

U.S. ARMY CORPS OF ENGINEERS

NEW ENGLAND DIVISION

PUBLIC SCOPING SESSION held at the Mattacheese
Middle School, 400 Higgins Crowell Road, West
Yarmouth, Massachusetts on Thursday, March 7, 2002,
commencing at 5:30 p.m. concerning:

WIND FARM PROPOSAL
ENVIRONMENTAL IMPACT STATEMENT

BEFORE:

Larry Rosenberg, as Moderator
Christine Godfrey, Chief, Regulatory Branch
Susan Holtham, EIS Project Advisor

MARIANNE KUSA-RYLL, RMR
JUSTICE HILL REPORTING
252 JUSTICE HILL ROAD, P.O. BOX 610
STERLING, MASSACHUSETTS 01564-0610
TELEPHONE: (978) 422-8777 FAX (978) 422-7799

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P R O C E E D I N G S

MODERATOR ROSENBERG: Good evening.

Thank you. Good evening and welcome to this National Environmental Policy Act public scoping session for the Environmental Impact Statement that will lead to a decision by the federal government on a permit application submitted by Cape Wind Associates for their proposal to build a wind farm power generation field in Nantucket Sound, Massachusetts.

My name is Larry Rosenberg, and I'm the Chief of Public Affairs for the Army Corps of Engineers in New England, and I'm going to be your moderator and facilitator this evening.

Before we begin, I would like to thank you for getting involved in this environmental review process. You see, we're here tonight to listen to your comments, to understand your concerns, and to provide you an opportunity to appear on the record should you care to do so. This forum is yours.

Our Scoping Officer tonight is Mrs. Christine Godfrey, the Chief of the Corps of

Engineers Regulatory Division.

Should you need copies of the public notice or the scoping procedures that we will be using tonight, or any other pertinent information, it is available at the registration table.

The agenda for this scoping session is, following this introduction, Mrs. Godfrey will address the session. She will be followed by the Corps' Environmental Impact Statement Project Advisor, Mrs. Susan Holtham, who will discuss both the Environmental Impact Statement and the National -- the National Environmental Policy Act, NEPA.

Following that short presentation, we will begin receiving your comments according to our protocols. Please feel free to bring up any and all topics that you feel need to be discussed on the record. I assure you that all your comments will be addressed during this environmental review process.

For your convenience, a stenographer is also available outside in the hallway, should you wish to dictate a statement for the record rather than make a formal presentation. And there is no time limit on those statements.

It is very important that you know that no decision has been made by the United States Army Corps of Engineers regarding the proposed wind farm.

Furthermore, the Corps is not here to defend any aspect of the proposed activity. We are here to listen to what's on your mind concerning this proposed activity.

You should also note that before any decision is made, we must take into consideration both the environmental concerns, and the issues that are of concern to you.

You know, as a direct result of having these types of open processes, we have been able to overcome many of the other difficulties other agencies face during the public interest review period.

Now, although we are here tonight to listen to your thoughts regarding this proposed activity, we also need your input throughout the entire process, not just this evening. Your involvement is not only requested. Your involvement is necessary, especially those of you who feel impacted by this project. We need your assistance in this environmental review process.

Before we begin, I would like to remind you the importance of filling out these blue cards that were available at the door. These cards kind of fill two purposes: First, they let us know that you are interested in the Environmental Impact Statement process, and we can keep you informed.

Secondly, they provide me a list of those who wish to speak tonight. If you did not complete a card, but wish to receive future information regarding the EIS, or speak here tonight, please do so at the registration desk.

One additional comment. We are here to receive your comments, not to enter into any discussion on those comments or to reach any conclusions. Any questions you have, please direct them to the record and not so much to the individuals up here tonight who listen to you. Thank you very much.

Ladies and gentlemen, Mrs. Godfrey.

MRS. GODFREY: Thank you, Larry.

Okay. I would like to welcome you today to this public scoping session that begins the federal environmental review process that will lead to a decision by the Corps of Engineers on a permit

application submitted by Cape Wind Associates for their proposal to build a wind farm power generation field in Nantucket Sound, Massachusetts.

I would also would like to thank you for involving yourself in this environmental review process.

I am Christine Godfrey, Chief of the Regulatory Division of the New England District of the US Army Corps of Engineers. My job is to oversee environmental permitting for the six New England states. Our headquarters is located in Concord, Massachusetts.

