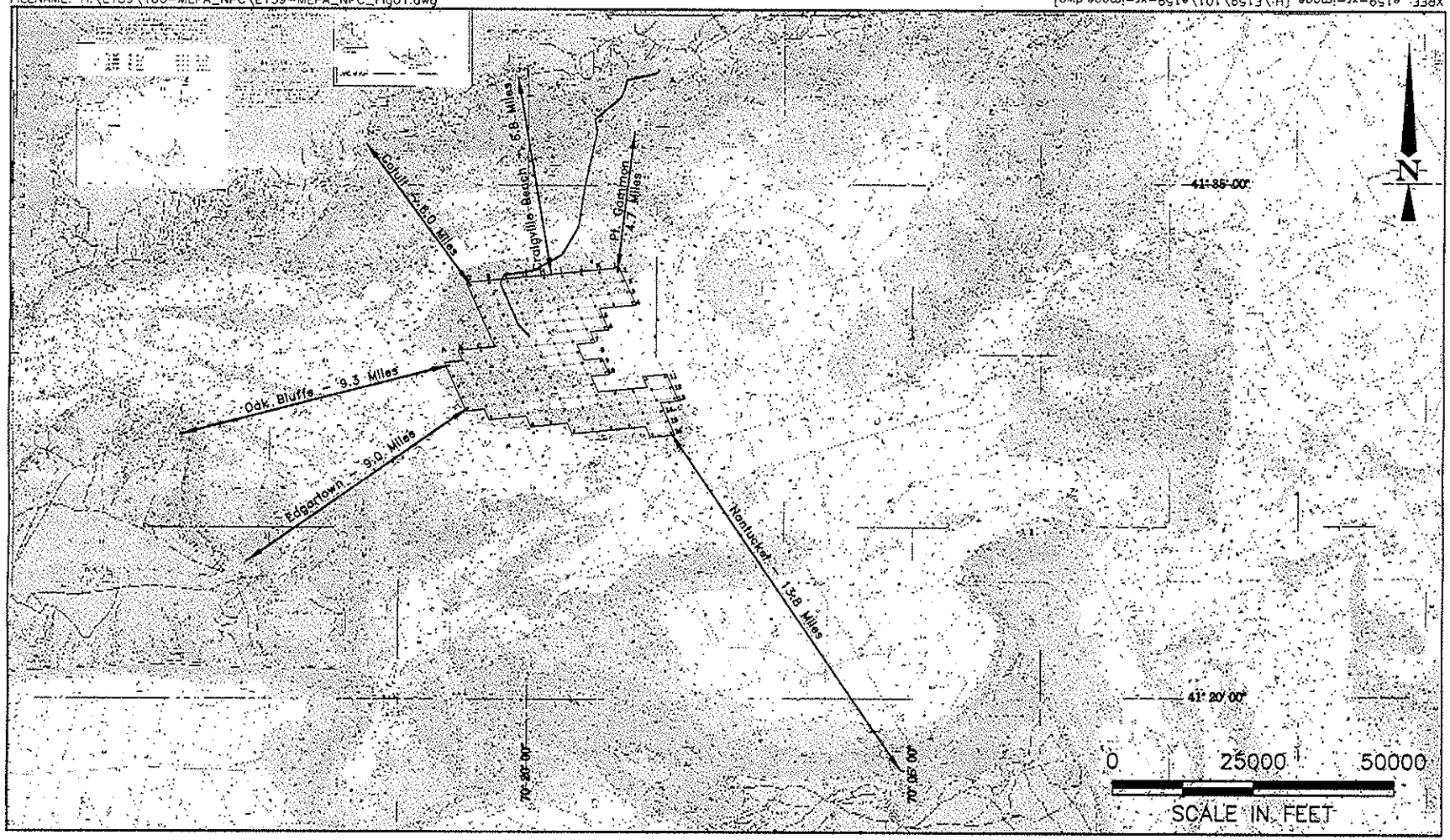

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Scientists
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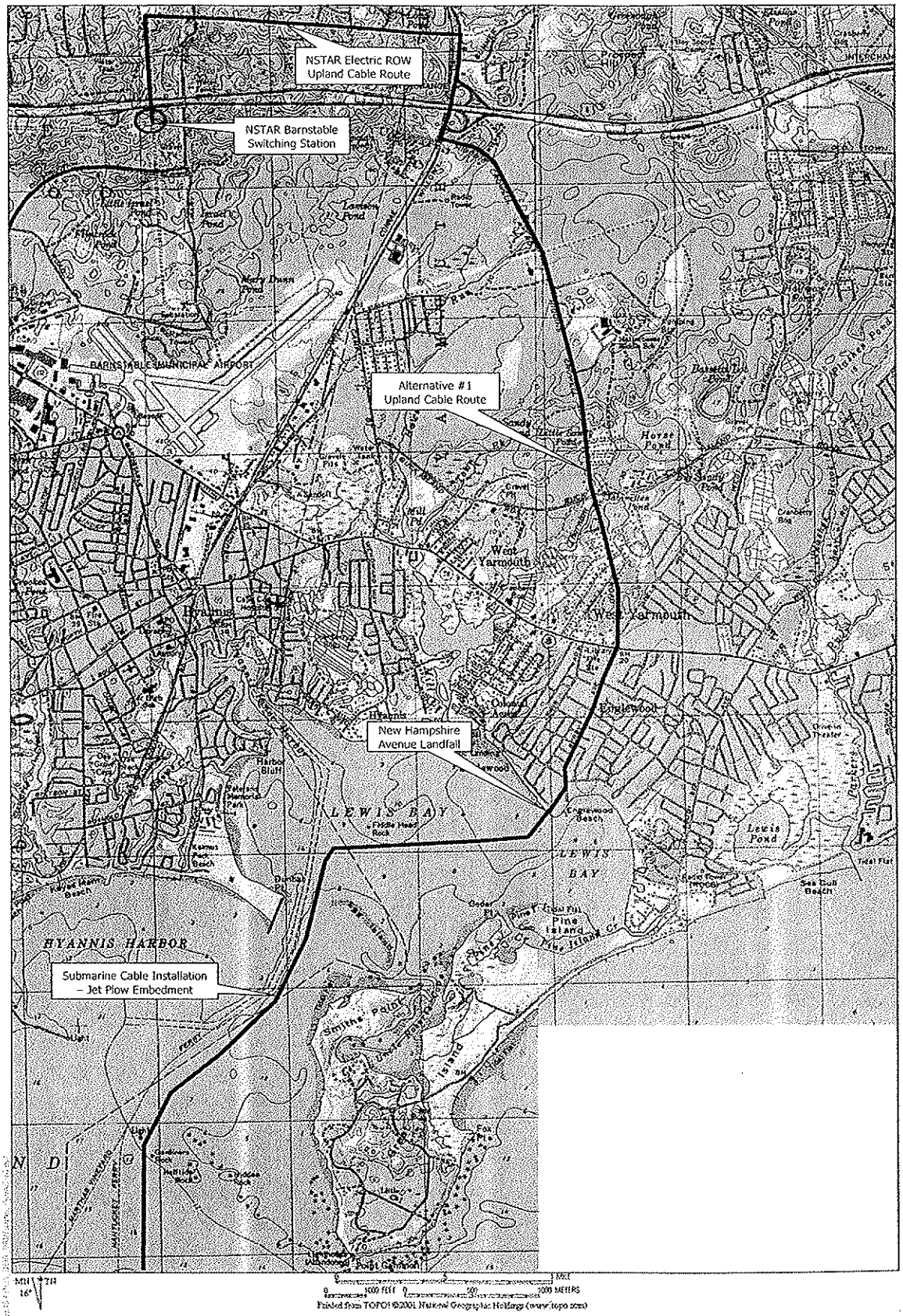
Cape Wind Project

Cape Wind Project Locus
As Proposed In Draft EIR # 12643
NOAA Chart# 13237, Nantucket Sound & Approaches

Figure
1



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Preferred Submarine and Upland Transmission Line Route

Source: USGS Topographic Maps on CD-ROM – Northeastern USA
Scale: As Shown
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Figure 2

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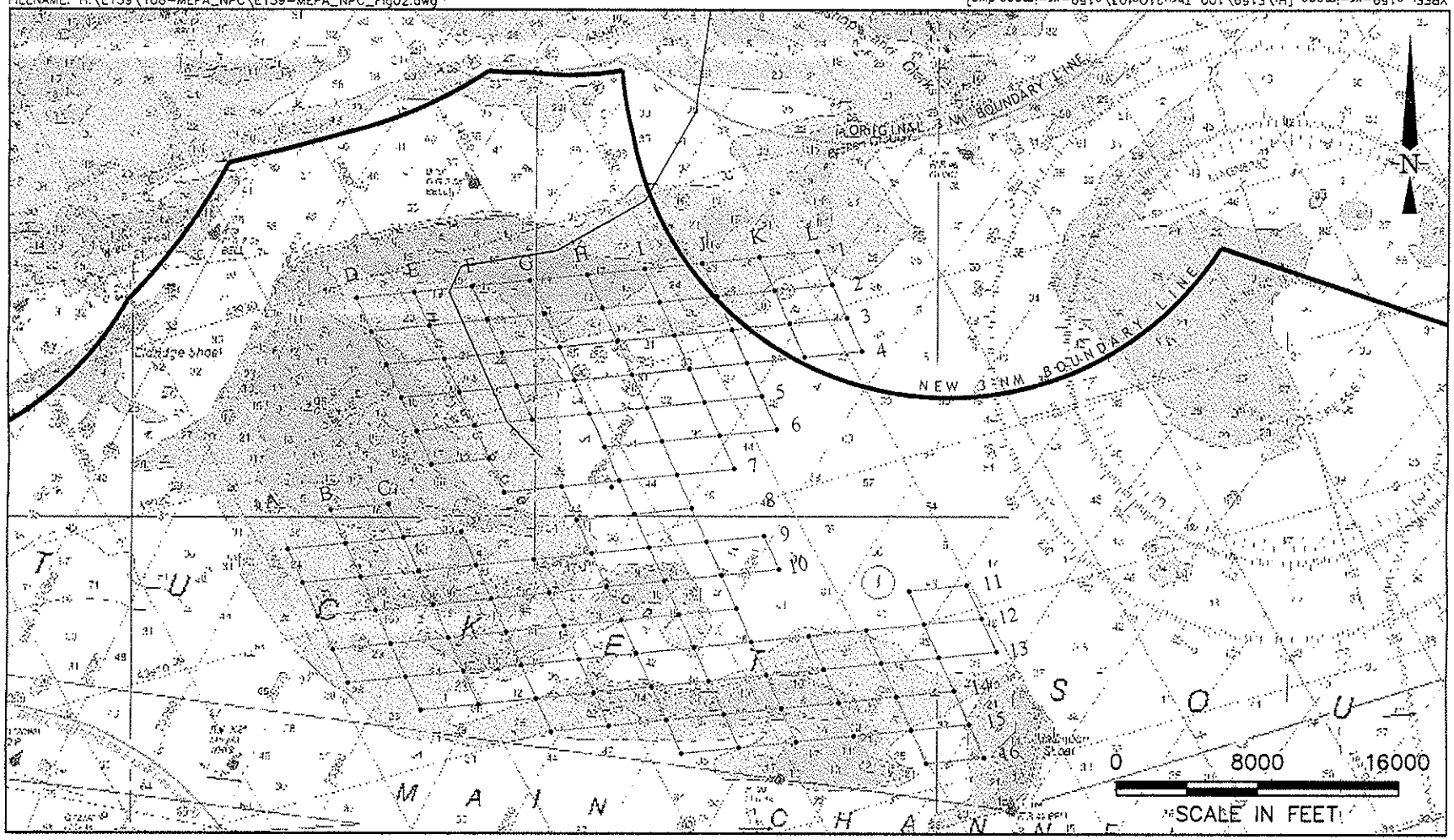

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Preliminary Turbine Array
NOAA Chart# 13237, Nantucket Sound & Approaches
New 3 Mile Boundary

Source of New 3 NM Boundary Line Coordinates: Minerals Management Service, Outer Shelf Official Protraction Diagram
OPD Number NK19-07, Block Numbers 6481 & 6531

Figure 3

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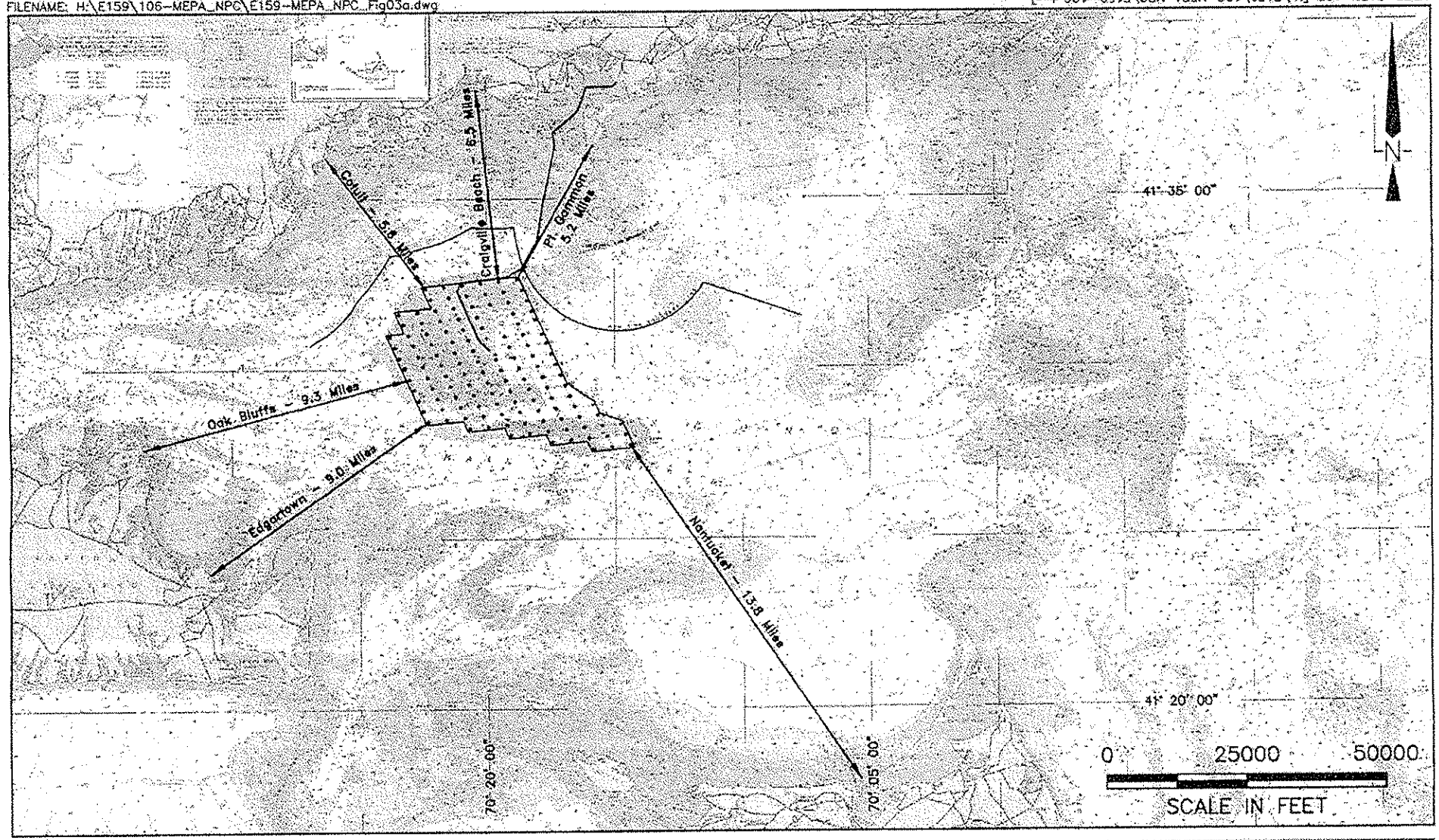

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Preliminary Turbine Array
NOAA Chart# 13237, Nantucket Sound & Approaches
New 3 Mile Boundary

Source of New 3 NM Boundary Line Coordinates: Minerals Management Service, Outer Shelf Official Protraction Diagram
OPD Number NK19-07, Block Numbers 6481 & 6531

Figure 4

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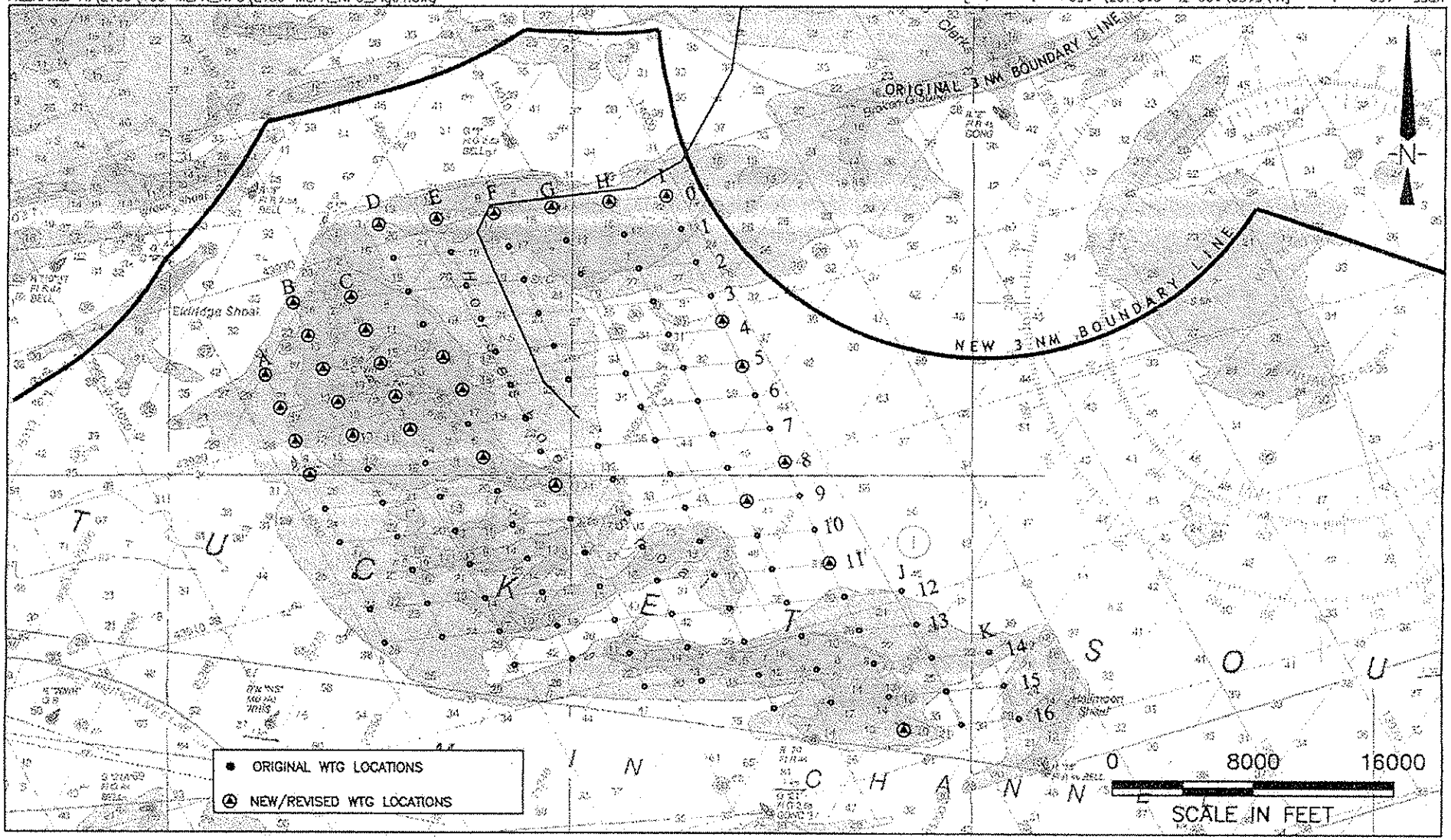

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Revised Turbine Array
NOAA Chart# 13237, Nantucket Sound & Approaches
New 3 Mile Boundary

Source of New 3 NM Boundary Line Coordinates: Minerals Management Service, Outer Shelf Official Protraction Diagram
OPD Number NK19-07, Block Numbers 6481 & 6531

Figure 5

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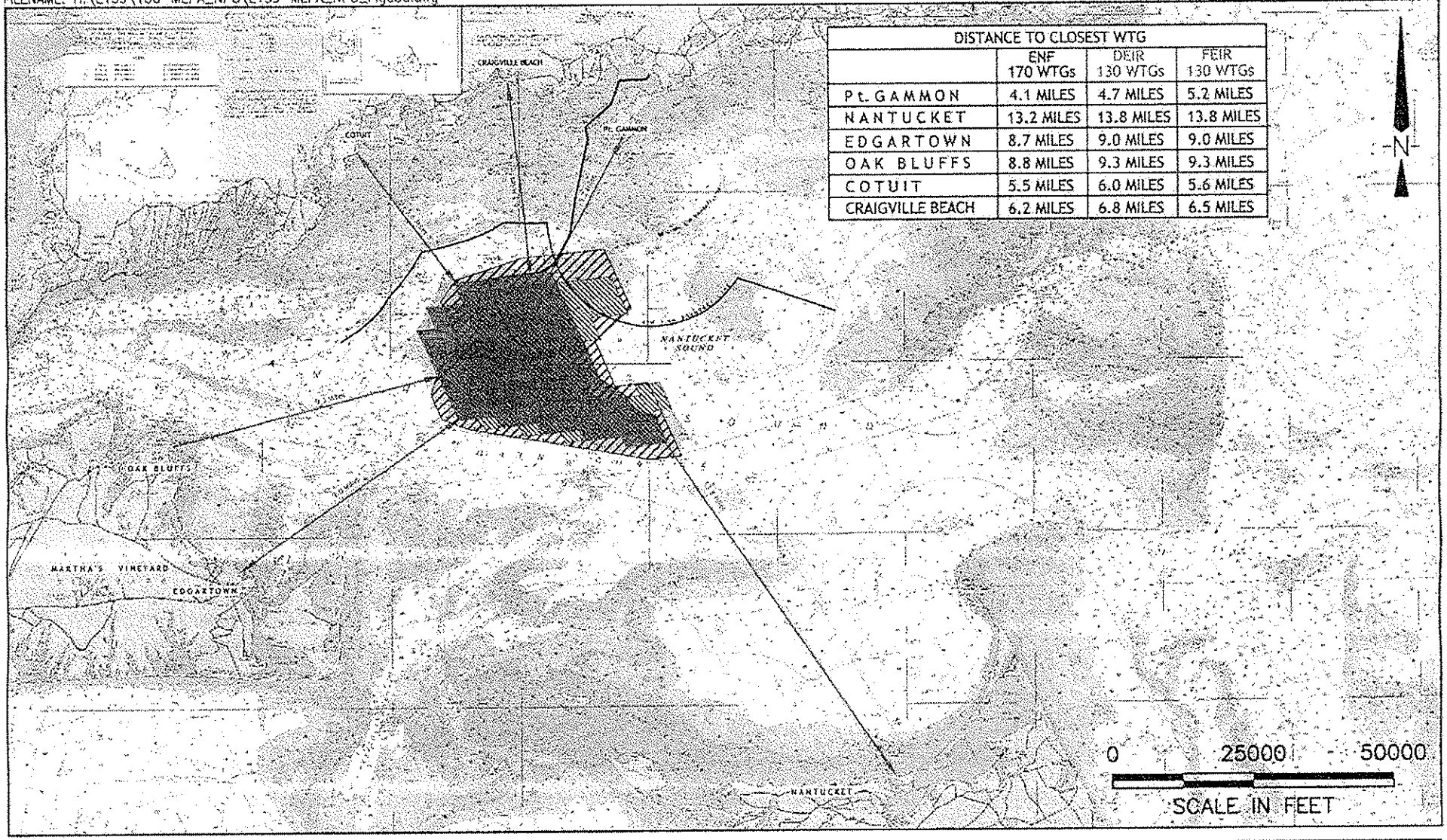

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Comparison of Wind Farm Areas
NOAA Chart# 13237, Nantucket Sound & Approaches
New 3 Mile Boundary

Source of New 3 NM Boundary Line Coordinates: Minerals Management Service, Outer Shelf Official Protraction Diagram
OPD Number NK19-07, Block Numbers 6481 & 6531

Figure 6

Notice of Project Change Distribution List

Agencies and Governement Representatives (Hard Copies)