We have several other Corps of Engineers representatives here tonight including: Sue Holtham, who is assisting us in managing the EIS process; Mr. Brian Valiton, our permit project manager; Ms. Karen Adams, chief of permits and enforcement for Massachusetts; and Richard Santino, from our office of counsel.

Tonight's scoping meeting is being conducted as part of a federal National Environmental Policy Act requirement, and the Corp of Engineers Regulatory responsibilities is to seek out public comments regarding the scoping content of

the Environmental Impact Statement, which we will be preparing.

Our authorities are statutory and include: Section 10 of the Rivers and Harbors Act, and the National Environmental Policy Act referred to as NEPA.

I would like to briefly review our responsibilities under these two acts:

First, the Corps of Engineers received a permit application from Cape Wind Associates in late November for a Section 10 Individual Permit for the installation and operation of 170 offshore wind turbine generators in federal and state waters off the coast of Massachusetts in Horseshoe Shoals in Nantucket Sound.

This application has been more fully described in the Corps of Engineers Federal Register announcement, dated January 30, 2002, and in our public notice dated January 29, 2002, copies of which are available here today in the back of the room.

Our regulatory authority for this permit application derives from Section 10 of the Rivers and Harbors Act, which authorizes the Corps to

regulate structures and work in navigable waters of the US.

As part of our regulatory responsibilities, a number of other federal laws apply, including the National Environmental Policy Act (NEPA). Under NEPA, federal agencies must insure that environmental information is available to itself and to the public before it makes a decision.

For every permit application, the Corps must decide if an environmental assessment, or a full Environmental Impact Statement, is necessary to comply with NEPA.

After a detailed analysis of this application was completed in December of 2001, our District Engineer, Colonel Brian Osterndorf determined that a full EIS would be required for this project.

NEPA requires that we have an early and open process for determining the scope of issues to be addressed in the EIS. This process is called scoping.

These two formal scoping meetings, yesterday in Boston and tonight, are being held as

part of the scoping process that will continue throughout the development of the Environmental Impact Statement.

However, in order to insure all relevant comments are included in the EIS outline that we will be developing subsequent to this meeting, I'm requesting your comments be submitted to me in the next 30 days.

Our goals for the scoping process are threefold: First, to identify the affected public and agency concerns, that is your concerns;

Second, to define the issues and alternatives that we should examine in the EIS; and

Third, to facilitate identification of relevant issues early so we can avoid backtracking later.

It's very important for you to understand that the decision on the content of the EIS, much less the permit decision has not been made. These meetings, and any subsequent meetings that we hold, or input that you offer, will be used to help us determine what to evaluate in the Environmental Impact Statement.

So we need your help to do this. Toward

that end, information on issues on resources, on sites, on alternatives, on available studies, data, maps, and so forth would be very helpful to us in preparing the Environmental Impact Statement.

This is not the time to be debating the merits of the proposal. There will be ample opportunity to give those comments later, once the Draft Environmental Impact Statement is prepared and released for public review and comment. We will have additional public hearings at that time.

So what we hope to achieve as we move through the scoping process by hearing from you and meeting with state and federal agencies, is a road map for a good solid EIS that evaluates all the issues - technical issues, environmental, economic and social, and describes a good range of alternatives and displays impacts to the proposal in away that is useful for agencies and citizens.

In addition to the federal EIS, the Massachusetts Executive Office on Environmental Affairs (EOEA) will be preparing an Environmental Impact Report under the Massachusetts Environmental Policy Act.

As the EIS and EIR will study similar

issues and follow a similar process, we have decided to prepare a joint EIS/EIR. The Corps of Engineers and the MEPA office are strongly committed to this joint process as a way to avoid duplication and confusion and by conducting a coordinated and comprehensive review of this proposal.

At this time, I would like to present Sue Holtham, who will explain to you in a little more detail the National Environmental Policy Act and what we do in preparing the EIS.

Thank you.

MRS. HOLTHAM: Thank you, Chris.

And good evening to everybody. Thank you for being here this evening. We are going to close some lights so that we can see the screen up on the stage.

Again, my name is Sue Holtham. I am with the New England District Corps of Engineers, and I am assisting our Regulatory Division regarding the NEPA requirements in the Environmental Impact Statement on this proposed project.

First off, I would like us to start off with what is an Environmental Impact Statement?

Shown here is that portion of the

National Environmental Policy Act, that Chris mentioned is better known as NEPA, which provides the basis for federal agencies to prepare EISes. As you read through this section of the Act, it notes the requirements of federal agencies to prepare statements for major federal actions that significantly affect the human environment, and, that the statements shall identify, analyze and document the effects and issues associated with the proposed action, as well as reasonable alternatives.