Secretary Ellen Roy Herzfelder Executive Office of Environmental Affairs Attention: MEPA Office 251 Causeway Street Suite 900 Boston, MA 02114	Executive Office of Environmental Affairs James Stergios Undersecretary for Policy c/o Nancy Gabriel-Sackie 100 Cambridge Street Suite 900 Boston, MA 02114	Executive Office of Environmental Affairs Land Policy Director – Bob O'Connor 100 Cambridge Street Suite 900 Boston, MA 02114
Executive Office of Environmental Affairs Water Policy Director – Karl Honkonen 100 Cambridge Street Suite 900 Boston, MA 02114	Cape Cod Commission Elizabeth Taylor 3225 Main Street PO Box 226 Barnstable, MA 2630	Council on Environmental Quality Robert Middleton White House Task Force on Energy Project Streamlining 1000 Independence Ave. SW WH-1 Washington, DC 20585
Department of Environmental Protection Attention: David Murphy Commissioner's Office One Winter Street Boston, MA 02108	Department of Environmental Protection Phillip Weinberg MA DEP 1 Winter Street Boston, MA 2108	Department of Environmental Protection Southeast Regional Office Attention: MEPA Coordinator 20 Riverside Drive Lakeville, MA 02347
Department of Environmental Protection Bureau of Resource Protection – Wetlands and Waterways 20 Riverside Drive Lakeville, MA 02347	Department of Public Health Director of Environmental Health 250 Washington Street Boston, MA 02115	Department of Telecommunications and Energy Attention: MEPA Coordinator One South Station Boston, MA 02110
Departments of the Army and Air Force Massachusetts National Guard Environmental and Readiness Center Attn: Brian Nickerson Building 1204 West Inner Road Camp Edwards, MA 02542-5003	Division of Marine Fisheries Paul Diodati 251 Causeway Street Suite 400 Boston, MA 2114	Division of Marine Fisheries 50 A Portside Drive Pocasset, MA 02559
Energy Facilities Siting Board Attention: MEPA Coordinator One South Station Boston, MA 02110	Executive Office of Transportation and Construction Attention: Environmental Reviewer 10 Park Plaza Room 3510 Boston, MA 02116-3969	Federal Aviation Administration New England Region Theresa Flieger Air Traffic Division ANE-520 12 New England Executive Park Burlington, MA 01803
Federal Communications Commission Commercial Wireless Team Wireless Communication□Attn: Dan Abeyta 445 12th Street SW Washington, DC 20554	Federal Energy Regulatory Commission James Fargo 888 First Street N.E. Washington, DC 20426	Marine Fisheries Advisory Commission Mark Amorello 251 Causeway Street Suite 400 Boston, MA 02114
Martha's Vineyard Commission Olde Stone Building 33 New York Ave. Oak Bluffs, MA 02557	Mashpee Wampanoag Tribal Council 483 Great Neck Road South Mashpee, MA 02649	Massachusetts Aeronautics Commission Attention: MEPA Coordinator 10 Park Plaza Room 6620 Boston, MA 02116-3966
Massachusetts Board of Underwater Archaeological Resources EOEA 251 Causeway Street Suite 900 Boston, MA 02114-2119	Massachusetts Commission on Indian Affairs Jim Peters 100 Cambridge Street Suite 300 Boston, MA 02114	Massachusetts Department of Conservation and Recreation Peter Church 251 Causeway Street Boston, MA 2114
Massachusetts Division of Energy Resources David O'Connor – Commissioner 100 Cambridge St. Suite 1020 Boston, MA 02114	Massachusetts Highway Department Public/Private Development Unit 10 Park Plaza Boston, MA 02116-3973	Massachusetts Highway Department – District #5 Attention: MEPA Coordinator 1000 County Street Taunton, MA 02780

Massachusetts Historical Commission The MA Archives Building 220 Morrissey Boulevard Boston, MA 02125	Nantucket Planning and Economic Development Commission John Pagini 4 North Water Street Nantucket, MA 02554	Natural Heritage & Endangered Species Program Thomas French Route 135 Westborough, MA 1581
New England Fishery Management Council Frank Blount 50 Water Street Newburyport, MA 1950	North Atlantic Division, Corps of Engineers James W Haggerty Fort Hamilton Military Community Bldg 301 General Lee Avenue Brooklyn, NY 11252-6700	Office of Coastal Zone Management Alex Strysky Office of Coastal Zone Management 251 Causeway Street, Suite 800 Boston, MA 2114
Office of Costal Zone Management - Cape Cod & Islands Regional Office Truman Henson 3195 Main St Barnstable, MA 02630	Office of the Assistant Secretary of the Army-Civil Works Attn: Chip R. Smith 108 Army Pentagon 3E431 Washington, DC 20310-0108	Town and County of Nantucket Timothy Soverino Nantucket , MA
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Town of Barnstable Department of Public Works Town Hall 367 Main Street Hyannis, MA 02601	Town of Barnstable Barnstable Town Council Ann Canedy Box 23 Cummaquid, MA 2637	Town of Brewster Peter Norton 2198 Main Street Brewster, MA 02631-1898
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Town of Yarmouth Board of Selectman 1146 Route 28 Second Floor South Yarmouth, MA 02664	Town of Yarmouth Conservation Commission 1146 Route 28 Lower Level South Yarmouth, MA 02664	Town of Yarmouth Department of Public Works 1146 Route 28 Town Hall South Yarmouth, MA 02664
Town of Yarmouth Robert Lawton, Jr. 1146 Route 28 South Yarmouth, MA 02664-4492	Town of Yarmouth Suzanne McAuliffe 1146 Route 28 South Yarmouth, MA 02664-4492	Town of Yarmouth Planning Board 1146 Route 28 Second Floor South Yarmouth, MA 02664
United States Coast Guard Marine Safety Office Providence Edward LeBlanc 20 Risho Ave. East Providence, RI 02914	United States Department of Commerce National Oceanic and Atmospheric Administration Susan Kennedy 13155 East West Hwy SSMC-3 Silver Spring, MD 20910	United States Department of Commerce National Oceanic and Atmospheric Administration National Marine Fisheries Service - Northeast Region Attn: Jack Terrill One Blackburn Drive Gloucester, MA 01930-2298

United States Department of Energy National Wind Technology Center Dr. Robert W. Thresher National Renewable Energy Laboratory 1617 Cole Boulevard MS 3811 Golden, CO 80401-3393	United States Department of Energy Northeast Regional Office Al Benson John F. Kennedy Federal Building Room 675 Boston, MA 02203-0002	United States Department of Interior Fish and Wildlife Service Michael J. Bartlett USDOI Fish and Wildlife Service New England Field Office 70 Commercial Street, Suite 300 Concord, NH 03301
United States Department of Interior Fish and Wildlife Service 1849 C Street NW Washington, DC 20240	United States Department of the Interior Office of Environmental Policy and Compliance Andrew Raddant 408 Atlantic Avenue Room 142 Boston, MA 02210-3334	United States Department of the Interior Minerals Management Service Environmental Assessment Branch Attn: Rodney Cluck 381 Elden Street Mail Stop 4042 Herndon , VA 20170
United States Department of the Interior National Park Service Cape Cod National Seashore Attn: Michael B. Murray 99 Marconi Site Road Wellfleet, MA 02667	United States Department of the Navy Office of the Judge Advocate General Attn: Commander Scott Kenney 2000 Navy Pentagon Room 5 E 793 Washington, DC 20350-2000	United States Environmental Protection Agency Region 1 Robert Varney US EPA 1 Congress St, Suite 1100 Boston, MA 02114-2023
United States Army Corps of Engineers New England Division Karen Kirk Adams 696 Virginia Road Concord, MA 01742-2751	United States Army Corps of Engineers Headquarters North Atlantic Division Regional Integration Team (3E-76) Attn: Russell Kaiser 441 G Street, NW Washington, DC 20314-1000	Wampanoag Tribe of Gay Head (Aquinnah) Attn: Cheryl Andrews-Maltais 20 Black Brook Road Aquinnah, MA 02535-1546
Governor Mitt Romney Office of the Governor Room 360 State House Boston, MA 02133	US Senator John Kerry 304 Russell Senate Office Building; Washington, DC 20510	US Senator John Kerry One Bowdoin Square Tenth Floor Boston, MA 02114
US Congressman William D. Delahunt 1317 Longworth House Office Building Washington, DC 20515	US Congressman William D. Delahunt 146 Main Street Hyannis, MA 02601	US Senator Edward Kennedy 315 Russell Senate Office Building; Washington, DC 20510
US Senator Edward Kennedy 2400 John F. Kennedy Building Boston, MA 02203	Senator Robert O'Leary State House Room 416-A Boston, MA 02133	Senator Mark C. Montigny State House Room 511-C Boston, MA 02133
Senator Therese Murray State House Room 212 Boston, MA 02133	Senator William Enos 4230 Main Road Tiverton, RI 02878	Rep Demetrius J. Atsalis State House Room 167 Boston, MA 02133
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Rep. Thomas N. George III State House Room 542 Boston, MA 02133	The Commonwealth of Massachusetts Daniel E. Bosley House of Representatives State House Boston, MA 02133-1054	The Commonwealth of Massachusetts Paul C. Demakis House of Representatives State House Boston, MA 02133-1054

The Commonwealth of Massachusetts John J. Binienda House of Representatives State House Boston, MA 02133-1054	The Commonwealth of Massachusetts Michael W. Morrissey House of Representatives State House Boston, MA 02133-1054	The Commonwealth of Massachusetts Frank I. Smizik House of Representatives State House Boston, MA 02133-1054
The Commonwealth of Massachusetts Susan C. Fargo House of Representatives State House Boston, MA 02133-1054		

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Cotuit Library 871 Main Street (PO Box 648) Cotuit , MA 02635-0648	Dennis Memorial Library 1020 Old Bass River Road Dennis , MA 02638	Dennis Public Library 673 Main Street (Route 28) Dennisport , MA 02639
East Falmouth Public Library 310 East Falmouth Highway East Falmouth , MA 02536	Edgartown Free Public Library 58 North Water St. (P.O. Box 5249) Edgartown , MA 02539-5249	Eldredge Public Library 564 Main Street Chatham , MA 02633-3608
Falmouth Public Library 123 Katherine Lee Bates Rd Falmouth , MA 02560-2895	Free Public Library 1042A State Road PO Box 190 West Tisbury , MA 02575-0190	Hyannis Public Library 401 Main Street Hyannis , MA 02601-3109
Jonathan Bourne Public Library 19 Sandwich Road Bourne , MA 02532-3608	Marstons Mills Library 2160 Main Street (PO Box 9) Marstons Mills , MA 02648-0009	Mashpee Library 100 Nathan Ellis Highway (PO Box 657) Mashpee , MA 02649-0657
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The Commonwealth of Massachusetts

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July 11, 2006

RECEIVED
06 JUL 19 AM 8:03
OFFICE OF THE
EXECUTIVE SECRETARIAT

Secretary Dirk Kempthorne
Department of the Interior
1849 C Street N.W.
Washington DC 20240

Dear Secretary Kempthorne:

I am writing to request that the Minerals Management Service (MMS) schedule public scoping meetings in Massachusetts to aid the organization in its preparation of an Environmental Impact Statement for the proposed Cape Wind Energy Project in Nantucket Sound, Massachusetts. To provide a meaningful opportunity for members of the public and stakeholders in the project to participate in this process, the MMS should extend the public comment deadline to accommodate the public meetings. This will allow the public sufficient time to respond to the MMS's scoping notice. This is the ideal time to offer public hearings as the summer months provide a great opportunity to reach a substantial number of year-round residents, part-time residents, and visitors to the Cape Cod area who have a mutual interest in this project.

There have been several new developments, as well as additional sources of information, that have been made available since the Army Corps of Engineers held their original public scoping meetings in 2002, and the Cape Wind Energy Project Draft Environmental Impact Statement hearings of 2004. These "new developments" include the "notice of project change" filed with the state, the Department of Defense studies on radar interference caused by wind turbines, the recent Federal Aviation Administration findings of "hazard" for wind turbines in proximity to Air Force installations and airports, and the additional alternative energy projects and state-wide renewable energy initiatives that are now under discussion in the Commonwealth. Perhaps, most importantly, interested parties on Cape Cod would be offered the opportunity to comment on new legislative initiatives proposed in the Energy Policy Act of 2005. It is only fitting that the

public have the benefit to fully understand and comment on the scoping process to give a true representative sample of the sentiment towards the proposed Cape Wind project.

Thank you for your time and attention to this matter. If you have any questions, please do not hesitate to contact my office.

Sincerely,

Demetrius J. Atsalis
STATE REPRESENTATIVE
2nd Barnstable District

Commonwealth of Massachusetts

Division of Marine Fisheries

251 Causeway Street, Suite 400
Boston, MA 02114
(617) 626.1520
Fax (617) 626.1509

Paul J. Diodati
Director

July 14, 2006

Dr. Rodney Cluck
Minerals Management Service
Outer Continental Shelf, Headquarters
381 Elden Street, Mail Stop 4042
Herndon, VA 20164

Re: Comments on the NOI to Prepare an EIS for the Cape Wind Energy Project

The Division of Marine Fisheries (*MarineFisheries*) offers the following comments and recommendations for your consideration in scoping the EIS for the Cape Wind Energy Project.

Nantucket Sound provides very important feeding, spawning, and/or nursery grounds for many species of finfish and invertebrates, including bluefish (*Pomatomas saltatrix*), striped bass (*Morone saxatilis*), scup (*Stenotomus chrysops*), summer flounder (*Paralichthys dentatus*), black sea bass (*Centropristis striata*), tautog (*Tautoga onitis*), squid (*Loligo pealei*), and knobbed whelk (*Busycon carica*). Further, the success of spawning and juvenile development activities of some of these species in the Sound may impact abundance levels as far down the eastern seaboard as the Mid-Atlantic states due to historic migratory patterns. The commercial and recreational harvest of fish and invertebrates in Nantucket Sound provides tens of millions of dollars in revenue to the local economy and is an integral, indeed historic, part of life in many Cape Cod and Island towns.

General Comments

Review of the ACOE DEIS/R reveals a near total dependence on existing data sets from *MarineFisheries* and National Marine Fisheries Service (NMFS) resource surveys and reported landings. No effort was made by the applicant to obtain comprehensive, representative, site-specific resource or habitat data, despite the fact that all existing data sets are acknowledged by the State and Federal resource agencies and the applicant to be limited in their scope and resolution. Similarly, there was little attempt to supplement landings data with direct assessment of commercial and recreational activity in the Sound, particularly at the preferred site, with the exception of an extremely limited telephone survey of commercial party boats. The overall level of information provided in the DEIS/R was inadequate to properly evaluate the potential environmental impacts of this large and precedent-setting project and this level of effort is particularly inappropriate

when compared with similar efforts undertaken for the construction and operation of traditional power plants or the recent HubLine gas pipeline project. To facilitate consideration of our specific comments and recommendations, they are grouped by resource and activity of concern.

Fisheries Resources, Benthic Species, and Habitat Characterizations

Acknowledging that the use of existing data sets is an important component of an EIS, the limitations of these data for this purpose were identified by the resource agencies well in advance of the preparation of the DEIS/R. Specific concerns and questions include:

- Fisheries management within Nantucket Sound has been delegated to the Commonwealth under the Magnuson-Stevens Act. As such, *MarineFisheries*' Resource Assessment trawl survey data is the only long-term data set available for the Sound. However, this survey is conducted only during May and September at randomly selected stations within predetermined depth strata and is not appropriate for use to describe year-round fish occurrence and relative abundance throughout Horseshoe Shoals and Nantucket Sound.
- Trawl gear is of limited usefulness when describing the occurrence and relative abundance of pelagic and benthic species (finfish and invertebrates) not vulnerable to this gear type.
- No gear type is 100% efficient and species occurrence in catches may not be representative of relative abundance.
- Comparisons made between the preferred Horseshoe Shoals site and alternate offshore locations must be made using the same level of data for each site.
- Essential Fish Habitat (EFH) has not been evaluated for many 'inshore' species that are not regulated by NOAA.
- The EFH analyses found in the DEIS/R have been presented as an abstract listing of species and their habitat preferences. Every effort should be made to tie EFH designations from the literature to actual occurrence and relative abundance as documented by survey data and landings.
- As they are managed by the Atlantic States Marine Fisheries Commission (ASMFC) rather than NMFS, important species such as striped bass, bluefish, and fluke are not included in the EFH analyses. As such, the DEIS/R does not adequately describe their habitat requirements nor document their contribution to the high species diversity and ecology of the Nantucket Sound ecosystem.
- Previous characterizations in the DEIS/R of benthic resources and habitat in Nantucket Sound suffer from a lack of comprehensive data and consistent analysis. Horseshoe Shoal is the most prominent bottom feature in Nantucket Sound and as such, likely fills an important role in the overall ecology of Nantucket Sound.
- The limited number of benthic surveys conducted in the Horseshoe Shoals area revealed the benthic community to be highly variable from season to season and location to location. The patchy nature of these data may be due to the presence of 'microhabitats', which would indicate the need for intensive sampling to define these habitats, associated flora and fauna, and describe their functions and values.
- Prior to drafting a new EIS, the applicants should conduct directed resource surveys of sufficient spatial and temporal scale to characterize the marine resources inhabiting (permanent and transient occupation) the preferred and alternative project sites as well as their habitat functions and values.

- Resource and habitat studies should be sufficiently comprehensive to characterize the use of this area by all life stages of relevant commercial and recreationally important species, as well as those species that provide ecological services such as forage.
- The data from these directed studies should be integrated (as appropriate) with existing data sets, landings data, and physical/oceanographic characteristics to produce an accurate characterization of the diversity and abundance of finfish resources in the Sound.
- The design and analysis of required supplemental studies should be coordinated with the appropriate State and Federal resource agencies.

Commercial and Recreational Fisheries

In the ACOE DEIS/R, comparison of fishing activity and landings at the alternative sites within Nantucket Sound, south of Tuckernuck, and in the New Bedford/Buzzards Bay area were compromised by many of the same deficiencies noted for the resource characterizations. The DEIS/R presented incomplete or conflicting data, a reliance on superficial analyses, and the absence of data on private recreational fishing activity and its contribution to the economy. Specific concerns and recommendations include:

- Due in part to differences between the State and Federal landings data sets, catch statistics reported for select species may appear to contradict each other during reporting. In some instances, total landings will understate actual catches, sometimes by an order of magnitude.
- Reported landings cannot be considered a surrogate estimate of relative abundance. Of particular concern is any implication that limited landings reflect low abundance. In addition to relative abundance, catch rates (and landings) in a given year are dependent upon quotas, size and bag limits, seasonal closures, and fishing effort. It is even possible to have low catch rates in a particular year because of high relative abundance, due to management closures brought on by over-fishing in the previous year.
- In view of the many gear types in use in Nantucket Sound and the known variation in reporting at the State/Federal level, it is critical that landings data be analyzed *in toto* (combining all gear types) for a given species to obtain an accurate estimate of harvest. This is especially important if these data are being used as a proxy for species occurrence, abundance, or fishing activity. Reporting landings broken down by individual gear types is not conducive to accurate data analysis, particularly if important gear types such as hook and line (the only commercial gear used to catch striped bass) are omitted from the analysis as they were in the DEIS.
- Another limitation to the use of landings data to describe species occurrence or fishing activity is the fact that fishermen working Nantucket Sound may land their catch in ports outside Nantucket Sound or even out-of-state. Boats that carry Federal permits are required to submit trip reports that indicate the area of the catch, but this information is not currently required of in-state boats or dealers.
- The use of raw data from the NMFS' MRFSS database and or that obtained through directed telephone surveys represent a fraction of the total effort and must be viewed as such.
- Studies of fishing activity should be developed in concert with *MarineFisheries* and NMFS to quantify effort (magnitude and technique) and landings by area and

season within the areas of interest, as well as the economic contribution these activities make to the local economy.

- Landings data reported by *MarineFisheries* and NMFS must be integrated into a unified format to allow comprehensive analysis of these data by species as well as gear type used in Nantucket Sound. The reporting of these data must include meaningful discussion of the limitations implicit in these data sets.

Physical Environment and Construction of the Facility

Viewed from the context of potential impacts to fisheries resources and habitat, the sections of the ACOE DEIS/R dealing with the physical environment and perceived construction impacts appear to be based upon incomplete data and analyses. Specific concerns and recommendations include:

- In the absence of actual data, estimates of current velocity were obtained from wave theory models in the DEIS. Given the evolving state of the art for offshore wind technology and dynamic nature of the preferred site, model projections should not be substituted for actual measurements.
- The applicant should conduct directed physical surveys of sufficient spatial and temporal scale to characterize water flow and sediment transport within the preferred and alternative project sites.
- The frequency of coring and grab samples used to support remote sensing of the sediment types in Nantucket Sound does not appear adequate when viewed from the perspective of the HubLine gas pipeline project in Massachusetts Bay. Far more effort went into their characterization of bottom type, yet that project was beset by numerous delays and operational changes as they encountered "unforeseen" conditions during construction.
- No data or models have been offered to support the contention that the distance separating the towers will be sufficient to preclude cumulative/additive changes in water flow or sediment transport due interaction between the towers.
- Sampling effort at alternative sites must be consistent with that at the preferred site to allow comparison of potential construction impacts.
- The use of models such as SSFATE to predict turbidity plumes must be based on adequate and representative field data.
- Estimates of scour, scour protection recommendations, and recommendations for adequate burial depth for the cable network must be consistent with discussions of the extent of sand movement determined through appropriate data collection and modeling. Additionally, contingency plans in the event of failure will be needed.
- The data from these directed studies should be used to model potential changes to water flow and sediment transport that may result from the installation of the wind towers and cable network, both as individual components and for the facility as a whole.
- The magnitude of potential changes to the physical environment of Nantucket Sound need to be evaluated in the context of proposed sand mining for beach fill projects along the Cape and Islands.
- Construction plans should follow the mandated progression of avoidance, minimization, restoration, and mitigation with regards to environmental impacts.

Evaluation of Impacts to Fisheries Resources, Habitat, and Harvest from the Construction and Operation of the Cape Wind facility

Identification of the numerous and extensive data deficiencies, and the incomplete analyses they support, presented in the ACOE DEIS/R render predictions regarding potential impacts at least premature, if not unsupportable. Evaluation of the potential impacts that may result from the construction and operation of the Cape Wind power generation facility cannot be completed in the absence of adequate site-specific data regarding fisheries resources, habitat, or harvest practices. As such, we request consideration of the following concerns when scoping the new EIS:

- Prior assertions that mobile finfish and invertebrates will simply move to other parts of the Sound with no disruption of their life history during construction of the Cape Wind facility are not supported. Substantial changes may occur in spawning, feeding, and juvenile development of the affected species and these changes may have far-reaching impacts on fisheries in other states as well as impacts on more local species, including birds, that rely upon these resources for food.
- Potential changes in finfish occurrence, relative abundance, and community structure could result if there are large-scale changes to water flow and sediment transport over Horseshoe Shoals as a result of this project. Additionally, the conversion of an open shoals fish community to one that is structure oriented may have a profound impact on the ecology of Nantucket Sound.
- The presence of 130 wind towers, with associated support structures and cable network, may serve to limit or even preclude traditional fishing practices in the project area. These limitations could include:
    - Direct closure of the facility (24 square miles) to fishing and boating for security reasons.
    - Loss of access for fishermen, particularly mobile gear or recreational fishermen seeking to anchor near a wind tower, because of the presence of exposed cables and scour protection structures.
    - Loss of access for mobile gear fishermen due to an inability to maneuver between the tows while towing a net, doors, and ground gear. Such movement will be further restricted by the presence of other boats or fixed gear, especially during periods of low visibility and/or extreme weather.
    - Should a boat get "hung up", its ability to haul back and free itself may be severely hampered or even prevented by towers or the influence of waves and currents as altered by the presence of the towers.
    - Even if access is not restricted or completely lost, fishing success may be greatly reduced by an inability to follow traditional tows. The target species are not evenly distributed and may not be available between the rows of towers.
    - Many small vessels, including draggers, are fished single-handed, making navigation and fishing between the towers virtually impossible.
    - Recreational fishermen seeking to drift fish or troll in this area will face similar obstacles and may be at greater risk due to closer proximity to the towers.
    - Many concerns have been expressed regarding the ability of the Coast Guard or other authorities to mount a rescue within the tower field, particularly if the sea state necessitates the use of helicopters. As these accidents rarely occur on calm seas during daylight hours, concerns about compromised rescue capability may preclude fishing and navigation in this area.

- Concerns remain regarding potential impacts from vibration, noise, electromagnetic fields, and heat output from the transmission cables. These issues must be addressed with due consideration to the species at risk.
- As well as meeting the baseline data needs, the applicants should be required to prepare appropriate plans for post-construction monitoring, restoration efforts, and compensatory mitigation for unavoidable habitat loss and impacts.
- To address requirements to minimize habitat/resource impacts, the applicants need to coordinate with the State and Federal resource agencies to develop appropriate time-of-year restrictions and plans for the use of containment technologies.
- Previous assertions that there will be no contribution to cumulative impacts in Nantucket Sound because there are no other wind farms being proposed are completely unacceptable. Analysis of potential impacts to fisheries resources, habitat, and harvest activities must include appropriate consideration of on-going and proposed construction activities such as cable installation, dredging, and sand mining. Projects of this nature are or will be under review, including one to remove two million cubic yards of sand from the shoals off the coast of Nantucket.

The Division will continue to provide any assistance needed to address environmental issues related to this project. Questions about these comments may be directed to Vin Malkoski at (508) 910-6318.

Sincerely,

Vincent J. Malkoski

For
Paul J. Diodati
Director

Cc: Karen Adams, ACOE
Phil Dascomb & Steve Tucker, Cape Cod Commission
Chris Boelke & Jack Terrill, NMFS
Tim Timmerman, EPA
Vern Lang & Maria Tur, U. S. Fish and Wildlife Service
Susan Snow-Cotter & Truman Henson, MCZM
Carolyn Mostello, MDFW
Jessie Thomas, ASMFC
Leslie-Ann McGee, NEFMC
Lealdon Langley & Alex Strysky, DEP Boston
Elizabeth Kouloheras, DEP SERO
MA Marine Fisheries Commission
Caruso, Cunningham, King, Pierce, MDMF

THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS
OFFICE OF COASTAL ZONE MANAGEMENT
251 Causeway Street, Suite 800, Boston, MA 02114-2136
(617) 626-1200 FAX: (617) 626-1240

July 27, 2006

Dr. Rodney E. Cluck
Minerals Management Service
381 Elden Street
Mail Stop 4042
Herndon, VA 20164

RE: Comments on the Notice of Intent to Prepare an EIS for the Cape Wind Project

Dear Dr. Cluck:

The Massachusetts Office of Coastal Zone Management (CZM) appreciates the opportunity to provide comments during the scoping of the Draft Environmental Impact Statement (DEIS) for the Cape Wind Project. We understand that you already have the benefit of the CZM comments submitted during the earlier Army Corps of Engineers (ACOE) process, and therefore it would not be necessary to resubmit those documents[1]. However, if providing those comments again will assist you in facilitating the development of this scope, we are certainly happy to do so at your request.

Because of our involvement in the development of the earlier ACOE scope and the degree of detail provided in our comments already on record, we are able to focus our response at this juncture to an issue which we consider to be of prime importance. As is reflected in our previous comments, we have continuing concerns related to the way in which the site screening criteria were developed and applied and the adequacy of the geographic scope of the resulting alternatives analysis. Therefore, we submit the following comments for your consideration.

CZM applauds the decision by MMS to expand the range of siting alternatives for evaluation in the new DEIS for the Cape Wind project. The analysis of alternative locations plays a key role in our review of federal actions associated with coastal energy facilities for consistency with the enforceable policies of the Massachusetts CZM Program. Of particular relevance to projects involving such facilities is CZM's Energy Policy #1, which states:

> *For coastally dependent energy facilities, assess siting in alternative coastal locations. For non-coastally dependent energy facilities, assess siting in areas*

[1] Subsequent to the submission of those comments the proponents provided CZM with information regarding sediment transport modeling conducted for them in Nantucket Sound. Given the very dynamic conditions at this location, we believe that more site-specific data should be used for the model inputs, and the model needs to be calibrated and verified with data from a number of locations and during various time periods.

outside the coastal zone. Weigh the environmental and safety impacts of locating proposed energy facilities at alternative sites.

The policy is further explained in the accompa
ensure that the development and maintenance of energy resources are completed with minimal displacement of water-dependent industry and by the least environmentally damaging means

that sites are avoided which could lead to substantial harm to the most valued areas of the coastal portance of conducting a meaningful comparative site evaluation for mitigation purposes is also stressed in a number of provisions of the implementing state regulations that specifically govern the evaluation of energy facility sites in the coastal zone [see, e.g., 980 CMR 9.02(1)(e)].[2]

Since a significant amount of the ongoing public opposition to the proposed project is based on anticipated visual impacts, we believe that opportunities to greatly reduce or eliminate such impacts should be carefully explored in the process of identifying and evaluating alternative sites. In our comments on the previous Draft EIR/EIS, dated February 24, 2005, we noted that only one of the sites under consideration at that tim
alternative) would not be visible from the mainland of Cape Cod; and even in that location the proposed array of wind turbines would be well in sight of the shorelines on the islands of the siting options presented did not include a true "over-the-horizon" alternative, ostensibly due to technical limitations relating to deepwater constructability. As we further noted in our previous comments, however, the DEIS/R was rather inconclusive on this point, a reflection of the fact that the siting-related technology of utility-scale wind farms is evolving rapidly. The fact that MMS has now proposed to include a site with depths up to 600 feet in the scope for the FEIS appears to be a further encouraging indication that substantial progress is being made in that regard.

In this context, CZM recommends that the list of prospective alternatives be further expanded to include at least one location that would be sufficiently more distant from the nearest shoreline so as to eliminate virtually all potential for adverse visual impacts on land-based populations. On the assumption that wind resources in farther offshore regions would be rated as excellent to outstanding (in accordance with the USDOE classification tables), we further recommend that this candidate area be determined in accordance with the following two basic criteria:

- The landward edge of the wind turbine array should be no closer to the closest shoreline than 25 nautical miles, which approximates the theoretical maximum range of visibility for a 420-foot offshore structure as seen from a point 10 feet above sea level (based on standard visibility charts).

- The depth of water should not exceed 150 feet, which appears to be a conservative estimate of the maximum depths at which wind turbine construction and operation can be

[2] Similar principles regarding the role of alternatives are embodied in the NEPA regulations at 33 CFR Part 320.4, which requires every permit application to evaluate, "where there are unresolved conflicts as to resource use, the practicability of using reasonable alternative locations and methods to accomplish the proposed work or structure."

foreseen to become technically feasible within a span of approximately 10 years. This estimate has been provided to CZM in a recent report prepared by TRC Environmental Corporation[3], an experienced consultant to the energy industry, which notes that depths of up to 45 meters (150 feet) are in the planning stages presently, with one example being the Beatrice Offshore Demonstrator Wind Farm proposed in the waters of the United Kingdom.

For your convenience, a map delineating the offshore area that meets these criteria is enclosed. Please note that we have not attempted to identify any project-specific footprint within this candidate area, insofar as that would require consideration of additional factors beyond those we recommend for broad screening purposes. In addition to mitigating land-based visual impacts, an alternative site in this area might also minimize or address other adverse effects to wildlife, habitat, fisheries, navigation (marine and air), and recreation still under evaluation.

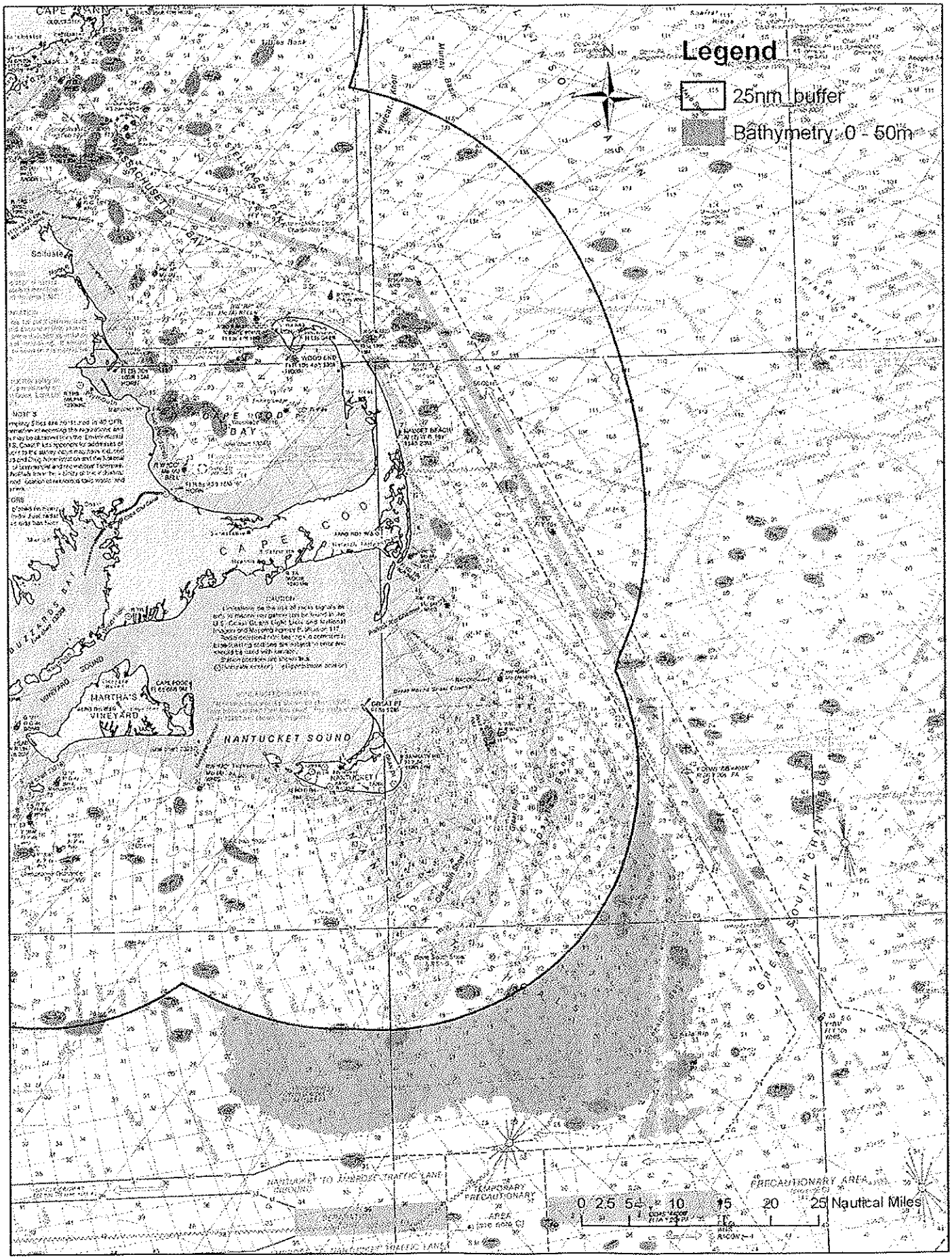
Sincerely,

(for)

Susan Snow-Cotter
Director

SSC{BC-for}/dd/th/kkm/ds

[3] TRC Environmental Corporation, Existing and Potential Ocean-Based Energy Facilities and Associated Infrastructure in Massachusetts, RFR#: ENV 06 CZN 15 (June 26, 2006).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CAPE COD BAY
CAPE COD
MASSACHUSETTS BAY
NANTUCKET SOUND
HARTHA'S VINEYARD
0 2.5 5 10 15 20 25 Nautical Miles

Commonwealth of Massachusetts

Division of Fisheries & Wildlife

MassWildlife

Wayne F. MacCallum, *Director*

December 26, 2006

ESS Group, Inc.
Attn: Thomas Liddy
888 Worcester Street, Suite 240
Wellesley, MA 02482

Re: Rare Species Information Request
Cape Wind Project- Yarmouth, Barnstable and Nantucket Sound
Yarmouth, Barnstable and Nantucket Sound, MA
NHESP Tracking No. 06-21099

Dear Mr. Liddy:

Thank you for contacting the Natural Heritage and Endangered Species Program ("NHESP") of the MA Division of Fisheries & Wildlife for information regarding state-listed rare species in the vicinity of the above referenced site. This project site, or a portion thereof, is located **within** the following Priority Habitat (PH) and Estimated Habitat (EH) regulatory polygons: *Priority Habitat 88* (PH 88) and *Estimated Habitat 178* (EH 178), *Priority Habitat 40* (PH 40) and *Estimated Habitat 680* (EH 680), *Estimated Habitat 188* (WH 188), *Priority Habitat 1232* (PH 1232) and *Estimated Habitat 821* (EH 821) as well as *near and possibly within Priority Habitat 837* (PH 837) and *Estimated Habitat 177* (EH 177), as indicated in the *Massachusetts Natural Heritage Atlas* (12th Edition).

Our database indicates that the following state-listed rare species have been found within PH 88 and EH 178 in the town of Yarmouth:

Scientific name	Common Name	Taxonomic Group	State Status
Papipema sulphurata	Water-willow stem borer	Moth	Threatened
Sabatia kennedyana	Plymouth Gentian	Plant	Special Concern

Our database indicates that the following state-listed rare species have been found within PH 40 and EH 188 and 680 in the town of Yarmouth:

Scientific name	Common Name	Taxonomic Group	State Status
Anax longipes	Comet Darner	Dragonfly	Special Concern
Sabatia kennedyana	Plymouth Gentian	Plant	Special Concern
Terrapene carolina	Eastern Box Turtle	Reptile	Special Concern

Our database indicates that the following state-listed rare species have been found within PH 837 and EH 177 in the town of Yarmouth:

Scientific name	Common Name	Taxonomic Group	State Status
Enallagma laterale	New England Bluet	Damselfly	Special Concern

Division of Fisheries and Wildlife
Field Headquarters, North Drive, Westborough, MA 01581 (508) 792-7270 Fax (508) 792-7275
An Agency of the Department of Fish and Game

Our database indicates that the following state-listed rare species have been found within PH 1232 and EH 821 in Nantucket Sound:

Scientific name	Common Name	Taxonomic Group	State Status
Sterna hirundo	Common Tern	Bird	Special Concern
Sterna antillarum	Least Tern	Bird	Special Concern
Sterna dougallii	Roseate Tern	Bird	Endangered

The species listed above are protected under the Massachusetts Endangered Species Act (MESA) (M.G.L. c. 131A) and its implementing regulations (321 CMR 10.00). State-listed wildlife are also protected under the state's Wetlands Protection Act (WPA) (M.G.L. c. 131, s. 40) and its implementing regulations (310 CMR 10.00). Fact sheets for most state-listed rare species can be found on our website (www.nhesp.org).

Please note that projects and activities located within Priority and/or Estimated Habitat **must** be reviewed by the NHESP for compliance with the state-listed rare species protection provisions of MESA (321 CMR 10.00) and/or the WPA (310 CMR 10.00). If the project site is within Estimated Habitat and a Notice of Intent (NOI) is required, then a copy of the NOI must be submitted to the NHESP so that it is received at the same time as the local conservation commission. If the proposed project is located within Priority Habitat and is not exempt from review (see 321 CMR 10.14), then project plans, a fee, and other required materials must be sent to NHESP Environmental Review to determine whether a probable "take" under the MA Endangered Species Act would occur (321 CMR 10.18). Please note that all proposed and anticipated development must be disclosed, as MESA does not allow project segmentation (321 CMR 10.16). For a MESA filing checklist and additional information please see our website: www.nhesp.org ("Regulatory Review" tab). On a case by case basis, field surveys and habitat assessments may be required as part of the MESA review process in order to locate rare species on the project site, and to determine their patterns of distribution and habitat use.

A streamlined joint MESA/WPA review process is now available. When filing a Notice of Intent (NOI), the applicant may now file concurrently under the MESA on the same NOI form and qualify for a 30-day streamlined joint review. For a copy of the revised NOI form, please visit the MA Department of Environmental Protection's website: http://www.mass.gov/dep/water/approvals/wpaform3.doc.

We recommend that rare species habitat concerns be addressed during the project design phase prior to submission of a formal MESA filing, as avoidance and minimization of impacts to rare species and their habitats is likely to expedite endangered species regulatory review.

MA Endangered Species Act (M.G.L. c. 131A)
If NHESP determines that the proposed project would "take" a rare species, then it may be possible to redesign the project to avoid a "take." If such revisions are not possible, the applicant should note that projects resulting in the "take" of state-protected wildlife may only be permitted if they meet the performance standards for a "Conservation and Management Permit" under MESA (321 CMR 10.23). Please note that projects resulting in a "take" may require submission of an Environmental Notification Form, pursuant to the MA Environmental Policy Act regulations (301 CMR 11.00).

Wetlands Protection Act
If the NHESP determines that the proposed project will adversely affect the actual Resource Area habitat of state-protected wildlife, than the proposed project may not be permitted (310 CMR 10.37, 10.58(4)(b) & 10.59). In such a case, the project proponent may request a consultation with the NHESP to discuss potential project design modifications that would avoid adverse effects to rare wildlife habitat.

This evaluation is based on the most recent information available in the Natural Heritage database, which is constantly being expanded and updated through ongoing research and inventory. Should your site plans change, or new rare species information become available, this evaluation may be reconsidered. If you have any questions regarding this review please call Jenna Garvey, Endangered Species Review Assistant, at (508) 792-7270, ext. 303.

Sincerely,

Thomas W. French

Thomas W. French, Ph.D.
Assistant Director

United States Department of the Interior

FISH AND WILDLIFE SERVICE
New England Field Office
70 Commercial Street, Suite 300
Concord, New Hampshire 03301-5087

RE: Cape Wind Project, ESS Project No. E159-000 January 5, 2007

Mr. Thomas Liddy
ESS Group, Inc.
888 Worcester Street, Suite 240
Wellesley, MA 02482

Dear Mr. Liddy:

This responds to your December 1, 2006, letter requesting information on any changes in the occurrence and distribution of federally-listed endangered, threatened, or proposed species and their habitats along the route of the proposed submarine cable in Nantucket Sound and the upland cable NSTAR transmission line corridor in Yarmouth, Massachusetts.

We are not aware of any changes to the distribution or occurrence of the threatened piping plover (*Charadrius melodus*) within the general project area. Piping plovers are well distributed along many of the south shore beaches on Cape Cod. Plovers nest west of the proposed cable landfall on nearby Great Island, Yarmouth, and east of the cable landfall on Kalmus Beach, Hyannis. They are not known to nest at Englewood Beach, the site of the proposed cable landfall.

Preliminary new information regarding the distribution of the endangered roseate tern (*Sterna dougallii*) in the general project vicinity became available this summer. During July and August, several roseate terns were observed among more than 500 terns staging at Black Beach in Falmouth (J. Spendelow, USGS, pers. comm.). Observations of color banded roseate terns were made at Eel Point, Nantucket Island, Black Beach, Falmouth and South Beach, Chatham, indicating use of beaches farther west than expected and movement around Nantucket Sound by post-breeding roseate terns (J. Spendelow, pers. comm.).

Based on information currently available to us, the New England cottontail (*Sylvilagus transitionalis*) is known to occur at a location adjacent to the Barnstable Municipal Airport. On September 12, 2006, the U.S. Fish and Wildlife Service designated the New England cottontail as a candidate species for future listing as a threatened or endangered species 176 FR 53756 (50 CFR part 17). New England cottontails are considered habitat specialists, as they are dependent on early-successional habitats typically described as thickets. New England cottontails demonstrate a strong affinity for heavy cover and are reluctant to stray from it. Habitats of this type are typically associated with beaver flowage wetlands, idle agricultural lands, power line corridors, edges of railroad right-of-ways, and patches of regenerating forests. In contrast,

eastern cottontails (which can often be found living with New England cottontails) appear to have relatively generalized habitat requirements and can often be found in residential-type habitats, such as private lawns, golf courses, and active agriculture areas.

Given suitable habitat conditions, the New England cottontail is likely to occur along the existing utility right-of-way leading from Willow Street to the Barnstable Switching Station. Vegetation management activities associated with the installation of the transmission line could have a significant impact on the ability of the New England cottontails to persist there. Although there are no regulatory requirements to do so at this time, we would like to discuss vegetation management practices that might ensure the persistence of New England cottontails in the area.

Without further information on the amount and distribution of turbidity in marine waters that will result from seabed cable installation, it is difficult to comment on the necessity of time-of-year restrictions. The time of year when the greatest number of roseate terns are likely to be present in Nantucket Sound is the period mid-July through mid-September. Accordingly, a conservative approach would avoid work in marine waters where roseate terns may be foraging during this period.

This response pertains only to listed and proposed, and candidate threatened and endangered species pursuant to the Endangered Species Act of 1973 (as amended). It does not address state-listed species or federally-protected species, such as endangered sea turtles or marine mammals, that are subject to the jurisdiction of NOAA Fisheries. Additionally, this response addresses only the route of the submarine cable and the NSTAR transmission line corridor. The Cape Wind energy park project will undergo a separate and comprehensive consultation as required under the ESA.

Receipt of any new information on the effects of the proposed action, or new information on the occurrence of listed species in the project area, may require re-evaluation of this response. Questions regarding this letter, and for further Endangered Species Act consultation, please contact me or Michael Amaral at 603/223-2541.

Sincerely yours,

Michael J. Bartlett
Supervisor
New England Field Office

The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Deval L. Patrick
GOVERNOR

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http://www.mass.gov/envir

March 29, 2007

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS
ON THE
FINAL ENVIRONMENTAL IMPACT REPORT

PROJECT NAME	: Cape Wind Project
PROJECT MUNICIPALITY	: Barnstable, Yarmouth, and Federal Waters of Nantucket Sound
PROJECT WATERSHED	: Cape & Islands
EOEA NUMBER	: 12643
PROJECT PROPONENT	: Cape Wind Associates LLC
DATE NOTICED IN MONITOR	: February 20, 2007

As Secretary of Environmental Affairs, I hereby determine that the Final Environmental Impact Report (FEIR) submitted on this project **adequately and properly complies** with the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and with its implementing regulations, 301 CMR 11.00 (the "MEPA regulations).

I believe that an ambitious program of renewable energy development is in the interests of the citizens of Massachusetts, and that the Commonwealth has an obligation to its citizens to promote development of renewable energy. Global climate change, sea level rise, dependence on foreign oil, and the health impacts of local and regional air pollution create an urgent need for sustainable alternatives to energy produced from fossil fuels. While new technologies are not without impacts themselves, these pale in comparison to the scale of impacts that continued fossil fuel emissions will have on the environment of Massachusetts. The development of the large scale wind farm as proposed is expressly consistent with and will significantly advance the Commonwealth's energy policy goals, and will provide immediate and significant benefits to air quality and energy reliability in Massachusetts and the Northeast. Overall, the project represents a balanced and thoughtful commitment to action that will contribute to the long-term preservation and enhancement of our environment.

For this project, my obligation under MEPA is to ensure that that the impacts of the construction and operation of the portions of the project within Massachusetts' jurisdiction have been adequately avoided, minimized, and mitigated. I find that they have. The proponent has provided an extensive assessment of impacts related to the electric transmission cable, the portion of the project subject to MEPA jurisdiction, and as explained below has mitigated those impacts. To the extent that technical issues associated with the electric transmission cable remain to be addressed, these can be addressed in the state permitting process, as described in detail below.

As for the wind farm itself, which for the most part lies outside of MEPA jurisdiction, the proponent has provided a significant amount of information regarding the wind turbine generators ("WTG array") located in federal waters. I note that the Coastal Zone Management (CZM) Office must perform a federal consistency review in which it assesses the impact of the wind farm upon Massachusetts coastal waters to determine whether the project is consistent with the commonwealth's enforceable policies. CZM's comment letter notes that there are some information gaps that need to be resolved prior to the issuance of CZM's federal consistency review, but that CZM expects that the additional information it needs to make an informed decision will be provided under the ongoing and comprehensive Minerals Management Service (MMS) review under the National Environmental Policy Act (NEPA). I concur with CZM's view, and instruct the proponent to coordinate closely with CZM to ensure that this information is provided to CZM's satisfaction.

Similarly, several state agencies and public commenters identify several aspects of the proponent's environmental analysis of potential impacts of the WTG array in federal waters that require additional information and analysis, and I expect that these issues will be addressed in greater detail in the Draft EIS to be published by MMS.

Project Description

As described in the FEIR, the proposed project involves the development of 130 Wind Turbine Generators (WTG) on a grid over approximately 25 square miles of sub-tidal area in Nantucket Sound known as Horseshoe Shoals. The project will have a maximum potential electric output of approximately 454 megawatts (MW) of renewable power. As currently proposed, the hub of each WTG will be 257.5 feet above Mean Lower Low Water (MLLW), with a total height up to 440 feet above MLLW when rotor systems reach maximum height. The WTG array and inter-connecting cables are located in federal waters.

The project also entails the placement of submarine cables for interconnection of the WTGs. The underground cables and portions of the submarine cables are located within Massachusetts or in the waters of the Commonwealth. The wind-generated electricity from each of the turbines will be transmitted via a 33 kilovolt (kV) submarine transmission cable to the Electric Service Platform (ESP) located within the WTG array. The ESP will take the wind generated energy from each of the WTGs and transform and transmit the electric power to the

mainland via two 115kV alternating current (AC) submarine cable circuits. The submarine cable systems will make landfall in the Town of Yarmouth.

The proposed submarine cable system route is approximately 12.5 miles in length (7.6 miles within the Massachusetts 3-mile territorial line) from the ESP to the landfall location in Yarmouth. The submarine transmission lines would travel north to northeast in Nantucket Sound into Lewis Bay past the westerly side of Egg Island, and then make landfall at New Hampshire Avenue. The submarine transmission lines would transition to the upland transmission line by using horizontal directional drilling (HDD) methodologies to a transition vault situated at the end of New Hampshire Avenue.

Federal and State Jurisdiction, Required Permits, and MEPA Jurisdiction

Because MEPA (like the Cape Cod Commission Act) is the product of state law, not federal law, MEPA review (and by extension Cape Cod Commission review) applies only to those portions of the project that are located within Massachusetts, including its territorial waters (generally within three nautical miles of the low water mark of the shore). The proposed WTG array is located outside of Massachusetts and, therefore, is not subject to state regulatory requirements. There is one notable exception: CZM has somewhat broader jurisdiction because federal law (pursuant to the Coastal Zone Management Act) specifically delegates review authority over projects in federal waters to the Coastal Zone Management Office of the adjacent coastal state, provided that state has a federally approved Coastal Zone Management Plan. However, under federal law CZM's review is not unlimited: its review must focus on the wind farm's foreseeable effects upon the uses and natural resources of the Massachusetts coastal zone.

At the time of the original submission of the Environmental Notification Form (ENF) filing and review, the portion of the project subject to MEPA was not believed to meet or exceed any mandatory EIR thresholds. Because of the precedent setting nature of the project and the potential for significant environmental impacts, the project was scoped for a discretionary EIR in accordance with section 11.06 of the MEPA Regulations.

Despite the jurisdictional limitations on MEPA review, the proponent agreed at the commencement of the MEPA process to voluntarily provide information under MEPA (within the meaning of Section 11.05(8) of the MEPA regulations) as it relates to the entire project, including the WTG array in federal waters. The purpose of subsequent MEPA scopes addressed to the non-jurisdictional WTG array was to ensure that state issues regarding potential impacts and benefits to Massachusetts would be fully addressed through a scope voluntarily accepted by the proponent for the purposes of MEPA, and which represented state comments for the purposes of NEPA. While strongly supporting the benefits of this approach, previous Certificates issued for this project carefully delimited the extent of MEPA jurisdiction, noting that "...the proposed WTG array is located outside of Massachusetts and, therefore, is not subject to state regulatory requirements." To facilitate this distinction, the first Certificate specifically directed that the proponent disaggregate the impacts of the project in Massachusetts from impacts that are occurring within federal waters, "since the latter represent aspects of the project that fall within

the "voluntary" nature of MEPA review but lie outside the scope of state and local permitting."

The project is undergoing review pursuant to Section 11.03 (7)(b)(4) of the MEPA regulations, because the project involves development of a new electric transmission line greater than one mile in length with a capacity of 69 or more kV. For purposes of MEPA analysis, I have assumed, but not decided, that the electric cable constitutes a non-water dependent use. On the basis of this assumption, the project also requires the preparation and review of a mandatory EIR pursuant to Section 11.03(3)(a)5 of the MEPA Regulations, as that section requires an EIR for a new non-water dependent use of more than one acre of tidelands. The portion of the project within Massachusetts will require a 401 Water Quality Certificate and a variance from Chapter 91 Waterways License from the Department of Environmental Protection (DEP) should the project be deemed to be non-water dependent; approval from the Massachusetts Energy Facilities Siting Board (EFSB) (which has already occurred); a construction permit from the Massachusetts Highway Department; and an Order of Conditions from the Barnstable and Yarmouth Conservation Commissions (and hence Superseding Order(s) from DEP if one or both local Order(s) were appealed). The Massachusetts Coastal Zone Management Office (CZM) will conduct Federal Consistency Review of the project, including the portions of the project located in federal waters. In addition, if a state-listed species is located within the proposed NSTAR Electric ROW transmission line route, a Conservation Permit will be required from Natural Heritage Endangered Species Program (NHESP) under the Division of Fisheries & Wildlife.

Because the proponent is not seeking financial assistance from the Commonwealth for the project, MEPA jurisdiction extends to those aspects of the project that are within the subject matter of required or potentially required state permits and that have the potential to cause significant Damage to the Environment. In this case, given the broad scope of the state permits listed above, MEPA jurisdiction effectively extends to all aspects of the project that are within Massachusetts, or that are appropriately the subject of CZM's federal consistency review.

Coordinated Review

The proponent also voluntarily committed, with strong support from this office, to a coordinated review process under MEPA and NEPA, to harmonize the timetables for the state and environmental reviews and facilitate informed and efficient agency and public review. The benefits of this approach were made obvious when the Draft EIR/EIS was filed as a joint document in November, 2004, which allowed the public to review a single set of materials within a common state/federal review period.

However, the federal Energy Policy Act of 2005, enacted after that Certificate was issued, reassigned lead agency responsibility for the project from the US Army corps of Engineers to the Department of Interior, MMS. MMS, in turn, determined that a new Draft EIS was required, and began the federal scoping process anew. This set the state and federal reviews on different schedules, and while the MMS process of developing the Draft EIS is now in its final stages, the proponent has chosen to file this Final EIR in advance of the MMS Draft EIS.

I have received numerous comments expressing strong dissatisfaction with the now bifurcated review process. Many commenters have written in opposition and asked that I require the proponent to withdraw the Final EIR or extend the comment period to correlate with the MMS schedule for release of the Draft EIS. Under the MEPA regulations, I can neither extend the review period of a Final EIR nor require that the proponent withdraw a Final EIR to allow additional time for comment. Other commenters have asked that I deny the project on grounds of inadequate information, flawed process, or perceived impacts. MEPA is not a zoning process, nor is it a permitting process. Rather, it is a process designed to ensure public participation in the state environmental permitting process, to ensure that state permitting agencies have adequate information on which to base their permit decisions and their Section 61 Findings, and to ensure that the potential environmental impacts are described fully and avoided, minimized, and mitigated to the maximum extent feasible.

MEPA issued the scope for the Final EIR before the Energy Policy Act of 2005 was promulgated, and the expectation of this office was that the coordinated state/federal review process would continue through a Final EIR/EIS. While my strong preference would be to continue the coordinated review process, I recognize and wish to note that the proponent is entirely within its rights to file with MEPA before filing with MMS.

Project Mitigation

Wind energy represents an indigenous source of virtually emissions-free power. However, as with all other power sources, wind power has potential drawbacks. Potential impact on wildlife is an important consideration, as is the highly visible nature of wind turbines. The placement of wind turbines in ecologically sensitive areas can also raise concerns with site-specific construction and operational impacts to marine resources and uses. The Final EIR describes specific measures the proponent has proposed to avoid, minimize, and mitigate impacts. In addition, the proponent has further clarified its mitigation commitments, generally described in the Final EIR, and has committed to their implementation in a letter dated March 26, 2007 from the proponent to EOEA. I note that for the most part, the proponent proposes mitigation for impacts from activities in federal waters, and this mitigation is not required for purposes of MEPA. However, the proponent has voluntarily offered this mitigation in the MEPA context, and it is therefore appropriate to describe the mitigation in this certificate. As explained below, the project will provide over $10 million in mitigation as compensation for unavoidable impacts as follows.

Compensatory Mitigation

- The proponent will provide $780,000 towards the restoration of Bird Island, off the town of Marion in Buzzards Bay, with funds to be managed by the Department of Fish and Game, Natural Heritage and Endangered Species Program.

At 1.5 acres in size, Bird Island supports an average of 750 pairs of Roseate Terns, and is the second or third largest Roseate Tern colony in North America, supporting an average of 22%

of the North American population. It is also the third largest Common Tern colony in Massachusetts, and supports an average of 1,900 pairs of Common Terns. Bird Island is conservation land owned by the Town of Marion and managed by the Harbormaster and Conservation Commission.

While Bird Island provides prime nesting habitat, the island is subject to significant and accelerating erosion. As a result, former Common Tern nesting areas adjacent to the seawall have turned into salt marsh, which is unsuitable for nesting. Common Terns have moved into interior nesting areas, forcing Roseate Terns out. The objective of the local, state, and federal partnership that is managing the restoration is to restore tern nesting habitat and protect the historic lighthouse by rebuilding the revetment to reduce erosion, fill eroded areas, and revegetate appropriate areas to provide suitable nesting habitat. Based on consultation with the Natural Heritage and Endangered Species Program, I understand that the enhancement of tern nesting habitat on Bird Island will directly benefit the same tern population that is subject to potential impacts from the WTG array. The project has a total cost of $3.775 million, the balance of which will be borne by the US Army Corps of Engineers, who is also providing planning, design, and construction services. If the proposed restoration project does not go forward, for whatever reason, the proponent shall coordinate with EOEA and state agencies and develop an alternative vehicle of equal value for mitigating avian impacts.

- The proponent will provide $4.22 million in annual payments prorated over the life of the project towards natural resource preservation, marine habitat restoration, and coastal recreation enhancement projects in the area of Cape Cod, Nantucket, and Martha's Vineyard, with funds to be managed by the Coastal Zone Management Office, in consultation with state agencies and the Cape Cod Commission.

Comments from the Department of Conservation and Recreation, CZM, Department of Fish and Game and others have identified a range of potential projects that would provide appropriate mitigation for impacts associated with the project. In order to take advantage of additional information that will be presented through the MMS Draft and Final Environmental Impact Studies, I will defer the specific guidance regarding allocation of this mitigation until the conclusion of the federal review process. I am therefore directing CZM, as an office of the Environmental Affairs secretariat, to seek appropriate public input and develop a program that will guide the allocation of these funds, in conjunction with its federal consistency review responsibilities. When a final allocation is reached, CZM shall prepare a document to be published in the environmental monitor.

Federal Lease Payment

- Pursuant to the Energy Policy Act of 2005, the project will provide Massachusetts with 27 percent of the revenues received by the federal government as a result of payments from projects that are located wholly or partially within the area extending three nautical

miles seaward of State submerged lands. [1]

The Department of Interior, through MMS, is currently developing the regulations that will implement relevant provisions of the Energy Policy Act, and an exact calculation of the mitigation to be derived from the project under this provision is therefore not possible. However, based on a Bureau of Land Management calculator recommended as a reasonable analog by MMS, it appears reasonable to estimate that the annual payment will be between $200,000 and $300,000 per year over the life of the project. At a minimum project life of twenty years, this equates to $5.6 million.

I anticipate that these funds will be available for project mitigation. As with the annual direct payments described above, in order to take advantage of additional information that will be presented through the MMS Draft and Final Environmental Impact Studies, I will defer the specific guidance regarding allocation of this mitigation until the conclusion of the federal review process. I am therefore directing CZM, as an office of the Environmental Affairs secretariat, to develop a program that will guide the allocation of these funds, in conjunction with its federal consistency review responsibilities.

Project Benefits and Mitigation

At a global and national level, the potential for climate change, global climate disruption, and rapid sea level rise create an urgent need for sustainable alternatives to fossil fuel combustion. At a regional level, development of an indigenous renewable energy market will help diversify New England's energy mix, improve regional air quality, and create a hedge against price fluctuations in gas and oil prices. I take administrative note of the decision of the Energy Facility Siting Board (EFSB). The EFSB, as part of an Alternative Needs Analysis, concluded that the project's operation would displace a portion of the electric generation capacity provided by power plants burning fossil fuels resulting in a significant annual reduction of pollutants. The FEIR updated those reduction estimates using a model based on the prospective dispatch of generating units and projected that the project's operation would annually offset 802 tons of SO2, 497 tons of NOX, and 733,876 tons of CO2 within the New England area. Additional studies indicate that a substantial portion of the regional NOx, SO2, and C02 emission reductions would occur in Massachusetts, and nearly one-half of the Massachusetts offsets would occur in the Cape and Island area.

At a state level, development of renewable energy will help Massachusetts ensure

1 Energy Policy Act of 2005 (P.L. 109-58, 42 USC 15801). Section 383 (B) states: "The Secretary shall provide for the payment of 27 percent of the revenues received by the Federal Government as a result of payments under this section from projects that are located wholly or partially within the area extending three nautical miles seaward of State submerged lands. Payments shall be made based on a formula established by the Secretary by rulemaking no later than 180 days after the date of enactment of this section that provides for equitable distribution, based on proximity to the project, among coastal states that have a coastline that is located within 15 miles of the geographic center of the project."

compliance with the Commonwealth's legally mandated Renewable Energy Portfolio Standards (RPS), M.G.L. c. 25A, s. 11F and 225 CMR 14.00, and Commonwealth commitments for reduction of greenhouse gases. The Commonwealth has adopted air quality goals to reduce emissions of greenhouse gases to 1990 levels by 2010; to reduce greenhouse gas emissions to 10% below 1990 levels by 2020; and ultimately to reduce greenhouse gas emissions by 75%-85% to achieve sustainability and climate stability.

Based on the foregoing, I find that the power produced by the project will mitigate impacts from Massachusetts generating facilities because it will serve to reduce demand on fossil fuel-fired facilities and thereby reduce air emissions from these facilities. The proposed project would reduce the need to construct additional fossil fuel-fired electric generation facilities as energy demand increases, facilitating the Commonwealth's and the region's air quality goals. The clean energy provided by the project will also serve as a mitigation measure in Massachusetts' efforts to achieve attainment of the air quality standard for ozone.

Based on the air quality benefits, the compensatory mitigation, and the specific mitigation identified in pages 19-25 of this Certificate, I find that the environmental benefits and compensatory mitigation provided by the project are adequate to mitigate the impacts of the project occurring in Massachusetts.

Review of the Final EIR:

Alternatives

In the certificate on the DEIR, I required that the proponent disaggregate the impacts of the project in the state territorial waters and overland from impacts that are occurring within federal waters, since the latter represent the aspects of the project that fall within the "voluntary" nature of MEPA review but lie outside the scope of state and local permitting. Therefore, the alternative analysis for state permitting purposes is related primarily to the cable route and its associated impacts. The FEIR adequately describes the potential impacts of the construction and operation alternatives of the electric transmission cables and measures to avoid, minimize and mitigate the potential impacts.

I take administrative notice that the Massachusetts Energy Facilities Siting Board (EFSB), the jurisdictional body of the Commonwealth charged by the legislature with ensuring a reliable energy supply with a minimum impact on the environment, has approved the proponent's petition regarding the in-state transmission cable for the project.

With respect to alternatives to the wind farm, as noted above there is limited MEPA jurisdiction over the wind farm and therefore arguably no strict requirement that the proponent study alternatives to the wind farm for purposes of MEPA. However, the proponent has nevertheless presented information to address the alternative issues that were raised in the Draft EIR and NPC Certificates, as well as comments raised by the Massachusetts Office of Coastal Zone Management (CZM). The FEIR presents additional information on alternative

technologies, including fossil fueled generators (oil, coal and natural gas) and renewable technologies, in order to provide a baseline for comparison of other power plants capable of generating similar levels of power. A No-Action alternative analysis is presented to establish a future baseline in relation to which the proposed Project and its alternatives can be described and analyzed and its potential environmental impacts and mitigation measures can be assessed.

The FEIR also presented alternative configurations for the proposed project that were evaluated. A phased approach compares the proposed Project of 130 WTG with a similar size project constructed in two 65 WTG phases. This two phase, 50/50 approach was chosen primarily for illustrative purposes, as it addresses many issues common to both a reduced sized project and a phased development approach. An alternative further from shore is discussed, as are alternative spacing of turbines, and a mix of turbine sizes. In addition, the FEIR presents two new configurations that were not previously presented in the DEIR. The revised project layout as presented in the NPC provides a minor change from the originally proposed Horseshoe Shoal array. The rotor diameter spacing has been reduced from the original 10.0 x 6.0 rotor diameters down to 9.0 x 5.7 rotor diameters. In addition, a "split alternative" configuration of two 65 turbine groupings within Nantucket Sound is analyzed as requested by CZM. The South of Tuckernuck Island alternative was examined in greater detail in the FEIR. The site is located in water depths between 65 and 90 feet, and would require the use of larger, multi-pile foundation systems which are as yet commercially unproven in a deep water offshore wind application.

Chapter 91

Pursuant to the waterways regulations (310 C.M.R. 9.00), a threshold issue is whether project is water-dependent or non-water dependent. That is a determination for DEP to make. However, the Secretary does play a role in this determination. Specifically, under 310 CMR 9.12(d), DEP relies on the Secretary's determination as to whether a facility can "be reasonably located or operated away from tidal or inland waters based on a comprehensive analysis of alternatives and other information analyzing measures that can be taken to avoid or minimize adverse impacts on the environment." The MMS final Record of Decision will ultimately determine the location of the project and the cable route. But, based on the information provided to date, the WTG will be located offshore and as a consequence there in no reasonable alternative to the cable traversing tidelands subject to Chapter 91 jurisdiction.

Should DEP determine that the project is non-water dependent, a variance under 310 CMR 9.21 will be required, and the proponent will also have to demonstrate compliance with 310 CMR 9.55. I find that the FEIR provides adequate information for DEP act on the c. 91 license application, whether the project is ultimately characterized as water-dependent or non-water dependent.

Massachusetts Ocean Sanctuaries Act

Under the Ocean Sanctuaries Act, OSA, M.G.L. c. 132A, ss. 13-16 and 18 (OSA), and its implementing regulations at 302 CMR 5.00, the five ocean sanctuaries, including the Cape and

Islands Ocean Sanctuary (CIOS), "shall be protected from any exploitation, development, or activity that would seriously alter or otherwise endanger the ecology or the appearance of the ocean, the seabed, or subsoil thereof, or the Cape Cod National Seashore."

With respect to the cable located in state waters, DCR views this activity as potentially eligible for the exemptions in Section 16, such as the exemption concerning electric power related activities, as well as exemptions regarding (1) the laying of cables approved by the department of telecommunications and energy, and (2) projects that are authorized under Chapter 91, deemed to be of public necessity and convenience, and can obtain other approvals as needed. In determining whether the cable is of public necessity and convenience, DCR and other state agencies will consider (302 CMR 5.04):

1. the financial and/or technical ability of the person proposing the project to build and maintain the project properly;
2. whether the facility or use, if any, existing at the time the agency approval is requested is inadequate;
3. whether either the public, which may be represented by several individuals or a representative group, demonstrates a need for the facility or use or that appropriate state or local public officials deem the facility or use necessary for the public's safety or welfare;
4. whether the proposed facility or use will serve the public interest;
5. whether the proposed facility or use will seriously alter or otherwise endanger the ecology or appearance of the ocean, the seabed or subsoil thereof, or the Cape Cod National Seashore; and
6. the extent to which existing uses or facilities will be affected by the proposed facility or use.

For purposes of the OSA and impacts in the CIOS, an important issue of potentially significant alteration of resources protected by the Act relates to the methods used to lay the cable and the potential impacts of that activity. My review of this aspect of the project focused on the potential adverse impact or degradation of marine resources such as benthic ecology, shellfish beds, fisheries, beaches, eel grass beds, water quality or public access. In general, the proposed techniques for laying the transmission cable do not appear to pose a long term threat to the resources in question or the public's enjoyment of them, but care should be taken in implementing the work, such as avoiding impacts to sensitive resources such as eel grass beds.

In the Certificate on the Draft EIR, I required the proponent to consult closely with DCR and DEP, to analyze how the project meets the "public necessity and convenience" requirements of the OSA. As detailed in the comment letter from DCR, the FEIR has in general adequately addressed concerns with the provisions of OSA. However, DCR states that although these activities will occur outside the CIOS, and therefore may not be prohibited by the Act, nonetheless these impacts will be realized and observed within that area and at certain shore location. DCR has indicated that it believes that these additional issues can be addressed either through the federal NEPA process, the CZM consistency review, or the chapter 91 licensing

process. I agree with DCR's view, and instruct the proponent to work closely with DCR through these processes.

Environmental Impacts/Air Quality

The installation of the cable will not produce or emit significant air pollutants. In addition, the wind farm will not only not cause air quality impacts, but will significantly improve air quality. On a regional level, a significant amount of emissions, 802 tons of SO2, 497 tons of NOX, and 733,876 tons of CO2, will be displaced by the operation of the non-emitting facility. Of these emission offsets, 27.2% of the SO2 offsets, 21.1% of the NOX offsets, and 18.9% of the CO2 offsets would occur in the South Eastern Massachusetts (SEMA) zone. Activities related to the construction and maintenance of the project, including the offshore and upland cables, will result in minor air emissions due to the fossil fuels used to operate internal combustion engines associated with equipment such as vessels, trucks, compressors, generators, etc.

Avian Impacts

The FEIR adequately describes the potential avian impacts of the construction and operation of the electric transmission cables and measures to avoid, minimize and mitigate the potential impacts. The installation of the cable will have no negative avian impact. As for the wind farm, there is a dispute over its impact on birds and whether the information provided in the FEIR is adequate to fully assess that impact. Due to the jurisdictional limits, MEPA is not the proper forum to resolve this dispute. However, I fully expect that the MMS process will include consideration of avian impact, and I instruct the state agencies that have submitted comments on this issue to provide their comments to MMS. The section below summarizes the information supplied by the proponent and proposed mitigation.

I note the comments from the Natural Heritage & Endangered Species Program (NHESP) that the project will impact several state and federally listed endangered species. Specifically, the project is expected to result in direct mortality of Roseate Terns, Piping Plovers and Common Terns and is also expected to disrupt the foraging activities of Roseate and Common Terns. The Roseate Tern is listed as "Endangered" and the Piping Plover is listed as "Threatened" pursuant to both the Massachusetts Endangered Species Act (M.G.L. c. 131A) ("MESA") and the Federal Endangered Species Act, while the Common Tern is listed as a species of "Special Concern" pursuant to MESA. In addition, the project will impact other migratory birds and other Massachusetts wildlife species such as the Long-tailed Duck. I expect that these issues will be addressed in the Federal EIS process.

During the MEPA review of the project the proponent analyzed five years of avian use data which includes the collection of two full years of migratory season radar. Using this data and data collected by others, the FEIR estimates collision risk and population viability for critical bird species such as Roseate Terns, Piping Plovers and Long-tailed Ducks. The modeling approaches used produced results that indicate a very low level of potential impact. The estimate of collision risk to Roseate Terns is 0.8 collision fatalities annually and for Piping Plovers, the

estimate of risk of collision is less than 1 per year. The daily movements of Long-tailed Ducks were observed through visual observations undertaken by the proponent in 2005-2006. The FEIR concluded that very few of the daily movements of Long-tailed Ducks were in close proximity to the site.

The FEIR concludes using best available data that fatal bird collisions resulting from the operation of the proposed project will be in the range of 0 to 2 birds per turbine per year. The potential distribution of species within this range of collision risk indicates that threatened and endangered species like Roseate Terns and Piping Plovers are each likely to sustain losses of less that one bird per year from the overall project. I note that the proponent has committed to provide funding towards the restoration of Bird Island, off the town of Marion in Buzzards Bay, as mitigation for potential avian impacts. Bird Island supports an average of 750 pairs of Roseate Terns, which is one of the largest Roseate Tern colonies in North America with an average of 22% of the North American population. It is also the third largest Common Tern colony in Massachusetts, and supports an average of 1,900 pairs of Common Terns.

The FEIR states that the proponent will work with MMS to design and implement post-construction monitoring which will be guided by an Environmental Management System (EMS) currently under development as required by MMS. The EMS will be subject to adaptive management as the results of the monitoring are evaluated. The EMS will include the involvement of a technical advisory group.

Rare Species

The FEIR adequately describes the potential impacts of the construction and operation of the electric transmission cables to rare species and measures to avoid, minimize and mitigate the potential impacts. The FEIR states that marine resources within Nantucket Sound will be exposed to temporary project impacts related to pile driving activities and vessel traffic. The project will temporarily introduce additional vessel traffic during construction and decommissioning.

As for the wind farm, the FEIR states that the risk of project vessel collisions with marine mammal and sea turtle species has been determined to be very low because vessel traffic associated with the project will not occur in areas where there have been high concentrations of marine mammal and sea turtle sightings and because project construction vessels will move at slow speeds (14 knots or below), speeds at which vessel collisions are less likely.

To minimize damage to rare species from noise, the proponent has committed to post an observer during the initial phases of construction, suspend construction activities if protected marine mammals are found within 500 meters of the site, and use a soft start-up during monopile installation. Once installed, the operation of the WTGs is not expected to generate substantial sound levels above baseline sound in the area. Noise disturbance impacts associated with operations are not expected to injure or cause behavioral effects to finfish even if an individual were to approach to within 20 m of a monopole when the project is operational.

Relative to the pile driving activities, the National Marine Fisheries Service (NMFS) noise level guidelines to preventing injury or harassment to marine mammal and sea turtle species is 180 decibels (db) beyond a 500 meter (m) safety zone. The proponent has committed to keeping sound levels emanating from project equipment and work boats during construction, operations and decommissioning activities below 180 decibels to protect marine species.

Fisheries Impacts

The FEIR adequately describes the potential impacts of the construction and operation of the electric transmission cables to fisheries and measures to avoid, minimize and mitigate the potential impacts. However, as is the case with avian impacts, there is a dispute over whether the wind farm will harm fisheries, and whether the proponent's data is adequate to reach conclusions about that impact. Again, I note that the MMS process, and not MEPA, is the proper forum to resolve these issues, and I instruct the state agencies that commented on this issue to provide their comments to MMS. The paragraphs below summarizes the information provided by the proponent on this issue.

The FEIR acknowledges that the installation of the monopiles, inner-array cables, and two submarine cable circuits will physically displace sediment at specific locations within the project area. In addition, permanent benthic habitat loss would result from installation of the WTG and ESP monopile foundations. This permanent loss due to occupation of structures would be approximately 0.67 acres or 0.0042% of the total project area.

There will also be temporary impacts to benthic habitat that will result from jet plow embedment of the inner-array cables as well as from construction vessel positioning, anchoring, and anchor line sweep associated with construction of all the project structures. The disturbance of the benthic environment will be localized because many benthic invertebrate species are capable of opportunistically recolonizing benthic sediments after disturbance. In addition, egg and larval stages of demersal species will be temporarily affected by benthic habitat disturbance if present during the time of year for project construction. Pelagic eggs and larvae would be less affected by permanent and temporary benthic habitat disturbance. The temporary displacement of benthic habitat would also likely result in the mortality and/or dispersal of some benthic organisms in the footprints of the construction activities, thereby temporarily disrupting feeding for some benthic-oriented juvenile and adult finfish in the area. Pelagic-oriented juveniles and adults would be less affected by permanent and temporary benthic habitat loss.

The FEIR states that during winter construction periods, demersal finfish may experience higher levels of injury or mortality since avoidance of anchors and anchor cables may be hampered due to sluggish response under cold water conditions. However, the FEIR states that there are no measurable effects on populations.

The FEIR shows that project construction/decommissioning is not expected to result in measurable direct mortality or injury to adult and juvenile pelagic finfish since these life stages

are mobile in the water column, capable of avoiding or moving away from the disturbances associated with construction, and not as closely associated with the bottom as demersal finfish. Adult and juvenile demersal finfish in the direct path of bottom disturbing construction and decommissioning activities may experience some direct mortality or injury.

However, construction activities associated with installing the monopile foundations, scour control mats, and the inner-array cables and submarine cable system will result in a temporary and localized increase in suspended sediment concentrations. Elevated Total Suspended Solids (TSS) can negatively impact the ability of some finfish to navigate, forage, and find shelter. Due to the predominant presence of fine to coarse-grained sand in Nantucket Sound, localized turbidity associated with project construction or decommissioning is anticipated to be minimal and confined to the area immediately surrounding the monopiles, the inner-array cables, and the two submarine cable circuits. Sediments disturbed by construction or decommissioning activities are expected to settle back to the sea floor within a short period of time.

The FEIR acknowledges that impacts to mobile gear fisheries can reasonably be anticipated as a result of the placement of the monopiles and scour protection. The FEIR also states that fees generated from the Outer Continental Shelf (OCS) lease and Chapter 91 license fees will serve to mitigate for this impact.

The proponent has committed to not placing any restrictions on commercial or recreational fishing activities or creating any fishing exclusion zones within the project site during construction or operation. The potential effects of project construction on commercial fishing gear, commercial fishing activities, and recreational fishing activities is expected to be minimal. Commercial and recreational fishing activities may be temporarily disrupted in the immediate vicinity of project construction. However, construction at the WTG array site will occur in a small area, allowing use of most of the surrounding project area. During operation, it is not expected that the monopiles or scour protection will preclude most fishing activity. The area directly occupied by each monopile and scour protection will not be available for bottom trawling, fixed gear, or dragging operations. However, the area remains largely unoccupied and available for these activities. Non-habitat invasive fishing practices such as hook and line, hand line, and rod and reel should be unaffected by the presence of the monopiles and scour mats, which may in fact, enhance recreational fishing for certain species.

Benthic and Shellfish Impacts

The FEIR adequately describes the potential impacts of the construction and operation of the electric transmission cables to benthic and shellfish resources and measures to avoid, minimize and mitigate the potential impacts. The FEIR shows that potential impacts to benthic and shellfish resources associated with the construction and operation of the project will include minor mortality rates which are anticipated due to the placement of the monopile tower foundation on the seafloor. The installation of the submarine cables will result in minimal impacts along the jet plow route.

As the jet plow traverses the planned cable routes, a localized area of suspended sediment will result. These impacts are expected to be temporary in nature, and may settle out of the water column quickly due to the size of the sand grains. Although the jet plowing technique is the preferred installation technology, there are environmental impacts associated with its use that require mitigation and compensation for unmitigated detriments. The FEIR does expand upon the analysis provided in the DEIR regarding the potential impacts to the seabed and benthic organisms from the construction activities related to submerging the transmission cable. A comparison of the impact charts in the DEIR and FEIR indicate a 36% increase in overall impacts (98 to 133 acres) and a similar increase directly related to jet plowing within the cable installation corridor (8 acres to 11 acres). It should be noted that portions of the shoal area are subject to highly dynamic sediment suspension and transport due to wind, wave and tide impacts, it appears likely that the benthic habitat may be disrupted. It is anticipated that benthic invertebrates and shellfish are likely to recolonize areas of disturbance, including the monopile towers and the submarine cable routes.

The FEIR estimates that it will take 1-2 years for the benthos to fully recover. The proposed Section 61 Findings include a limited post-construction monitoring of benthic conditions in those places where pre-construction data has been collected, using Sediment Profile Imaging (SPI) to assess changes in benthic physical conditions and habitat quality along the cable route. I advise the proponent that the post-construction evaluation should include additional comparisons to pre-construction conditions and that a more comprehensive post-construction benthic monitoring program should be developed during the permitting process. In addition, I advise the proponent that in accordance with the Chapter 91 variance regulation, compensation for disruption of resource affecting the benthic habitat will be addressed through the license application review process.

I remind the proponent that the project must also meet criteria concerning designated uses of the water body found in the Surface Water Quality standards at 314 CMR 4.00. To address this requirement, the proponent should review relevant data contained in the FEIR, and collect any necessary additional data, concerning suspended solids resulting from jet plow operations to demonstrate that the plowing operations will not have a significant effect. The FEIR notes that the short duration of the jet plowing activities and the expected rapid settlement of suspended solids are not likely to have impacts greater than the sediment disturbance that occurs along most of the proposed route in Nantucket Sound as a result of natural processes. The benthic monitoring program, including monitoring of eelgrass beds, proposed in the FEIR, will be used to document the expected recovery of benthic habitat function along the cable route. Both the Waterways Regulations and Water Quality Certificate regulations will require the establishment of Time of Year restrictions to minimize adverse impacts on shellfish beds, fishery resource areas, and submerged aquatic vegetation. The FEIR proposes that no in-water work will occur between January 1 and May 1 in Lewis Bay.

I also note that the FEIR shows that the vertical structure that would be created from the installation of wind turbine towers is not anticipated to result in adverse impacts to the ecology of the immediate project area or to Nantucket Sound. Although the walls of the towers represent a

source of new hard substrate with a vertical orientation in an area that has a limited amount of such habitat, this new substrate is not favorable for colonization or reef formation. In addition, direct impacts to lobsters are expected to be minimal. The only mortality expected would be for the less mobile individuals in the direct footprint of the monopile foundations.

Aquatic Vegetation

The FEIR states that the route of the transmission line was chosen to avoid impacts to submerged aquatic vegetation, primarily eelgrass. However, there is concern over the potential effects of the jetting operation on an eelgrass bed identified northwest of Egg Island in Lewis Bay. The FEIR contains simulations of sediment transport and deposition from jet plow embedment of the submarine cable system and the inner-array cables. In the area of the eelgrass bed in Lewis Bay, the bottom sediments are relatively coarse. As a result, the sediments suspended by the jet plow are predicted to fall along the route with bottom deposition predicted to be in the range of 1.0 to 3.0 millimeter (mm) (0.04 to 0.1 in.) at the western edge of the eelgrass bed. The majority of the eelgrass bed is predicted to experience little or no deposition as a result of the jet plow embedment operations. It is anticipated that the natural means of seagrass adaptation to changing sedimentation conditions will allow the eelgrass bed to withstand the short-term jet plow operations that will pass the eelgrass bed.

The FEIR states that the jet plowing associated with laying the transmission cable will result in the deposition of 1-3 mm of sediments in parts of the eelgrass bed within Lewis Bay. The modeling also predicts that water column sediment concentrations will peak at 500 mg/l, stay at 100 mg/l for six hours, and stay greater than 10 mg/l for 12-18 hours in the vicinity of the eelgrass bed. The FEIR predicts the deposition of up to 20 mm of sediment in very close proximity to the eelgrass bed as it was mapped in 2006. Furthermore, eelgrass distribution is dynamic and maps displaying the extent of eelgrass represent a 'snap-shot' in time. The proposed cable corridor passes through water depth and substrate suitable for eelgrass growth.

The proponent has proposed to develop an eelgrass transplanting program if long-term impacts are observed. I strongly advise the proponent that an appropriate methodology and sufficient monitoring of the success of the transplants of eelgrass should be developed in coordination with federal and state resource agencies. In addition, a monitoring plan for existing eelgrass beds should be developed in coordination with state and federal resource agencies.

Visual

All of the visual impact stems from the non-jurisdictional wind farm, rather than the electric transmission cable, because the cable will be buried. The FEIR contains analysis of alternatives to redesign the project in ways that might avoid or minimize the adverse visual impacts to the extent feasible. The project as redesigned for the FEIR minimizes visual impacts to historic properties by 1) reducing nighttime FAA lighting on WTGs, as allowed by the FAA; 2) omitting all daytime FAA lighting on WTGs; and 3) narrowing the breadth of visual impact of the offshore project layout as seen from portions of the surrounding shoreline, as compared with

the previous layout proposed in the DEIR.

The Final EIR contained new baseline data for the project which included revised visual simulations and renderings due to the relocation of the WTGs. In addition, both re-run simulations for far-field appearance under conditions of greater visibility and contrasts were provided and new simulations at two shorefront locations between 14-18 miles. The Final EIR also contained the computation of values for two basic parameters: 1) the amount of ocean-facing shoreline (in miles, and as a percent of the total within Nantucket Sound); and 2) the arc (in degrees, and as a percent of the full seascape view) that describes the horizontal extent to which WTG structures will be noticeable against the water horizon, for all of the separate viewpoints and grouped again according to the three distance categories stated above.

Historic/Archaeological Impacts

Historic/archeological impacts arise from the wind farm, rather than the electric transmission cable. The layout of the project proposed in the DEIR has been revised in the FEIR to avoid disturbance to all areas identified as potentially archaeologically sensitive as a result of marine archaeological reconnaissance survey conducted for the DEIR. Locations of 8 turbines, 7 sections of inner-array cables, and one area of cable convergence near the ESP, as proposed in the DEIR, have been revised for the FEIR specifically to avoid archaeologically sensitive areas, as recommended in the Marine Archaeological Reconnaissance Survey report included in the FEIR.

There are no significant archaeological deposits and historic sites or structures in the upland cable route, and therefore construction, operation, maintenance and decommissioning of the upland cable route portion of the project will cause no impacts to these types of resources. In addition, because the upland cable will be underground, there will be no permanent visual impacts.

The FEIR contains information showing an attempt to reduce the visual impact of the proposed project on areas of historical significance, however, it was determined by Public Archaeology Laboratory (PAL) that the realignment of the project components did not "qualitatively" change the visual experience presented by the proposed project. PAL findings of "Adverse Effect" remain unchanged for two National Historic Landmarks (NHLs) (the Kennedy Compound and the Nantucket Historic District), four historic districts and 10 individual properties.

Noise

The installation and operation of the electric transmission cable is not expected to cause significant noise impact. With respect to the wind farm, the Draft EIR concluded that the project will comply with the state's noise regulations, but that temporary impacts may result from project construction, particularly pile driving. The FEIR states that underwater sound effects from pile driving are unchanged from the results presented in the DEIR, except that elimination of the

closest WTGs in the northeast corner of the project has slightly reduced underwater sound levels along the shore of Cape Cod. Above water sound effects from pile driving are identical to those presented within the DEIR, with the exception of the lowest project sound level being 1dBA less. Pile driving sound will be below existing levels at 8 of 10 upland locations and will therefore be inaudible along most of the coast.

At Point Gammon in Yarmouth, the temporary sound of construction may be barely audible when pile driving is done for the monopiles in the northeast corner of the project closest to the shore (sounds up to 41 dBA when winds are onshore) if existing sound levels are very low (possibly as low as 35 dBA). At Cape Poge on the northeast tip of Martha's Vineyard, the temporary sound of construction may be barely audible when pile driving is done for the monopiles in the southwest corner of the project closest to the Vineyard (sounds up to 40 dBA when winds are onshore) if existing sound levels are very low (possibly as low as 40 dBA). All temporary pile driving sound will be inaudible in Lewis Bay. Sound effects from upland construction activities are unchanged from the results presented in the DEIR.

Land Alteration

The FEIR through technical studies states that impacts on the physical oceanographic environment from installation and operation of the electric transmission cables will be minimal and localized. I remind the proponent that 310 CMR 9.37(4) of the Waterways regulations requires that the cable be buried in a manner that will not present a hazard to navigation, be protected from scouring, will not be uncovered by sediment transport, will not present a hazard to fishing gear. In addition, bottom contours must be restored after burial. The FEIR provides an analysis that estimates that a shallow scar remaining after jet plowing operations will be backfilled through natural processes within a sufficiently short time period (ranging from 1-4 days in sandy areas to 60 days in areas with finer sediments). The FEIR also concludes, however, that portions of the cable buried in sand waves may become exposed within 6 to 8 years, due to sand wave migration, unless unidentified mitigation measures are used. The proponent must provide more information to DEP during the licensing process regarding any monitoring or mitigation measures that are necessary to maintain adequate burial of the cable.

As for the wind farm, the FEIR states that small eddies may develop in the immediate vicinity of the WTGs but are expected to dissipate a short distance from the WTG. Based on the WTG pile diameter and wave characteristics in the area, the presence of the WTGs will not affect wave conditions in the area. The large spacing between the WTGs and the small WTG pile diameter will prevent the effects of each WTG pile on wave and current conditions from affecting adjacent piles.

Wetlands/Drainage

The Draft EIR included a reasonably scaled map that delineated wetland boundaries and buffer zones present in the project area. Wetlands were identified in the vicinity of the project area seaward and within the state territorial limit of Nantucket Sound and Lewis Bay, and along

the onshore transmission cable route.

The FEIR states that the proposed submarine cable system will be pulled beneath Coastal Bank, Coastal Beach, and Land Subject to Tidal Action. After installation, the total onshore wetland resources estimated to be temporarily disturbed along the proposed onshore transmission line route from the landfall location to the NSTAR Electric ROW is approximately 4.9 acres/213,444 square feet. The proponent has committed to use measures to minimize impacts to wetland resource areas. From the landfall to the NSTAR Electric ROW, work would be required within existing paved portions of state- and locally-regulated Land Subject to Coastal Storm Flowage, Riverfront Area, and 100-foot (30.5-meter) Buffer Zone of freshwater and coastal wetland resource areas. No permanent aboveground structures are proposed within Yarmouth's 50-foot (15.2-meter) No-Build Zone, and no vegetation would be disturbed within the local 35-foot (10.7-meter) Vegetated Buffer.

Water Quality

The FEIR adequately describes the potential impacts of the construction and operation of the electric transmission cables to water quality and measures to avoid, minimize and mitigate the potential impacts. The FEIR shows that the installation of WTG foundations and the submarine cable systems will cause temporary and localized physical displacement of sediment at specific locations. The project will temporarily disturb marine sediments, suspend finer fractions and cause turbidity in the water column, largely in near-bottom areas proximal to construction. Chemical analysis of sediment samples in areas that will be disturbed have none of the targeted chemical analytes above the guidelines for marine sediments.

The submarine cables will be installed using low impact hydraulic jet plow equipment, and the foundation structures will be minimized through use of a monopile system. The FEIR shows that the majority of disturbed sediments are expected to settle and refill cable trenches and areas immediately surrounding these trenches shortly after installation. Seabed impacts related to sediment disturbance from anchoring and the resting of work vessels on the seabed within designated work areas will be comparable to disturbance already occurring within Nantucket Sound from natural events and the use of commercial fishing gear. After installation, some localized scour around monopile foundations may occur, depending on the location of the WTG on Horseshoe Shoal and local sediment transport conditions.

The FEIR proposes to return the dredged sediments to nearly replicate the sediment transport attributes of the benthic area prior to dredging. The FEIR has provided greater detail concerning measures to be undertaken to avoid impacts with this phase of construction. The FEIR also appears to have adequately characterized the physical and chemical characteristics of the sediments in this area. The FEIR includes data on sediment grain size along the route that suggests that extensive information exists to confirm the presence of coarse grained sand along the pipeline route. I remind the proponent that the application for a Water Quality Certificate must also include similar analysis of sediments along the cable route, in accordance with 314

CMR 9.07. If necessary, the Water Quality Certificate application should also provide any data that has been collected concerning any possible areas of contaminated sediment along the cable route.

The cable system will generate a limited amount of heat that is absorbed by, and dissipated into, the surrounding subsurface environment. This loss of heat to the sediments is essential for proper operation of cables. Any increase in sediment temperatures resulting from operations of the submarine cables are expected to be on the order of fractions of a degree, which may not be measurable and is not expected to impact water quality. Because the cable would be buried to a depth of approximately 6 feet of cover, this small level of heat dissipation should not result in impacts to seabed sediments, surface waters, or biota in the vicinity of the Project.

Decommissioning Plan

The proponent has committed to fully comply with the decommissioning standards imposed by the MMS, including any financial responsibility requirements. The proponent will provide a financial instrument to the reasonable satisfaction of MMS that will ensure the decommissioning of the facility. It will be utilized at the end of the useful economic life of the project or in the event that the project is abandoned or otherwise rendered inoperable. It is expected that the overall impacts related to the decommissioning of the project in its entirety are expected to be the same or less than those related to the construction of the project. It is estimated that the schedule for completing the decommissioning process would be similar to the estimated initial construction time frame. Based on the use of today's technology it is estimated that the process would involve up to two calendar years to complete, assuming that weather conditions will dictate that the bulk of the work take place between April and November.

Navigation and Transportation

The proponent has revised the 2003 Navigational Risk Assessment in the FEIR to incorporate design changes and new information and to address topics requested by the USCG in its letter of February 14, 2005. In addition, as a result of the reconfiguration of the WTGs, anticipated design changes that would increase rotor height, and the release of new lighting guidelines by the FAA, the proponent has initiated new Aeronautical Surveys by the FAA for each of the proposed turbine locations and is awaiting results.

Telecommunication

An evaluation of the Federal Communication Commission (FCC) permitted antennae in the study area (existing and proposed) was completed by ComSearch in June of 2005. The analysis identified no microwave paths that would have a conflict with the proposed turbine locations (i.e., no impact to line-of-sight telecommunications). The existing, permitted, and proposed FCC antennae on Martha's Vineyard and Nantucket would be able to maintain unimpeded line-of-sight communication with existing and permitted corresponding antennae on Cape Cod. Transmission and receiving of signals between towers on Cape Cod and within or

between the Islands are not along a path that would intersect with the position of the WTGs. As a result, the WTGs would not be expected to create shading effects on existing or proposed telecommunications towers.

The FEIR states that no interference with land based telecommunications towers, marine VHF radios, GPS positioning systems, aviation radar or military radar is anticipated from development of the project. However, the WTGs may produce shadow areas and/or spurious echo effects on vessel mounted radars, requiring mariners utilizing the areas in and around the project site to be made aware of the potential and to more closely scrutinize radar data received. The proponent has committed to work with the USCG to develop information and training opportunities that will be provided to local mariners in order to raise awareness if interference does occur.

The proposed submarine cable system and upland transmission line associated with the project will be buried either beneath the seafloor or on land, and the only potential aboveground section of the 115 kV transmission line is located at the interconnection with the existing Barnstable Switching Station. Most telecommunication devices operate on a line-of-sight basis, the source of the transmission and the receiving antennae communicate in a linear path. No interference with telecommunications is anticipated from the project transmission lines.

Draft Section 61 Finding

The following is a summary of the proposed mitigation for potential impacts on as a result of the electric transmission cables and the wind farm:

Air Quality

- The power produced will reduce demand on fossil-fuel fired facilities and reduce air emissions from these facilities. The project would also reduce the need to construct additional fossil fuel-fired electric generation facilities as energy demand increases, facilitating the Commonwealth's and the region's air quality goals.

Avian

- The proponent has committed to working with MMS to design and implement post-construction monitoring which will be guided by an Environmental Management System (EMS) currently under development as required by MMS. The EMS will be subject to adaptive management as the results of the monitoring are evaluated. The EMS will include the involvement of a technical advisory group.

Marine Resources

- Vessels transporting construction materials to the project site in Nantucket Sound will travel at slow speeds, usually at 10 knots or below.
- Potential vessel impacts (collisions and harassment) to marine mammals and sea turtles will be minimized by requiring that project vessels follow National Oceanic &

Atmospheric Administration (NOAA) Fisheries Regional Viewing Guidelines –Northeast Region (NMFS and NOS, 2006) while in transit to and from the site so as not to disturb any individuals that may be in the area.

- The use of state-of-the-art hydraulic jet plow technology for cable installation to minimize sediment transport and suspended sediments.
- The use of monopile foundations for the WTGs.
- Implementing post-construction monitoring to document habitat disturbance and recovery.
- Potential impacts to marine mammals and sea turtles associated with underwater sound levels created by pile driving will be minimized by conducting a "soft-start" to each piling event.
- Underwater sound monitoring will be performed during initial monopile construction (the first three monopiles).
- A NMFS approved observer will be posted on-site during all pile driving activities to monitor the area during construction. If protected marine species are observed within the 500 m (1,640 feet) Safety Zone by the NMFS approved observer, the observer would ensure that work will cease until the animal is clear of the work area and safety zone.

Fisheries

- Utilization of a state-of-the-art hydraulic jet plow for cable installation, monopile foundations for WTG towers, horizontal directional drilling (HDD) installation at the nearshore area, and post-construction monitoring to document habitat disturbance and recovery.
- The pile driving hammer and jet plow technology that would be used to install the monopile foundations and the submarine cables, respectively, were selected specifically for their ability to keep sediment disturbance to a minimum.
- The proponent has agreed to work with commercial/recreational fishing agencies and interests to ensure that the construction and operation of the project would minimize potential impacts to commercial and recreational fishing interests.
- Measures proposed to minimize or avoid potential impacts to the commercial fishing industry include: no restrictions on fishing activities within the site; marking the WTGs with USCG-approved lighting to ensure safe vessel operation; and burying the inner-array cables and two submarine cable circuits to a minimum of 6 feet (1.8 meters) below the seabed to avoid the potential for conflicts with fishing vessels and gear operation.
- Notification of fishermen well in advance of mobilization as to the location and timeframe of project construction activities, as well as a daily broadcast on VHS marine channel 16 as to the construction activities for that and upcoming days.
- Cable burial depth will be inspected periodically during project operation to ensure adequate coverage is maintained so as not to interfere with fishing gear/activity or with the safe operation of the cable.
- To protect sensitive fish species such as winter flounder, the proponent has committed to avoid in-water construction in Lewis Bay between January 1 and May 1 of any year. No submarine installation or cofferdam/HDD installation will occur during this timeframe.

The proponent has committed to continue to work with NOAA Fisheries and MarineFisheries to ensure that impacts to finfish species are minimized and mitigated if necessary.

Benthic and Shellfish

- Utilizing state-of-the-art hydraulic jet plow for cable installation in order to minimize seabed disturbance and sediment dispersion during cable embedment.
- Utilizing monopile foundations for WTG towers which minimize the seabed footprint and sediment disturbance while also minimizing opportunities for benthic organism colonization or fish habitat creation.
- Post construction monitoring to document habitat disturbance and recovery.
- The use of mid-line buoys on anchor lines in order to minimize the impacts from anchor line sweep.
- The duration and sequencing of construction has been designed to minimize the period of disturbance.
- Impacts to benthos and benthic habitat in Lewis Bay within 200 feet (61 meters) of shore would be minimized by using HDD methodology to transition the submarine cable system to the shore.
- The proponent has committed to working with the Town Shellfish Constable to appropriately avoid or minimize impacts to designated shellfish areas from installation of the submarine cable. The proponent will provide the Town of Yarmouth with funds to mitigate for the direct area of impact within the Town's designated recreational shellfish bed in accordance with the Town's mitigation policies.

Aquatic Vegetation

- The proponent will not anchor vessels or perform cable installation work in the area near Egg Island where eelgrass beds are located.
- A dive survey will be conducted to confirm the limits of the eelgrass bed near Egg Island (verifying the limits of submerged aquatic vegetation (SAV) previously surveyed in July 2003) prior to the commencement of cable installation in the same calendar year preceding construction, and divers will also be used to confirm correct placement of work vessel anchors.
- If during installation of the submarine cable the eelgrass beds are disturbed, the proponent has committed to replanting eelgrass.
- Pre and post-construction monitoring of the eelgrass bed will be performed and if it is determined that eelgrass has been lost as a result of project activities, replanting will occur.
- The proponent has committed to aerially photograph the entrance to Lewis Bay in the month of July immediately prior to jet-plowing, under conditions conducive to documenting the extent of eelgrass beds, to use the photographs in finalizing the exact location of jet-plowing, and to provide such photographs to the Energy Facilities Siting Board.
- The proponent will denote the edge of the eelgrass bed at the water surface with buoys

near Egg Island. In addition, the proponent will implement a No Wake Zone for its construction vessels at a distance of 200 feet (61 meters) from the edge of the eelgrass bed.

- An eelgrass survey will be performed for the two consecutive years following construction to document the change in density which will be coordinated with the appropriate state and federal agencies.

Visual

- The proponent has removed daytime FAA lighting on the WTGs, formerly proposed in the DEIR
- Potential nighttime visual impacts have been lessened by the reduction in FAA nighttime lighting (from the originally proposed 260 lights down to 57).
- Revisions to the layout have narrowed the breadth of the visual impact as seen from certain areas around the Sound.
- The WTGs will be an off-white color, to reduce contrast with the sea and sky.
- The upland transmission route will be located entirely below ground within paved roads and existing utility ROWs to avoid visual impacts and impacts to potential unidentified archaeological resources.
- If MMS determines there will be an adverse effect (due to visual impacts) MMS will direct a formal consultation process under the requirements of the NHPA, to develop measures to help mitigate these impacts on historic properties.
- The proponent and MMS will continue to consult with MHC, the Wampanoag Tribe of Gay Head Aquinnah (WTGHA) and other consulting parties to address and resolve issues concerning potential visual effects of the project on historic properties.

Historic/Archaeological

- All submerged potentially archaeologically sensitive areas identified during marine archaeological investigations have been avoided, including relocation of eight WTGs and associated cable arrays.
- The interpreted limits of three submerged potential historic resources on the seafloor within the site will be extended by a 100-foot (30.5-m) perimeter that will constitute a no-activity buffer zone. Compliance will be overseen by an environmental inspector.
- In addition, Procedures Guiding the Unanticipated Discovery of Cultural Resources and Human Remains will be provided to construction contractors, outlining measures to be taken in the event that previously unidentified submerged and upland historic/archaeological resources are discovered during Project construction. Compliance with the procedures will be overseen by an environmental inspector.
- The proponent has reduced lighting on the WTGs and revised the layout such that the breadth of visual impact of the array as seen from certain areas is reduced. If the MMS determines that the offshore above water components of the project will result in adverse effects to certain onshore aboveground historic properties due to visual impacts, then the MMS will direct a formal consultation process under the National Historic Preservation Act (NHPA) to develop mitigation measures that would be detailed in a Programmatic

Agreement.

Noise

- The proponent has selected state–of–the–art, very low noise wind turbines.
- Construction noise impacts would be temporary, unavoidable, and are primarily associated with the laying of the Onshore Transmission Line from the transition vault at the shore of Lewis Bay along existing roadways to the Barnstable Switching Station using standard roadway construction equipment. Noise mitigation for this onshore activity would consist of scheduling activities during normal working hours and ensuring that all equipment has properly functioning noise mufflers.
- Onshore construction activities (which include the horizontal directional drilling (HDD) at the landfall), would be temporary, lasting 4 to 6 weeks, and would be audible to persons near the cable corridor. Sound levels would be similar to roadway construction equipment. Noise barrier walls will be constructed at the edge of the HDD pit to shield nearby residences at 32 and 49 New Hampshire Avenue.

Land Alteration

- Scour mats and or rock armoring (rip-rap) will be placed at the foundation of each WTG and each support pile of the ESP to minimize sediment scour.
- The use of state-of-the-art hydraulic jet plow for offshore cable embedment that minimizes sediment disturbance.
- Restoration of the dredged cofferdam area using originally dredged material supplemented with imported clean sandy backfill material if necessary to restore preconstruction contours.

Wetlands/Drainage

- The proposed submarine and onshore transmission cable route would be designed to fully comply with all applicable local, state and federal wetland performance standards.
- Direct wetland impacts will be minimized through the use of hydraulic jet plowing, HDD, and installation of the upland transmission line within existing paved roadways or disturbed electric ROWs.
- The proponent has committed to coordinate with the Yarmouth and Barnstable Conservation Commissions, the DEP, and Natural Heritage Endangered Species Program (NHESP) to prevent impacts to state-listed species as part of the project.
- The project will use best management practices for sedimentation and erosion control and stormwater management.
- A pre-construction survey will be performed to document the occurrence of state-listed rare species along the NSTAR Electric ROW route. If a state-listed species is located within the proposed transmission line route, a Conservation Permit under Massachusetts Endangered Species Act (MESA) would be obtained and efforts would be made to eliminate, minimize, or mitigate for any potential impacts.
- Post-construction monitoring will document habitat disturbance and recovery.
- The upland transmission line system has been sited below grade within existing roadways

and maintained ROW.

- Sediment and erosion controls will be installed prior to construction, and will be inspected and maintained throughout the construction activities.
- A Dewatering Plan will be prepared to address the procedures for handling of any water encountered during excavation.
- The transmission line will not contain any fluids, petroleums, oils, or lubricants.
- The project will not result in any direct discharge of untreated stormwater into wetlands and waterbodies. Once installed, the paved areas will be restored to preconstruction conditions and the NSTAR Electric ROW will be restored to pre-construction contours and revegetated using a suitable upland seed mixture. The existing stormwater collections and management systems for these roadways will remain intact.

Water Quality

- An Oil Spill Response Plan (OSRP), a Stormwater Pollution Prevention Plan (SWPPP), and an Operation & Maintenance (O&M) Plan will be implemented during project construction/decommissioning and operation to prevent potential impacts to water quality from spills and erosion/sedimentation
- The proponent will work with the Yarmouth Shellfish Constable to mitigate for any short-term impacts to shellfish productivity and will provide the Town with funds to mitigate for the direct area of impact.
- To minimize the release of bentonite drilling fluid into Lewis Bay during HDD, freshwater will be used as a drilling fluid to the extent practicable prior to the drill bit or the reamer emerging in the pre-excavation pit.
- Scour protection, in the form of scour control mats and/or rock armor, will be installed around monopiles and ESP piles in order to prevent scouring.

Construction

- Use of state-of-the-art low-impact hydraulic jet plow installation for the marine cables;
- Use of HDD cable installation techniques at the landfall to avoid impacts to the intertidal zone and shoreline in Lewis Bay;
- A temporary cofferdam will be used during construction to minimize sediment resuspension at the interface between the HDD conduit and submarine cable system;
- Use of hollow monopile foundations for WTG towers;
- Installation of scour protection mats and/or rock armor to reduce scour potential near the WTGs; and
- Post-construction monitoring including regular visual inspection of inner array cable routes in areas of migrating sand waves, to ensure the cables remain properly buried.

Navigation and Transportation

- Direct communication would be established between Air Station Cape Cod Search and Rescue (SAR) personnel and the proponent's operation center (manned 24/7) in order to facilitate rapid remote WTG shut down, at the request of the USCG, in the event of bad weather SAR by air.

- The proponent will implement procedures outlined by the USCG to deconflict the areas around ongoing construction activities.
- The proponent has designed the WTG monopiles to withstand the forces of up to six (6) inch (15 centimeter) thick ice floes impacting the monopile.
- The proponent has committed to initiate manual shutdown of WTG(s) experiencing icing conditions if conditions warrant such a shutdown.
- The proponent will use either Seabed Scour Control Mats or rock armor for scour protection to limit changes to bottom contours in the vicinity of the WTGs.
- The proponent will provide private aids-to-navigation (ATONs) (lights and sound signals) within the site to assist mariners..
- The proponent will mark each WTG with its alphanumeric designation to serve as a point of reference for mariners.
- The proponent will provide the USCG; other local, state, and federal agencies and commercial sailors with a plan showing the designations of each WTG.
- The proponent has committed to continue coordinating with the USCG and NOAA regarding inclusion of the project site on NOAA nautical charts covering the area.
- The proponent has committed to immediately shutting down all or a portion of the WTGs upon notification from the USCG that SAR aircraft have been ordered to respond to an incident within or immediately adjacent to the project site.
- The proponent will work with the USCG to develop information that could be used to provide mariners to educate them regarding the potential effects of the WTGs on marine radar.
- The submarine cable system will be buried 6 feet below the present sea bottom.
- Installation of the upland cable system will occur outside of the height of the summer tourist season to minimize any vehicular disruption.
- Trenchless technologies will be used at major intersections and railroad crossings in order keep traffic disruptions to a minimum
- Impacts to land-based transportation will be limited and temporary in nature. A Construction Traffic Management Plan would be prepared in consultation with local and state officials to ensure that safe access is maintained for vehicular traffic during onshore cable system installation, once the final route has been determined.

Telecommunication

- The potential does exist for interference to vessel mounted radar operating within or in close proximity to the proposed project site. The proponent will work with the USCG to develop information and training opportunities that could be provided to local mariners in order to raise awareness if interference does occur.

Conclusion

I find the FEIR to be adequate, and am allowing the project to proceed to the state permitting agencies. The FEIR presents a complete and definitive description and analysis of the jurisdictional portions of the project and its alternatives, and contains an assessment of its

potential environmental impacts and mitigation measures to enable state permitting agencies to understand the environmental consequences of their permit decisions To the extent that certain aspects of the jurisdictional portion of the project needs additional analysis of technical details, I find that any such issues can be fully analyzed in the state permitting processes, which also provide meaningful opportunities for further public review. With respect to the non-jurisdictional aspects of the project, the DEIR and FEIR provide extensive information, and I fully expect that the comprehensive federal NEPA review conducted by MMS will supplement what has already been provided, provide a forum for continued public input into the non-jurisdictional aspects of the project, and appropriately resolve any lingering issues over the level and adequacy of data provided.

As noted previously, CZM will perform a limited review of the non-jurisdictional portion of this project. CZM has stated that there are still some information gaps and issues that need to be resolved prior to the issuance of CZM's federal consistency decision, but has affirmed that these issues can be resolved via the federal review process, as well as other permitting and licensing, and does not recommend a Supplemental EIR. I concur with CZM's view and therefore find that the FEIR is generally adequate for purposes of enabling CZM to make an informed federal consistency review. The proponent and state agencies should forward copies of the Section 61 Findings to the MEPA Office for completion of the file.

To keep all interested parties fully informed of permitting developments, the proponent should provide notification of local public meetings regarding the project to those parties who commented on the ENF, Draft EIR, NPC and Final EIR. I also request that the proponent send to the commenters notices of any relevant state permitting comment periods, meetings, or other opportunities for public input into the state permitting processes, and also provide notice when the MMS DEIS is submitted.

March 29, 2007
Date

Ian A. Bowles

IAB/dbb/acc

LOCAL

CAPE COD COMMISSION

3225 MAIN STREET
P.O. BOX 226
BARNSTABLE, MA 02630
(508) 362-3828
FAX (508) 362-3136
E-mail: frontdesk@capecodcommission.org

July 13, 2006

Comments on the Notice of Intent to Prepare an EIS on the Cape Wind Project
Minerals Management Service
381 Elden Street
Mail Stop 4042
Herndon, VA 20164

Re: Cape Cod Commission comments on the Cape Wind Energy Project

Dear Sir or Madam:

In response to the Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) for the Cape Wind Offshore Wind Development that appeared in the May 30, 2006 *Federal Register*, the Cape Cod Commission Subcommittee (Subcommittee) respectfully submits the following comments.

The Commission subcommittee has previously filed comments on this project with the Army Corps of Engineers, specifically commenting on the Joint Draft EIS/EIR prepared in November 2004 in a letter dated February 22, 2005. It is the subcommittee's understanding that the Minerals Management Service (MMS) is in possession of these comments and therefore rather than restate those comments in their entirety, the subcommittee wishes to submit them for your consideration by reference. However, the subcommittee would like to take this opportunity to reiterate some of the more global comments on the EIS that the subcommittee believes will have a defining impact on the adequacy of the final document.

The subcommittee's comments reflect a desire to see that a comprehensive analysis of the proposed project be completed by MMS that incorporates the following comments in order that a fair and reasoned decision based on the relative merits of the project can be made. This is essential for a project that is the first of its kind in the nation, where a clear picture of the associated impacts has to be established so that the issues can be sharply defined for all those with a stake, interest or regulatory role in the proposal. All participants in the environmental review need to be confident that the information gathered is clear, concise and verifiable so that the final decision on the project is supported by facts.

The subcommittee requested that the Army Corps of Engineers (ACOE) prepare a Supplemental DEIS for the Cape Wind project. The preparation of a DEIS by the MMS in essence provides an opportunity to respond to many of the comments raised by the subcommittee, cooperating agencies and the public during the comment period in lieu of a Supplemental DEIS.

As referenced in our February 22, 2005 letter, the subcommittee believes the following issues need to be addressed in the MMS DEIS:

1. The MMS DEIS should clearly articulate the "purpose and need" of the project and in particular ensure that it does not overly constrain the alternatives analysis to be presented. The DEIS/DEIR prepared by the ACOE (ACOE DEIS/DEIR) narrowly defined "utility-scale renewable energy" projects to a range between 200-1,500 MW. This range, developed by reviewing the nameplate capacity of fossil-fueled power facilities currently supplying the grid, is an order of magnitude greater than the range of renewable energy technologies in the region and effectively places the proposal outside of the class of renewable energy facilities. Employing this range effectively eliminates consideration of other forms of renewable energy from consideration as alternatives and, when used as a screening criteria, improperly narrows the range of alternatives that can be considered. Therefore, if a range is to be selected, it should be appropriate and in scale with renewable energy projects currently functioning as utilities and providing power to the grid.

2. It is unclear from the *Federal Register* whether the MMS intends to use screening criteria to narrow the list of alternatives analyzed in a manner similar to that employed by the ACOE in their DEIS/DEIR. If the MMS DEIS is to use this approach, the subcommittee recommends that any criteria be flexibly applied and take into account potential technological changes that may impact the feasibility of a particular region to accommodate renewable energy installations. For example, the ACOE DEIS/DEIR included a screening criteria that disqualified large areas of northern New England from consideration based upon a lack of excess capacity in the transmission system. While this may be a current constraint, it seems possible that upgrades to the transmission system could be completed that would remove this barrier and allow consideration of alternatives in locations other than southeastern Massachusetts.

3. The Federal Register NOI notes that the alternatives being considered will include a phased installation and alternative locations, South of Tuckernuck, Nantucket Shoals, Monomoy Shoals and a Deepwater Alternative east of Nauset Beach. The subcommittee is encouraged by the addition of the phased installation and deepwater alternatives to the analysis, as these are both essential to an understanding of the various costs associated with developing in the Outer Continental Shelf (OCS) and assist in an understanding of why Nantucket Sound was selected as a site for an offshore wind facility. The subcommittee also strongly recommends that additional variations be explored that would be

conducive to providing simple comparisons between project alternatives and allow a weighing of whether the proposed project is in the public interest and is the most appropriate way of reaching the state's important renewable energy goals. Alternatives that should be considered include:

a. Smaller facilities consisting of fewer turbines or smaller turbines at the same location. This could perhaps be explored as part of the phased alternative.
b. Alternative configurations should be considered, including:
    i. Relocating some rows to be further from shore. The ACOE DEIS/DEIR included reference to a British study (A guide to Best Practice in Seascape Assessment) that developed a methodology for assessing the visual impacts of changes to the seascape (including new wind turbine development). That study suggests that 15 kilometers (or approx 9.3 miles) would be the seaward extent beyond which structures in the ocean are of limited regional visual significance to views from shore. Using this information, the MMS should explore an alternative that places the turbines at least this distance from the shore to address the visual concerns raised by many individuals and organizations during the ACOE's comment period.
    ii. A more compact facility with tighter spacing between turbines. The Arklow Offshore facility in Ireland uses the same turbines as those proposed by Cape Wind, yet the Cape Wind proposal has turbines spaced twice as far apart. There has been no satisfactory answer as to why the turbines could not be located closer together, reducing the overall footprint of the project. Therefore, the relative merits of this change should be explored as an alternative design.
    iii. Use of a mix of turbine sizes. This could include using smaller turbines on the periphery of the array that may mitigate visual or avian impacts yet still be consistent with providing a utility scale project. In addition, it is possible that different sized turbines will have a different power curve (with different operating efficiencies and different thresholds for start up/shut down wind speeds). This variation in physical turbine characteristics may allow a more consistent power production that should be evaluated in the context of regional/local seasonal demand fluctuations A discussion of these alternative engineering arrangements would be instructive and support a final determination regarding the optimum design of the project from power supply and public interest perspective rather than the perspective of maximizing profit and return.

c. A distributed generation option that would consider several smaller wind farms, which seems feasible based on the recent proposal for three sites located in Buzzard's Bay, Massachusetts.

4. The subcommittee also notes that the land-based alternative included in the ACOE DEIS/DEIR has been removed from the list of potential alternatives. While the subcommittee understands that any land-based alternative, as well as any ocean alternative within state 3-mile jurisdiction, is outside the OCS jurisdiction of the MMS, if these alternatives are not analyzed the reviewing public has no means to weigh whether the use of the OCS is in the public interest or the least environmentally damaging. Therefore, the subcommittee urges the MMS to include both a land-based alternative and a near-shore alternative in the DEIS being prepared.

5. The subcommittee expressed a number of concerns about the analysis and methodology employed in the ACOE DEIS/DEIR that are briefly summarized below (more details are provided in the subcommittee letter dated (February 22, 2005):

   a. Incomplete - Flawed assumptions
   Some of the ACOE DEIS/DEIR's conclusions appeared to be based either on an incomplete or flawed analysis. The ACOE DEIS/DEIR did not reference all sources of information on a topic and the analysis presented appeared, on occasion, to be derived from a methodology that includes flawed assumptions and inappropriate comparisons.

   b. Lack of independent assessment – lack of transparency
   It was unclear from the text of the ACOE DEIS/DEIR whether independent analysis was undertaken to reach some of the conclusions presented. This was a particular concern when information that was provided by the Applicant and was relied upon as the primary source of information.

   c. Balance of conclusions
   In many sections of the ACOE DEIS/DEIR, conclusions regarding the expected benefits and detriments are not directly related to the proposed project. General statements were included that suggested benefits but the ACOE DEIS/DEIR failed to adequately link these to the specific project. Conversely, where potential detrimental impacts are identified, they appeared to be downplayed.

   d. Lack of quantitative information
   Some sections (particularly parts of the alternatives analysis) did not present enough quantitative information on the relative impacts of the facility under consideration. This prevented any meaningful comparison between the various alternatives.

   Therefore, the subcommittee recommends that in order to be consistent with the purpose of NEPA, the MMS must ensure that these issues are addressed in the DEIS. The subcommittee believes that a key objective of the DEIS should be to objectivity and transparently lay out the facts in a manner that is easily accessible

and can be relied upon with confidence by all decision makers as the project moves through the regulatory process.

6. The MMS DEIS should ensure that plans and data essential to a full understanding of the entire project be incorporated into the DEIS for comment, namely the Spill Prevention Control and Countermeasure Plan (SPCC), System Impact Study (SIS), Storm Water Pollution Prevention Plan (SWPPP) and an Operations and Maintenance Plan (O&M). Furthermore, no report has been presented on the data collected from the meteorological tower currently located in Nantucket Sound. This information would allow an accurate characterization of the climate conditions in the area in regard to wind speed, weather conditions and currents.

7. The MMS DEIS should provide a full and complete treatment of the cumulative impacts associated with the project. Throughout the ACOE DEIS/DEIR, the cumulative impact assessment is limited to similar types of energy and cable projects that have been permitted or are likely to occur in the vicinity of Cape Cod. While consideration of these activities is an appropriate exercise in cumulative impact analysis, the MMS DEIS must also address the additive impacts that will accrue over the project's anticipated lifespan. For example, the cumulative impacts resulting from the loss of avian species because of turbine strikes over the course of the project's operation should be evaluated.

8. The MMS DEIS should also outline appropriate mitigation to reduce or avoid all identified potential impacts. The mitigation proposed throughout the ACOE DEIS/DEIR often relates to the project design, such as the use of newer turbine technology with slower spinning rotors as mitigation for avian mortality and painting of structures to mitigate visual impacts. However, while these project design steps may reduce impacts associated with the project, no clear picture emerges whether they minimize impacts or if impacts may be avoidable. This incomplete picture of the possible mitigation could be remedied in part by a more thorough alternatives analysis that varies the project parameters as suggested earlier in this letter

9. The MMS DEIS should ensure that a decommissioning plan for removal of the turbines and related infrastructure be provided and that a funding mechanism for the decommissioning plan be discussed. The subcommittee understands that the MMS will be requiring that a decommissioning plan be provided and hope that it will include a discussion of what provisions are to be made for potential future changes in inflation and engineering costs associated with decommissioning, technological impediments to complete removal of the structures, and describe any risk that a shifting shoal will expose the remaining piles. In addition, the MMS DEIS should discuss other feasible decommissioning strategies and their impacts.

10. The subcommittee understands that the MMS will be requiring on-going monitoring of the project as part of their cradle-to-grave approach to management of the OCS. The subcommittee hopes that the DEIS clearly stipulates the extent of the monitoring that would be carried out throughout the lifetime of the project, including precautionary monitoring intended to identify incremental changes in the environment that could be precursors to or indicators of adverse impacts. Examples could include species composition in the vicinity of the piles, ongoing assessments of avian behaviors as they relate to the facility, bathymetric surveys of the shoal, etc.

11. The MMS DEIS should also provide detailed information regarding the potential environmental impacts associated with a catastrophic failure of the facility, such as in the event of a hurricane or seismic event. This should include details on the design specifications for all infrastructure and the engineering failure point of structures. The analysis should reference the frequency of hurricanes and seismic activity and establish the likelihood of failure. The contingencies for responding in the event of failure should also be discussed, including plans for reconstruction, recovery/salvage, spill clean-up and what financial arrangements have been made to cover these costs. Special attention should also be paid to assessing the impacts of any spill, including the potential environmental impacts and the direction and area likely to be affected.

As noted at the beginning, the subcommittee's letter dated February 22, 2005 provides a wide range of additional comments on specific topics that should be addressed in the MMS DEIS. It is our hope that the MMS will consider the comments here and those of the subcommittee's February 22, 2005 letter as the DEIS is drafted. Any questions on the points raised should be directed to Phil Dascombe, Planner at the Cape Cod Commission ((508) 362-3828). Thank you for the opportunity to comment,

Sincerely,

Elizabeth G. Taylor
Subcommittee Chair

cc:
Cape Cod Legislative Delegation
Assembly of Delegates
Barnstable County Commissioners
Barnstable Town Council, President
Cape Town's Boards of Selectmen
Martha's Vineyard Commission
Nantucket Planning & Economic Development Commission
Cape Cod Commission members
Mr. Jim Gordon, Cape Wind Associates
Ms. Anne Canaday, MEPA Unit, Exec. Office of Environmental Affairs

TOWN OF YARMOUTH

1146 ROUTE 28 SOUTH YARMOUTH MASSACHUSETTS 02664-4492
Telephone (508) 398-2231, Ext. 271, 270 — Fax (508) 398-2365

BOARD OF SELECTMEN

TOWN ADMINISTRATOR
Robert C. Lawton, Jr.

July 27, 2006

Dr. Rodney Clark
Minerals and Management Service
381 Elden Street
Mail Stop 4042
Herndon, VA 02164

Dear Dr. Clark:

The Town of Yarmouth would like to request that the Minerals and Management Service should include in the scope of work you are requiring of Cape Wind Associates include the following items:

- the standing of local affected communities in the permitting decision process
- the regulations that towns have in place with regard to protection of coastal resources
- potential economic impacts that the proposed project may have on important components of the local economy such as tourism, property values and commercial fishing opportunities
- near-shore and offshore construction impacts including truck traffic through communities, vessel traffic offshore, and airspace traffic such as helicopters carrying personnel and equipment to the construction site
- noise and visual impacts associated with project construction and operation
- water turbidity from disturbance of bottom sediments during project construction and operation
- potential for pollution of near-shore water and shellfishing beds from spills of petroleum or other hazardous materials associated with construction and operation of the facility
- public safety with regard to recreational and commercial boat traffic, as well as air traffic

In terms of land-based impacts for communities where infrastructure

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connections are contemplated, we would like to request:

- consideration of local zoning ordinances
- consideration of local conservation commission by-law requirements
- type and impact of infrastructure associated with construction and operation of the facility

We also believe it is appropriate to request that MMS include in their DEIS a thorough review of issues that have been raised in the past including:

- review of alternatives to Cape Wind including onshore projects and additional offshore sites than the three sites identified by MMS
- a broad statement of purpose and need so that solutions are not limited to the area in the immediate Nantucket Sound region
- public safety issues
- economic impacts and risks associated with the project
- complete cost/benefit analysis to be provided to the public for review

Thank you for your consideration of these comments.

Respectfully:

Robert C. Lawton Jr.
Town Administrator

MMS CONSULTATIONS AND PUBLIC NOTICES

List of Agency Consultation Letters and Public Notices	
Date	**Description**
Federal Agencies	
March 16, 2006	Letter from Mineral Management Service to US Army Corps of Engineers
March 16, 2006	Letter from Mineral Management Service to Department of Commerce
March 16, 2006	Letter from Mineral Management Service to US Environmental Protection Agency
March 16, 2006	Letter from Mineral Management Service to MA Executive Office of Environmental Affairs
March 16, 2006	Letter from Mineral Management Service to Cape Cod Commission
March 16, 2006	Letter from Mineral Management Service to US Coast Guard
March 16, 2006	Letter from Mineral Management Service to US Department of Energy
March 16, 2006	Letter from Mineral Management service to Federal Aviation Administration
March 16, 2006	Letter From Mineral Management Service to MA Historical Commission
May 30, 2006	Minerals Management Service Notice of Intent to prepare DEIS
Local Agencies	
February 23, 2007	Letter from Town and County of Nantucket to Mineral Management Service
February 27, 2007	Letter From Barnstable Airport Commission to Mineral Management Service
February 27, 2007	Letter from Town of Barnstable to Mineral Management Service
February 27, 2007	Letter from Town of Yarmouth to Mineral Management Service

United States Department of the Interior

MINERALS MANAGEMENT SERVICE
Washington, DC 20240

MAR 16 2006

Ms. Karen Adams
U.S. Army Corps of Engineers
New England District
696 Virginia Road
Concord, Massachusetts 01742-2751

Dear Ms. Adams:

The Energy Policy Act of 2005 (EPAct) provided the U.S. Department of the Interior, Minerals Management Service with regulatory authority over alternate energy-related uses on the Outer Continental Shelf. Presently, the MMS is the lead Agency reviewing the proposal by Cape Wind Associates for a wind turbine park on Nantucket Sound. After reviewing the Corps of Engineers' draft environmental impact statement (EIS), issued before the passage of the EPAct, MMS concluded that it must prepare its own draft EIS to address our broader authority granted under the EPAct.

As you may know, the Cape Wind project is proposed to be located on Horseshoe Shoals in Nantucket Sound, Massachusetts. The purpose of this project is to provide a utility-scale renewable energy facility providing power to the New England power grid. This wind turbine park is the first of its kind proposed in Federal waters.

In the spirit of Federal collaboration and the Council on Environmental Quality regulations at 40 CFR 1501.6, MMS requests that your Agency become a cooperating agency for the compilation of the Cape Wind draft EIS. We are specifically seeking your assistance in the review and development of information in matters related to Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act.

Please contact Dr. Rodney E. Cluck (381 Elden Street, MS 4042, Herndon, Virginia 20170) in writing by April 14, 2006, to confirm your status as a cooperating agency and to ask any questions you may have. Dr. Cluck's telephone number is (703) 787-1087. We look forward to your participation in the development of a more comprehensive draft EIS. With your assistance MMS will gain valuable insight that will be used to develop a more effective, environmentally sound and consistent process for alternate energy-related use of our Federal waters.

Sincerely,

Walter D. Cruickshank
Deputy Director

TAKE PRIDE IN AMERICA

United States Department of the Interior

MINERALS MANAGEMENT SERVICE
Washington, DC 20240

MAR 16 2006

Mr. Jack Terrill
U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Marine Fisheries Service – Northeast Region
One Blackburn Avenue
Gloucester, Massachusetts 01930-2298

Dear Mr. Terrill:

The Energy Policy Act of 2005 (EPAct) provided the U.S. Department of the Interior, Minerals Management Service with regulatory authority over alternate energy-related uses on the Outer Continental Shelf. Presently, the MMS is the lead Agency reviewing the proposal by Cape Wind Associates for a wind turbine park on Nantucket Sound. After reviewing the Corps of Engineers' draft environmental impact statement (EIS), issued before the passage of the EPAct, MMS concluded that it must prepare its own draft EIS to address our broader authority granted under the EPAct.

As you may know, the Cape Wind project is proposed to be located on Horseshoe Shoals in Nantucket Sound, Massachusetts. The purpose of this project is to provide a utility-scale renewable energy facility providing power to the New England power grid. This wind turbine park is the first of its kind proposed in Federal waters.

In the spirit of Federal collaboration and the Council on Environmental Quality regulations at 40 CFR 1501.6, MMS requests that your Agency become a cooperating agency for the compilation of the Cape Wind draft EIS. We are specifically seeking your assistance in the review and development of information in matters related to the mandates of the Magnuson Stevens Fishery Conservation and Management Act, Marine Mammal Protection Act, and the Endangered Species Act.

Please contact Dr. Rodney E. Cluck (381 Elden Street, MS 4042, Herndon, Virginia 20170) in writing by April 14, 2006, to confirm your status as a cooperating agency and to ask any questions you may have. Dr. Cluck's telephone number is (703) 787-1087. We look forward to your participation in the development of a more comprehensive draft EIS. With your assistance MMS will gain valuable insight that will be used to develop a more effective, environmentally sound and consistent process for alternate energy-related use of our Federal waters.

Sincerely,

Walter D. Cruickshank
Deputy Director

TAKE PRIDE IN AMERICA

United States Department of the Interior

MINERALS MANAGEMENT SERVICE
Washington, DC 20240

MAR 16 2006

Dr. Timothy Timmermann
U.S. Environmental Protection Agency
Region 1
1 Congress Street, Suite 1100
Boston, Massachusetts 02114-2023

Dear Dr. Timmermann:

The Energy Policy Act of 2005 (EPAct) provided the U.S. Department of the Interior, Minerals Management Service with regulatory authority over alternate energy-related uses on the Outer Continental Shelf. Presently, the MMS is the lead Agency reviewing the proposal by Cape Wind Associates for a wind turbine park on Nantucket Sound. After reviewing the Corps of Engineers' draft environmental impact statement (EIS), issued before the passage of the EPAct, MMS concluded that it must prepare its own draft EIS to address our broader authority granted under the EPAct.

As you may know, the Cape Wind project is proposed to be located on Horseshoe Shoals in Nantucket Sound, Massachusetts. The purpose of this project is to provide a utility-scale renewable energy facility providing power to the New England power grid. This wind turbine park is the first of its kind proposed in Federal waters.

In the spirit of Federal collaboration and the Council on Environmental Quality regulations at 40 CFR 1501.6, MMS requests that your Agency become a cooperating agency for the compilation of the Cape Wind draft EIS. We are specifically seeking your assistance in the review and development of information in matters related to Sections 309 and 176(c) (conformity analysis) of the Clean Air Act and Section 402 (NPDES) of the Clean Water Act.

Please contact Dr. Rodney E. Cluck (381 Elden Street, MS 4042, Herndon, Virginia 20170) in writing by April 14, 2006, to confirm your status as a cooperating agency and to ask any questions you may have. Dr. Cluck's telephone number is (703) 787-1087. We look forward to your participation in the development of a more comprehensive draft EIS. With your assistance MMS will gain valuable insight that will be used to develop a more effective, environmentally sound and consistent process for alternate energy-related use of our Federal waters.

Sincerely,

Walter D. Cruickshank
Deputy Director

TAKE PRIDE IN AMERICA

United States Department of the Interior

MINERALS MANAGEMENT SERVICE
Washington, DC 20240

MAR 16 2006

Ms. Anne Canaday
Massachusetts Executive Office of Environmental Affairs
100 Cambridge Street, Suite 900
Boston, Massachusetts 02114

Dear Ms. Canaday:

The Energy Policy Act of 2005 (EPAct) provided the U.S. Department of the Interior, Minerals Management Service with regulatory authority over alternate energy-related uses on the Outer Continental Shelf. Presently, the MMS is the lead Agency reviewing the proposal by Cape Wind Associates for a wind turbine park on Nantucket Sound. After reviewing the Corps of Engineers' draft environmental impact statement (EIS), issued before the passage of the EPAct, MMS concluded that it must prepare its own draft EIS to address our broader authority granted under the EPAct.

The MMS has sent letters to each appropriate Federal agency requesting that they become cooperating agencies with MMS to complete the new draft EIS. In order to complete the Environmental Impact Report (EIR), as required by 301 CMR 11.03(7)(b)(4), and the new draft EIS MMS requests that EOEA work with MMS as a joint preparer.

Please contact Dr. Rodney E. Cluck (381 Elden Street, MS 4042, Herndon, Virginia 20170) in writing by April 14, 2006, to confirm your acceptance as a joint preparer and to ask any questions you may have. Dr. Cluck's telephone number is (703) 787-1087. We look forward to your participation in the development of a more comprehensive draft EIS and EIR. With your assistance MMS will gain valuable insight that will be used to develop a more effective, environmentally sound and consistent process for alternate energy-related use of our Federal waters.

Sincerely,

Walter D. Cruickshank
Deputy Director

TAKE PRIDE IN AMERICA

United States Department of the Interior

MINERALS MANAGEMENT SERVICE
Washington, DC 20240

MAR 16 2006

Mr. Phil Dascomb
Cape Cod Commission
3225 Main Street
Barnestable, Massachusetts 02630-0226

Dear Mr. Dascomb:

The Energy Policy Act of 2005 (EPAct) provided the U.S. Department of the Interior, Minerals Management Service with regulatory authority over alternate energy-related uses on the Outer Continental Shelf. Presently, the MMS is the lead Agency reviewing the proposal by Cape Wind Associates for a wind turbine park on Nantucket Sound. After reviewing the Corps of Engineers' draft environmental impact statement (EIS), issued before the passage of the EPAct, MMS concluded that it must prepare its own draft EIS to address our broader authority granted under the EPAct.

The MMS has sent letters to each appropriate Federal agency requesting that they become cooperating agencies with MMS to complete the new draft EIS. In order to complete the Environmental Impact Report (EIR), as required by 301 CMR 11.03(7)(b)(4), and the new draft EIS MMS requests that the Cape Cod Commission work with MMS as a joint preparer.

Please contact Dr. Rodney E. Cluck (381 Elden Street, MS 4042, Herndon, Virginia 20170) in writing by April 14, 2006, to confirm your acceptance as a joint preparer and to ask any questions you may have. Dr. Cluck's telephone number is (703) 787-1087. We look forward to your participation in the development of a more comprehensive draft EIS and EIR. With your assistance MMS will gain valuable insight that will be used to develop a more effective, environmentally sound and consistent process for alternate energy-related use of our Federal waters.

Sincerely,

Walter D. Cruickshank
Deputy Director

TAKE PRIDE IN AMERICA

United States Department of the Interior

MINERALS MANAGEMENT SERVICE
Washington, DC 20240

MAR 16 2006

Commandant (G-PWN/RM 1409)
United States Coast Guard Headquarters
Attn: Mr. George Detweiler
2100 2nd Street, SW
Washington, D.C. 20593

Dear Mr. Detweiler:

The Energy Policy Act of 2005 (EPAct) provided the U.S. Department of the Interior, Minerals Management Service with regulatory authority over alternate energy-related uses on the Outer Continental Shelf. Presently, the MMS is the lead Agency reviewing the proposal by Cape Wind Associates for a wind turbine park on Nantucket Sound. After reviewing the Corps of Engineers' draft environmental impact statement (EIS), issued before the passage of the EPAct, MMS concluded that it must prepare its own draft EIS to address our broader authority granted under the EPAct.

As you may know, the Cape Wind project is proposed to be located on Horseshoe Shoals in Nantucket Sound, Massachusetts. The purpose of this project is to provide a utility-scale renewable energy facility providing power to the New England power grid. This wind turbine park is the first of its kind proposed in Federal waters.

In the spirit of Federal collaboration and the Council on Environmental Quality regulations at 40 CFR 1501.6, MMS requests that your Agency become a cooperating agency for the compilation of the Cape Wind draft EIS. We are specifically seeking your assistance in the review and development of information in matters related to marine safety, navigation and pollution.

Please contact Dr. Rodney E. Cluck (381 Elden Street, MS 4042, Herndon, Virginia 20170) in writing by April 14, 2006, to confirm your status as a cooperating agency and to ask any questions you may have. Dr. Cluck's telephone number is (703) 787-1087. We look forward to your participation in the development of a more comprehensive draft EIS. With your assistance MMS will gain valuable insight that will be used to develop a more effective, environmentally sound and consistent process for alternate energy-related use of our Federal waters.

Sincerely,

Walter D. Cruickshank
Deputy Director

TAKE PRIDE IN AMERICA

United States Department of the Interior

MINERALS MANAGEMENT SERVICE
Washington, DC 20240

MAR 16 2006

Mr. Al Benson
United States Department of Energy
Northeast Regional Office
John F. Kennedy Federal Building, Room 675
Boston, Massachusetts 02203-0002

Dear Mr. Benson:

The Energy Policy Act of 2005 (EPAct) provided the U.S. Department of the Interior, Minerals Management Service with regulatory authority over alternate energy-related uses on the Outer Continental Shelf. Presently, the MMS is the lead Agency reviewing the proposal by Cape Wind Associates for a wind turbine park on Nantucket Sound. After reviewing the Corps of Engineers' draft environmental impact statement (EIS), issued before the passage of the EPAct, MMS concluded that it must prepare its own draft EIS to address our broader authority granted under the EPAct.

As you may know, the Cape Wind project is proposed to be located on Horseshoe Shoals in Nantucket Sound, Massachusetts. The purpose of this project is to provide a utility-scale renewable energy facility providing power to the New England power grid. This wind turbine park is the first of its kind proposed in Federal waters.

In the spirit of Federal collaboration and the Council on Environmental Quality regulations at 40 CFR 1501.6, MMS requests that your Agency become a cooperating agency for the compilation of the Cape Wind draft EIS. We are specifically seeking your assistance in the review and development of information in matters related to design standards and guidelines.

Please contact Dr. Rodney E. Cluck (381 Elden Street, MS 4042, Herndon, Virginia 20170) in writing by April 14, 2006, to confirm your status as a cooperating agency and to ask any questions you may have. Dr. Cluck's telephone number is (703) 787-1087. We look forward to your participation in the development of a more comprehensive draft EIS. With your assistance MMS will gain valuable insight that will be used to develop a more effective, environmentally sound and consistent process for alternate energy-related use of our Federal waters.

Sincerely,

Walter D. Cruickshank
Deputy Director

TAKE PRIDE® IN AMERICA

United States Department of the Interior

MINERALS MANAGEMENT SERVICE
Washington, DC 20240

MAR 16 2006

Ms. Theresa Flieger
U.S. Federal Aviation Administration
New England Region
Air Traffic Division, ANE-520
12 New England Executive Park
Burlington, Massachusetts 01803

Dear Ms. Flieger:

The Energy Policy Act of 2005 (EPAct) provided the U.S. Department of the Interior, Minerals Management Service with regulatory authority over alternate energy-related uses on the Outer Continental Shelf. Presently, the MMS is the lead Agency reviewing the proposal by Cape Wind Associates for a wind turbine park on Nantucket Sound. After reviewing the Corps of Engineers' draft environmental impact statement (EIS), issued before the passage of the EPAct, MMS concluded that it must prepare its own draft EIS to address our broader authority granted under the EPAct.

As you may know, the Cape Wind project is proposed to be located on Horseshoe Shoals in Nantucket Sound, Massachusetts. The purpose of this project is to provide a utility-scale renewable energy facility providing power to the New England power grid. This wind turbine park is the first of its kind proposed in Federal waters.

In the spirit of Federal collaboration and the Council on Environmental Quality regulations at 40 CFR 1501.6, MMS requests that your Agency become a cooperating agency for the compilation of the Cape Wind draft EIS. We are specifically seeking your assistance in the review and development of information in matters related to Title 14, CFR Part 77, Objects Affecting Navigable Airspace.

Please contact Dr. Rodney E. Cluck (381 Elden Street, MS 4042, Herndon, Virginia 20170) in writing by April 14, 2006, to confirm your status as a cooperating agency and to ask any questions you may have. Dr. Cluck's telephone number is (703) 787-1087. We look forward to your participation in the development of a more comprehensive draft EIS. With your assistance MMS will gain valuable insight that will be used to develop a more effective, environmentally sound and consistent process for alternate energy-related use of our Federal waters.

Sincerely,

Walter D. Cruickshank
Deputy Director

TAKE PRIDE IN AMERICA

United States Department of the Interior

MINERALS MANAGEMENT SERVICE
Washington, DC 20240

MAR 16 2006

Massachusetts Historical Commission
The MA Archives Building
220 Morrissey Boulevard
Boston, Massachusetts 02125

Dear Sir or Madam:

The Energy Policy Act of 2005 (EPAct) provided the U.S. Department of the Interior, Minerals Management Service with regulatory authority over alternate energy-related uses on the Outer Continental Shelf. Presently, the MMS is the lead Agency reviewing the proposal by Cape Wind Associates for a wind turbine park on Nantucket Sound. After reviewing the Corps of Engineers' draft environmental impact statement (EIS), issued before the passage of the EPAct, MMS concluded that it must prepare its own draft EIS to address our broader authority granted under the EPAct.

The MMS has sent letters to each appropriate Federal agency requesting that they become cooperating agencies with MMS to complete the new draft EIS. As the lead state agency for historic and archaeological resources, we are seeking your assistance in the review and development of matters related to Section 106 of the National Historic Preservation Act of 1966.

Please contact Dr. Rodney E. Cluck (381 Elden Street, MS 4042, Herndon, Virginia 20170) in writing by April 14, 2006, to confirm your acceptance as a cooperating agency and to ask any questions you may have. Dr. Cluck's telephone number is (703) 787-1087. We look forward to your participation in the development of a more comprehensive draft EIS and Environmental Impact Report. With your assistance MMS will gain valuable insight that will be used to develop a more effective, environmentally sound and consistent process for alternate energy-related use of our Federal waters.

Sincerely,

Walter D. Cruickshank
Deputy Director

TAKE PRIDE IN AMERICA

Notice of Intent

Federal Register Notice/ Vol. 71, No. 103/ Tuesday, May 30, 2006/ Notice

DEPARTMENT OF THE INTERIOR

Minerals Management Service

Outer Continental Shelf, Headquarters, Cape Wind Offshore Wind Development 2007

AGENCY: Minerals Management Service, Interior.

ACTION: Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS), request for written scoping comments and invitation for participation by cooperating agencies.

SUMMARY: The MMS has received a request from Cape Wind Associates, LLC (CWA) for a lease, easement or right-of-way to construct and operate a wind park located in Federal waters 4.7 miles offshore Cape Cod, Massachusetts. The purpose of this project is to provide a utility-scale wind energy facility providing power to the New England power grid. By this document, the MMS announces: (1) Its intention to prepare an EIS; (2) commencement of a 45-day written scoping period under the National Environmental Policy Act (NEPA); and (3) invitation for participation by interested cooperating agencies.

DATES: Comments must be received no later than July 14, 2006 in envelopes labeled ''Comments on the Notice of Intent to Prepare an EIS for Proposed Cape Wind Project.'' Further instructions on submitting comments are contained in Section 3 of the **SUPPLEMENTARY INFORMATION** below.

FOR FURTHER INFORMATION CONTACT: Dr. Rodney E. Cluck, Project Coordinator, at (703) 787–1087 in MMS's Headquarters office regarding questions on the NOI.

SUPPLEMENTARY INFORMATION

1. Background

In November 2001, CWA filed a permit application with the U.S. Army Corps of Engineers (USACE), New England District, under section 10 of the Rivers and Harbors Act of 1899, in anticipation of constructing a wind park located on Horseshoe Shoal in Nantucket Sound, Massachusetts. The proposed wind park would consist of 130 offshore wind turbine generators arranged to maximize the park's maximum potential electric output of approximately 454 megawatts. The wind-generated electricity from each of the turbines would be transmitted via a 33 kilovolt submarine transmission cable system to a centrally located electric service platform. This platform would transform and transmit electric power to the Cape Cod mainland (12+ miles) via two 115 kilovolt lines, where it would ultimately connect with the existing power grid.

The Energy Policy Act of 2005 was enacted on August 8, 2005, giving the Department of the Interior authority for issuing leases, easements, or rights-of-way for alternative energy projects on the Outer Continental Shelf (OCS). Since its establishment in 1982, the DOI's Minerals Management Service (MMS) has been responsible for management of oil, natural gas, and other mineral resource activities on offshore Federal lands. With the new authority in the Energy Policy Act of 2005, the MMS will now also manage the alternative energy-related uses on Federal OCS lands, act as a lead agency for coordinating the permitting process with other Federal agencies, and monitor and regulate those facilities used for alternative energy production and energy support services. As such, the MMS must comply with NEPA when considering the CWA application.

In addition to the MMS' analysis under NEPA, the Massachusetts Environmental Policy Act (MEPA) will apply to the project's upland and submarine cable system components in Nantucket

Sound out to the 3-mile State/Federal boundary. In order to address all the environmental analyses in the most efficient manner, the State MEPA and Federal NEPA processes will run concurrently and be analyzed together, within the NEPA document.

General information on the MMS Renewable Energy and Alternate Use Program can be found at *http://www.mms.gov/offshore/RenewableEnergy/RenewableEnergyMain.htm*

2. Solicitation of Comments and Issues under this Notice of Intent

Pursuant to the regulations (40 CFR 1508.22) implementing the procedural provisions of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 *et seq.*), the MMS is announcing its intent to prepare an EIS for the CWA project. The EIS analysis will focus on the potential environmental effects of the development, operations and decommissioning on the proposed action area and alternatives. This NOI also serves to announce the initiation of the written scoping process for this EIS. The scoping process allows Federal, State, tribal, and local governments and other interested parties to aid the MMS in determining the significant issues, potential alternatives, and mitigating measures to be analyzed in the EIS and the possible need for additional information. The MMS is considering potential alternatives to the proposed action such as: modifying the size of the development, phasing the development, reconfiguring the development, and considering alternative sites. These and any additional alternatives developed through the scoping and analytical processes will be considered in the decision process. Alternatives to be considered in the EIS include:

- Proposed Action.
- Phased installations and operations of wind turbine generators.
- Alternative locations:

1. South of Tuckernuck Island.
2. Nantucket Shoals.
3. Monomoy Shoals.
4. Deepwater Alternative—East of Nauset Beach.

- No Action

3. Instructions on Notice of Intent

Federal, State, tribal, and local governments and other interested parties are requested to send their written comments on the scope of the EIS, significant issues that should be addressed, and potential alternatives and mitigating measures. Written comments will be accepted by mail or through the MMS Web site noted below. Comments are due no later than July 14, 2006.

Mailed comments should be enclosed in an envelope labeled, ''Comments on the Notice of Intent to Prepare an EIS on the Cape Wind Project.'' The MMS will also accept written comments submitted to our electronic public commenting system. This system can be accessed at *http://www.mms.gov/offshore/RenewableEnergy/Projects.htm.*

• Mail written comments to: Comments on the Notice of Intent to Prepare an EIS on the Cape Wind Project, Minerals Management Service, 381 Elden Street, Mail Stop 4042, Herndon, VA 20164.

Our practice is to make comments, including names and addresses of respondents, available for public review during regular business hours. Individual respondents may request that we withhold their address from the rulemaking record, which we will honor to the extent allowable by law. There also may be circumstances in which we would withhold a respondent's identity, as allowable by law. If you wish us to withhold your name and/or address, you must state this prominently at the beginning of your comment. However, we will not consider anonymous comments. We will make all submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, available for public inspection in their entirety.

4. Cooperating Agency

The Department of the Interior invites other Federal, State, tribal, and local governments to consider becoming cooperating agencies in the preparation of the EIS. We invite qualified government entities to inquire about cooperating agency status for the Cape Wind EIS. Under guidelines from the Council of Environmental Quality (CEQ), qualified agencies and governments are those with ''jurisdiction by law or special expertise.'' Potential cooperating agencies should consider their authority and capacity to assume the responsibilities of a cooperating agency and to remember that your role in the environmental analysis neither enlarges nor diminishes the final decision-making authority of any other agency involved in the NEPA process. Upon request, the MMS will provide potential cooperating agencies with a written summary of ground rules for cooperating agencies, including time schedules and critical action dates, milestones, responsibilities, scope and detail of cooperating agencies' contributions, and availability of pre-decisional information. You should also consider the ''Factors for Determining Cooperating Agency Status'' in Attachment 1 to CEQ's January 30, 2002, Memorandum for the Heads of Federal Agencies on Cooperating Agencies in Implementing the Procedural Requirements of the National Environmental Policy Act. A copy of this document is available at: *http://ceq.eh.doe.gov/nepa/regs/cooperating/cooperatingagenciesmemorandum.html* and *http://ceq.eh.doe.gov/nepa/regs/ cooperating/cooperatingagencymemofactors.html.*

The MMS, as the lead agency, will not be providing financial assistance to cooperating agencies. Even if your organization is not a cooperating agency, you will continue to have opportunities to provide information and comments to the MMS during the normal public input phases of the NEPA/EIS process. The MMS will also consult with tribal governments on a Government-to-Government basis. If you would like further information about cooperating agencies, please contact Dr. Rodney E. Cluck, the MMS's Cape Wind project manager at 703–787–1087.

Current Cooperating Agencies on the Cape Wind project EIS include:
United States Fish and Wildlife Service.
Cape Cod Commission.
United States Department of Energy.
United States Coast Guard.
United States Department of the Interior/Office of Environmental Policy and Compliance.
Wampanoag Tribe of Gay Head.
Federal Aviation Administration.
Massachusetts Coastal Zone Management.
Massachusetts Environmental Policy Act Office.
National Oceans and Atmospheric Association/National Marine Fisheries Service.
United States Environmental Protection Agency.
United States Army Corps of Engineers.

Dated: April 26, 2006.

Chad Calvert,

Acting Assistant Secretary—Land and Minerals Management.

[FR Doc. E6–8216 Filed 5–26–06; 8:45 am]

BILLING CODE 4310–MR–P

TOWN AND COUNTY OF NANTUCKET

16 Broad Street
Nantucket, Massachusetts 02554

Telephone (508) 228-7255
Facsimile (508) 228-7272
www.nantucket-ma.gov

February 23, 2007

Dr. Rodney Cluck
Cape Wind Project Manager
Minerals Management Services,
381 Elden Street, Mail Stop 4042
Herndon, Massachusetts 20164

RE: Proposed Wind Farm/Nantucket Sound

Dear Dr. Cluck:

The Town of Nantucket is pleased that the MMS considers the Town a stakeholder in the process of reviewing alternate wind energy sites off of the coast of Nantucket. At its meeting of February 14, 2007, the Board voted to request that the MMS include the Town in the regulatory process for its review of the sites and any other hearings or reviews on the matter. We appreciate your consideration.

Thank you.

Sincerely,

Whitey Willauer (JS)

Whitey Willauer
Chairman, Board of Selectmen

Pc: Congressman Delahunt

BARNSTABLE MUNICIPAL AIRPORT
BOARDMAN-POLANDO FIELD
480 BARNSTABLE ROAD, 2ND FLOOR
HYANNIS, MA 02601
www.town.barnstable.ma.us

Office: 508-775-2020
Fax: 508-775-0453

Quincy "Doc" Mosby, Airport Manager
Frank Sanchez, Asst. Airport Manager

Barnstable Municipal Airport Commission:

Arthur F. Kimber, Chairman

John T. Griffin, Jr., Vice Chairman

Robert L. O'Brien, Commissioner, Clerk

Donald E. Megathlin, Commissioner

Larry F. Wheatley, Commissioner

Michael A. Dunning, Commissioner

Daniel W. Santos, P.E. Commissioner

February 27, 2007

Dr. Rodney E. Cluck, Ph.D.
Environmental Sociologist and Cape Wind Project Manager
Department of the Interior
Minerals Management Service
381 Elden Street, Mail Stop 4042
Herndon, VA 20170

RE: Request for Cooperative Agency Status for the Barnstable Airport Commission.

Dear Dr. Cluck:

I am writing on behalf of the Barnstable Airport Commission to request cooperating agency status on the Cape Wind project review.

This request is made in response to the Minerals Management Service's (MMS) Notice of Intent to prepare an Environmental Impact Statement and Invitation for Participation by Cooperating Agencies. See 71 Fed. Reg. 30693 (May 30, 2006). In the notice, MMS invited local governments and other qualified parties to become cooperating agencies where appropriate and referenced a memo by the Council on

Environmental Quality (CEQ) memorandum outlining the Factors for Determining Cooperating Agency Status (CEQ Memorandum). The CEQ Memorandum sets forth several factors for determining whether cooperating agency status is appropriate and indicates that satisfying just one factor may be sufficient basis for granting cooperating agency status. The Barnstable Airport Commission satisfies all of the relevant factors as follows:

The Town of Barnstable has appointed the Barnstable Airport Commission (BAC). The BAC has a fiduciary responsibility to insure the safety of all of the regional commercial, private and passenger flights, which travel through the exact airspace of this proposed project. As the local Airport Commission responsible for the regional air traffic, which will travel through this exact airspace, it is imperative that the Barnstable Airport Commission be included as a stakeholder in the process.

This proposed wind plant has the potential to affect over 400,000 flights a year between the Barnstable, Nantucket and Martha's Vineyard Air Routes, and this issue

is of critical importance to the MMS review and the EIS. As a local governing body, the BAC has expertise regarding the proposed Cape Wind project's relationship to the critical objectives of safe flight operations, policies and controls. See CEQ memorandum factor 2.

The BAC understands what cooperating agency status means and can legally enter into an agreement to be a cooperating agency. See CEQ memorandum factor 3.

The Barnstable Airport Commission can participate during scoping and/or throughout the preparation of the analysis and documentation as necessary and meet milestones established for completing the process. See CEQ memorandum factor 4.

The BAC can, in a timely manner, aid in:

- Identifying significant navigational issues including aspects of the flight environment, potential hazards, economic effect on changed flight patterns, increased energy consumption and potential local Air Traffic Control issues.

- Eliminating minor issues from further study,

- Identifying issues previously the subject of appeal, review or study, and

- Identifying Cape Wind's relationship to the objectives of regional, state and local flight plans, policies and air traffic control operations.

See CEQ memorandum factor 5.

The BAC can provide resources such as subject matter expertise to support critical milestones. See CEQ Memorandum factor 7.

The BAC accepts that MMS has the final decision-making authority regarding the scope of the analysis, including authority to define the purpose and need for the proposed Cape Wind project. See CEQ memorandum factor 9.

The CEQ memorandum also recommends that lead agencies consider other relevant factors. As a local airport commission, the BAC has a clear interest in insuring that the review process is thorough and complete. The BAC can contribute to the project review on a large range of local flight issues. Further, the BAC can add to the discussion of alternatives, and the ways in which the Cape Wind project can be successfully sited. The BAC can provide expertise in a similar manner as the Cape Cod Commission and the Nantucket Planning and Economic Development Commission, both of which have already been granted cooperating agency status.

In brief, "qualified agencies and governments are those with jurisdiction by law or special expertise." 71 Fed. Reg. 30693 (May 30, 2006) (citing CEQ guidelines) (internal quotations omitted). The BAC has both, and clearly qualifies as a cooperating agency for the Cape Wind project review.

Moreover, in accordance with President Bush's Executive Order 13352 to Facilitate Cooperative Conservation, see 69 Fed. Reg. 52989 (Aug. 30, 2004), MMS should grant the Barnstable Airport Commission cooperative agency status in order to "properly accommodate [] local participation" in the federal review of the Cape Wind project.

We understand that a meeting of cooperating agencies is scheduled to be held on February 28, 2007. The BAC requests that MMS confirm its cooperating agency status so that a BAC representative may participate in that meeting in person or via conference call. Additionally, in accordance with the May 30, 2006 notice by MMS, we request a written summary of ground rules for cooperating agencies, including time schedules and critical action dates, milestones, responsibilities, scope and detail of cooperating agencies' contributions, and availability of pre-decisional information. We specifically request to see any and all changes filed with the FAA and submitted to MMS. See 71 Fed. Reg. 30693 (May 30, 2006) (stating that upon request MMS will provide a written summary of ground rules for cooperating agencies).

The Barnstable Airport Commission appreciates the invitation and encouragement to participate as a cooperating agency, and we look forward to working with MMS and the other cooperating agencies on this important matter.

Sincerely,

John Griffin, Vice Chairman
Barnstable Municipal Airport Commission

TOWN OF BARNSTABLE

OFFICE OF TOWN ATTORNEY
367 MAIN STREET
HYANNIS, MASSACHUSETTS 02601-3907

ROBERT D. SMITH, Town Attorney
T. DAVID HOUGHTON, 1st Assistant Town Attorney
CHARLES S. McLAUGHLIN, JR., Assistant Town Attorney
CLAIRE R. GRIFFEN, Paralegal/Legal Assistant
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Please Reply our File No.

#2002-0235

February 27, 2007

Rodney Cluck, Ph.D.
Cape Wind Project Manager
Minerals Management Service
381 Elden Street, MS 4042
Herndon, Va. 20170-4817

RE: Town of Barnstable Request for Designation as Cooperative Agency

Dear Doctor Cluck:

The Town of Barnstable, Massachusetts respectfully requests that it be endowed with cooperating agency status on the Cape Wind project review pursuant to Minerals Management Service's Notice of Intent to prepare an Environmental Impact Statement and Invitation for Participation by Cooperating Agencies dated May 30, 2006.

MMS invited qualifying parties to become cooperating agencies and referenced a memo by the Council on Environmental Quality memorandum (the memorandum) outlining the Factors for Determining Cooperating Agency Status. Barnstable meets many of the qualifying factors discussed in the memorandum as briefly outlined below.

1. Authority to approve.

The first factor discussed in the memorandum is the prospective cooperating agency's authority to approve all or at least a portion of the project. At this point in time, no formal applications have yet to be filed with the Town of Barnstable. However, without limiting the range of review and approval authority possessed by the Town, it seems reasonably clear at the very minimum that a filing for an Order of Conditions with the Town's Conservation Commission will be required both by the Commonwealth's Wetlands Protection Act (M.G.L.

The Town also has authority under some circumstances to approve the location of transmission facilities, pole locations, and related infrastructure pursuant to M.G.L. Chapter 166, Section 21, et seq. This specific statute also gives the Town of Barnstable the authority over the location of transmission facilities that might interfere with the public's use of public ways and with navigation over public waters within the municipal limits of the Town.

Additionally, the Town of Barnstable also has formal representation on the Cape Cod Commission, a county-wide authority created by the Massachusetts Legislature. The Commission is playing several vital and important roles not only as part of the MEPA review but also in its own capacity as the reviewing authority for a so-called "Development of Regional Impact".

2. Required Expertise

A second factor for consideration requires a sufficient level of expertise with respect to the Cape Wind project's relationship to the objectives of local land use plans, policies and controls.

The Town of Barnstable with a population now exceeding 50,000 year-round residents (and an estimated four times that many in the summer) is the largest municipality on Cape Cod. The Town derives much of its income from the tourist industry and the Cape Wind project is to be constructed less than four miles from Barnstable's shoreline. As well, the transmission lines will pass through the Town's navigable waters and vital commercial harbor that will likely be impacted by the project's extensive support activities and equipment.

The Town has available to it extensive multi-disciplinary expertise both within its professional employee base and, where necessary, via access to outside consultants. Barnstable has regularly been acknowledged as a leader in municipal matters on Cape Cod where it is the hub of the region's commercial activity. At both the state and national levels, Barnstable and its staff have won a number of awards including, most recently, a "AAA" municipal bond rating by Standard and Poor's, one of only eight towns in the Commonwealth to enjoy such recognition as an exceptionally well and competently run municipality.

Barnstable is fully prepared to lend its efforts to assure that the review process and the end product for this first-in-the-nation project is open, transparent, and everything that the public expects and indeed requires them to be.

3. Capacity and Understanding.

Barnstable fully understands the role of a cooperating agency status means and can legally enter into an agreement to be a cooperating agency.

4. Participation and Timely Contributions.

The Town has the professional and legal staff and is fully committed to participate and contribute in a timely manner to the analysis of this proposal either directly, via conference call, or by memorandum.

Whether the subject matter at hand involves regional, state and local land use plans, policies and controls, identifying significant environmental, maritime, navigational. historic, economic, or cultural issues, or requires the examination of the effects of the project on the business and residential community, Barnstable is both in the unique position to do so and has the budget and expertise to offer meaningful commentary on these subjects.

Barnstable recognizes the vital role that MMS fulfills in the regulatory scheme and the review process attached to the Cape Wind project. We believe that this municipality's input is critical to a full and comprehensive review of this application. And we urge the view that the town's expertise will be particularly helpful to MMS in defining both the scope of inquiry and the standards against which this application will be evaluated. Ultimately, the public whom we all represent should expect an outcome that reflects the very best substantive input available. Barnstable's participation can help assure that outcome and that confidence.

I would be grateful for MMS's confirmation of Barnstable's cooperating agency status so that Barnstable representatives may participate in upcoming meetings.

And finally, in accordance with the May 30, 2006 notice by MMS at 71 Fed. Reg. 30693, I respectfully request a written summary of ground rules for cooperating agencies, including time schedules and critical action dates, milestones, responsibilities, scope and detail of cooperating agencies' contributions, and availability of pre-decisional information.

We are grateful for your consideration and we look forward to working with you on this very important matter.

Respectfully,

Charles S. McLaughlin, Jr.

CC: John C. Klimm, Town Manager
Paul J. Niedziewiecki, Assistant Town Manager
Robert D. Smith, Town Attorney

TOWN OF YARMOUTH

1146 ROUTE 28 SOUTH YARMOUTH MASSACHUSETTS 02664-4492
Telephone (508) 398-2231, Ext. 271, 270 — Fax (508) 398-2365

BOARD OF SELECTMEN

TOWN ADMINISTRATOR
Robert C. Lawton, Jr.

February 27, 2007

Rodney Cluck, Ph.D.
Cape Wind Project Manager
381 Elden Street, MS 4042
Herndon, Va. 20170-4817

RE: Request for Cooperative Agency Status for the Town of Yarmouth.

Dear Dr. Cluck:

I am writing on behalf of the Town of Yarmouth (the Town) to request cooperating agency status on the Cape Wind project review.

This request is made in response to the Minerals Management Service's (MMS) Notice of Intent to prepare an Environmental Impact Statement and Invitation for Participation by Cooperating Agencies. *See* 71 Fed. Reg. 30693 (May 30, 2006). In the notice, MMS invited local governments to become cooperating agencies where appropriate and referenced a memo by the Council on Environmental Quality (CEQ) memorandum outlining the Factors for Determining Cooperating Agency Status (CEQ Memorandum). *Id.* The CEQ memorandum sets forth several factors for determining whether cooperating agency status is appropriate and indicates that satisfying just one factor may be sufficient basis for granting cooperating agency status. Yarmouth satisfies all of the relevant factors as follows:

> Yarmouth is responsible for issuing an Order of Conditions under both the MA Wetlands Protection Act and the Yarmouth wetlands bylaw, and potentially a permit from the town Department of Public Works and therefore has "authority to approve a proposal or a portion of a proposal." *See* CEQ memorandum factor 1.
>
> As a local governing body, the Town has expertise regarding the proposed Cape Wind project's relationship to the objectives of local land use plans, policies and controls. *See* CEQ memorandum factor 2.
>
> Yarmouth understands what cooperating agency status means and can legally enter into an agreement to be a cooperating agency. *See* CEQ memorandum factor 3.

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Yarmouth can participate during scoping and/or throughout the preparation of the analysis and documentation as necessary and meet milestones established for completing the process. *See* CEQ memorandum factor 4.

Yarmouth can, in a timely manner, aid in:

- identifying significant environmental issues including aspects of the human environment, natural, social, economic, energy, urban quality, historic and cultural issues,
- eliminating minor issues from further study,
- identifying issues previously the subject of environmental review or study, and
- identifying Cape Wind's relationship to the objectives of regional, state and local land use plans, policies and controls.

See CEQ memorandum factor 5.

Yarmouth can provide resources such as subject matter expertise to support critical milestones. *See* CEQ Memorandum factor 7.

Yarmouth accepts that MMS has the final decision-making authority regarding the scope of the analysis, including authority to define the purpose and need for the proposed Cape Wind project. *See* CEQ memorandum factor 9.

The CEQ memorandum also recommends that lead agencies consider other relevant factors. As a local government, Yarmouth has a clear interest in insuring that the review process is thorough and complete. The Town can contribute to the project review on a large range of local issues from planning and zoning, to water and land-based transportation issues, economic considerations that may be associated with the project, construction-related impacts and conveyance of electricity to the grid, near-shore environmental concerns, visual impacts, and historical preservation issues. Further, the town can add to the discussion of alternatives, and the ways in which the Cape Wind project can be successfully sited. Yarmouth can provide expertise in a similar manner as the Cape Cod Commission and the Nantucket Planning and Economic Development Commission, both of which have already been granted cooperating agency status.

In brief, "qualified agencies and governments are those with jurisdiction by law or special expertise." 71 Fed. Reg. 30693 (May 30, 2006) (citing CEQ guidelines) (internal quotations omitted). Yarmouth has both, and clearly qualifies as a cooperating agency for the Cape Wind project review.

Moreover, in accordance with President Bush's Executive Order 13352 to Facilitate Cooperative Conservation, *see* 69 Fed. Reg. 52989 (Aug. 30, 2004), MMS should grant

Yarmouth cooperative agency status in order to "properly accommodate[] local participation" in the federal review of the Cape Wind project.

We understand that a meeting of cooperating agencies is scheduled to be held on February 28, 2007. Yarmouth requests that MMS confirm its cooperating agency status so that Yarmouth representatives may participate in that meeting. Additionally, in accordance with the May 30, 2006 notice by MMS, we request a written summary of ground rules for cooperating agencies, including time schedules and critical action dates, milestones, responsibilities, scope and detail of cooperating agencies' contributions, and availability of pre-decisional information. *See* 71 Fed. Reg. 30693 (May 30, 2006) (stating that upon request MMS will provide a written summary of ground rules for cooperating agencies).

Yarmouth appreciates the invitation and encouragement to participate as a cooperating agency, and we look forward to working with MMS and the other cooperating agencies on this important matter.

Respectfully,

James K. Saben, Chairman
Board of Selectmen

COOPERATING AGENCY ACCEPTANCE LETTERS

U.S. Department of Homeland Security

United States Coast Guard

Commandant
United States Coast Guard

2100 2nd St., S.W.
Washington, DC 20593-0001
Phone: (202) 267-0574
Fax: (202) 267-4826
Email: gdetweiler@comdt.uscg.mil

16451

APR 24 2006

Rodney E. Cluck, Ph.D.
Cape Wind Project Manager
Department of the Interior
Minerals Management Service
381 Elden Street, Mail Stop 4042
Herndon VA 20170

Dear Dr. Cluck:

On behalf of the United States Coast Guard, I accept your March 16, 2006 request that the Coast Guard serve as a cooperating agency in the EIS process for the Cape Wind Associates proposal for Horseshoe Shoals in Nantucket Sound, Massachusetts. We are pleased that MMS has agreed that it will be the lead agency for all EIS processes on said applications.

I suggest the best course would be to reach a Memorandum of Agreement, in the form of a supplement to the 30 September 2004 MMS/USCG MOA. I will soon forward a draft of such an agreement for your consideration. We look forward to working with you on yet another joint MMS/USCG effort.

If you have any questions, please contact our POC, Mr. George Detweiler at 202-267-0574 or gdetweiler@comdt.uscg.mil.

Sincerely,

D. M. HOLLAND
Captain, U. S. Coast Guard
Acting Director of Waterways Management

Copy: CGD ONE (p)
CG LANTAREA (Am/Ao)

DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MASSACHUSETTS 01742-2751

REPLY TO:
ATTENTION OF:
CENAE-R-2004-338

April 13, 2006

Dr. Rodney E. Cluck
Minerals Management Service
Depart of the Interior
381 Elden Street, MS 4042
Herndon, VA 20170

Dear Dr. Cluck:

This is in response to the March 16, 2006 letter from Walter Cruickshank requesting that our agency become a cooperating agency for the Cape Wind Environmental Impact Statement (EIS). The Corps of Engineers New England District accepts the invitation to be a cooperating agency providing input and assistance regarding our regulatory program requirements under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, if applicable. We are currently reviewing a permit application for the proposed installation of the wind power facility which includes work within our Section 10 jurisdiction in Nantucket Sound.

Karen K. Adams, Chief, Permits & Enforcement Branch will continue as our project manager for review of the permit application and EIS coordination. She can be reached at 978-318-8828, or by email at Karen.k.adams@usace.army.mil.

Sincerely,

Christine A. Godfrey.
Chief, Regulatory Division

RULES PROCESSING TEAM

APR 2 1 2006

The Commonwealth of Massachusetts

William Francis Galvin, Secretary of the Commonwealth
Massachusetts Historical Commission

April 14, 2006

Walter D. Cruickshank
Deputy Director
Mineral Management Service
Washington, DC 20240

RE: Cape Wind Energy Project, Yarmouth, MA. MHC #RC.29785.

Dear Mr. Cruickshank:

Thank you for your letter of March 16, 2006, regarding the preparation of a Draft Environmental Impact Statement for the project referenced above. The MHC, the Office of the State Historic Preservation Officer, is a consulting agency in this review (see 36 CFR 800.3(c)). MHC looks forward to review of project information and consultation with the Mineral Management Service.

These comments are offered to assist in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (36 CFR 800). Please contact Ann Lattinville or Edward L. Bell of my staff if you have any questions.

Sincerely,

Brona Simon

Brona Simon
Deputy State Historic Preservation Officer
Acting Executive Director
Massachusetts Historical Commission

xc: ACHP

220 Morrissey Boulevard, Boston, Massachusetts 02125
(617) 727-8470 • Fax: (617) 727-5128
www.sec.state.ma.us/mhc

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
1 CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

OFFICE OF THE
REGIONAL ADMINISTRATOR

April 13, 2006

Dr. Rodney E. Cluck
Minerals Management Service
381 Elden Street, MS 4042
Herndon, Virginia 20170

Re: Request to serve as Cooperating Agency for the Cape Wind Daft Environmental Impact Statement

Dear Dr. Cluck:

This letter responds to your request for the Environmental Protection Agency (EPA) to participate as a cooperating agency during the preparation of an Draft Environmental Impact Statement (DEIS) for the proposed Cape Wind project proposed in Nantucket Sound.

EPA intends to work as a cooperating agency within the limit of our resources to help define the scope of analysis, identify sources of information and to offer input on how specific issues should be addressed in the DEIS. We note your interest in our assistance reviewing information related to Sections 309 and 176(c) of the Clean Air Act and Section 402 of the Clean Water Act.

If you have any questions about this letter or EPA's involvement in the EIS process, please contact Timothy Timmermann at 617-918-1025.

Sincerely,

Robert W. Varney
Regional Administrator

CAPE COD COMMISSION

3225 MAIN STREET
P.O. BOX 226
BARNSTABLE, MA 02630
(508) 362-3828
FAX (508) 362-3136
E-mail: frontdesk@capecodcommission.org

March 27, 2006

Dr. Rodney E. Cluck
United States Department of the Interior
Mineral Management Service
381 Elden Street, MS 4042
Herndon, Virginia, 20170

RE: Cape Wind Environmental Impact Statement preparation

Dear Dr. Cluck:

We have received a letter from Mr. Walter D. Cruickshank dated March 16, 2006 requesting that the Cape Cod Commission work with the Minerals Management Service (MMS) as a joint preparer of the Environmental Impact Statement (EIS) for the proposed Cape Wind project in Nantucket Sound. I understand that the intent of the request is to establish a cooperative relationship with the Cape Cod Commission (Commission) in order to receive feedback and comment on the draft document as it is prepared by the MMS. This relationship would be similar to the role played by the Commission in the cooperating agency process established by the Army Corps of Engineers for the preparation of the previous Cape Wind EIS. On behalf of the Cape Cod Commission, I'd like to accept this offer to work in this collaborative manner and hope that we are able to provide the MMS with feedback that allows issues of regional importance to be incorporated into the EIS document.

As you may know, the Cape Cod Commission has a regulatory role to play in the review of the Cape Wind project and therefore I wish to clarify that I believe it would be inappropriate for us to prepare portions of the EIS that we will be commenting on through our regulatory process at a later date. However, we welcome the opportunity to work cooperatively with the MMS and to coordinate our review process with MMS's so that issues relevant to our review are incorporated into the Draft EIS.

Please direct all correspondence and communications to Phil Dascombe at (508) 362-3828 (pdascombe@capecodcommission.org), who is coordinating the Commission's review of the Cape Wind project.

Sincerely,

Margo Fenn
Executive Director