Therefore, an EIS identifies and evaluates potential environmental impacts and ensures that the public and agencies are involved in the process before any decisions are made.

I would also like to note, and as Chris stated, that we are working closely with the state MEPA office and have a joint process during the development of the EIS. And we have a representative here this evening, Mr. Arthur Pugsley from the MEPA office, if there are any questions you would like to ask of him this evening.

Shown here are some specific elements of the EIS process, and I'll just quickly go down this list.

First off, it's a decision-making tool. It helps the agency to gather all the public comments and to ultimately make a decision on the proposed project. It provides full public disclosure throughout the entire process and involves the public. It integrates all environmental requirements, and I will get back to that fully in a minute. It documents the existing conditions, all the baseline conditions on the environmental and socioeconomic side and evaluates alternatives. It documents and analyzes impacts, and it finally identifies a preferred course of action.

Going back to the fourth bullet on the slide, which talks about integrating all the environmental requirements, this basically means that the requirements of other environmental and applicable laws and regulations are also evaluated and included in the EIS.

For example, the requirements of the Endangered Species Act and the National Historic Preservation Act must be evaluated and documented.

So, what does this document look like? Shown here on this slide is a standard outline for

an EIS.

As you can see, the document in essence tells the story of why the project is being proposed. There is a description of the project, its purpose and need, alternatives, a description of the affected environment, then the outlay of impacts to environmental and socioeconomic resources. Extensive data and analyses are included in the appendices to the document.

The alternatives section of an EIS has been termed "The heart of the EIS." This chapter evaluates all reasonable alternatives, as well as those alternatives eliminated from detailed study, as well as the No Action alternative, which is the requirement of NEPA.

At this point, at this early stage of the process, we foresee that the following alternatives will be included in the EIS:

The No Action alternative, which I just mentioned;

Alternative wind park locations,
including onshore and offshore locations;

Alternative project capacities;

Alternative renewable forms of energy;

Submarine cable route alternatives;
Alternative landfill and overland cable
route locations;

And alternative connections to an NSTAR
transmission line.

Finally, shown here are the five major
milestones in the development of a EIS.

First is scoping and why we are all here
tonight kicking off the process. As we stated a
couple of times tonight, this process, the scoping
process, helps us determine a range of issues that
need to be evaluated in the document.

Again, I would like to point out that
although we are asking for comments over the next
30 days, scoping continues throughout the
development of the EIS, and we will accept comments
at any time.

After the technical analyses and
alternative evaluations are completed, a draft EIS
is released for public review and comment. The
availability of the document is published in the
federal register, as well as in public notices and
news releases.

Then there is a 45-day review period,

which is a review period that is stated in the MEPA regulations. Within the 45-day review period, a public meeting is held to hear comments on the document. Then a final EIS is prepared, which takes into consideration all comments received during the public review.

The final EIS is released for a 30-day comment period; and at the conclusion of that time frame, a Record of Decision is prepared, which outlays the findings and conclusions of the EIS and the Corps' decision on the permit.

I notice there is this slide, it is probably a little hard to see from the back, but what we wanted to show was this early schematic of a time frame that shows the NEPA process, and the permit process tracking along together and the major points in that.

If anybody would like a copy of it, we have copies available for you. The arrow way over on the left, the green arrow, shows where we are at right now, the start of the scoping process. And it shows the issuance of a Draft EIS, and then the final EIS, integrating with the regulatory permitting process.

And I would like to end with this, with this statement: The steps built into the NEPA and EIS process allow for the public to be involved and informed throughout the process, and we will ensure you that you will be fully informed as we undergo the preparation of this EIS.

Thank you very much.

MODERATOR ROSENBERG: Thank you.

Ladies and gentlemen, it is crucial to this public process that your voice is heard, and we are here to listen. We are here to listen to your comments, to understand your concerns, and to provide you an opportunity to put your thoughts on the record should you care to do so.

You should be aware that any -- that subsequent to any decisions made by the Army Corps of Engineers, we conduct this broad-based public review. As a direct result of our decision to require an Environmental Impact Statement, this scoping is part of that public interest review.

All factors effecting the public will be included in the EIS and in our evaluation. Your comments will help us define the scope.

Furthermore, in order to make any

decisions regarding this permit application -- we, the Corps of Engineers, as I said before, need to have you involve yourself in this process, not just tonight, but throughout the entire process.

This scoping will be conducted this evening in a manner so that all who desire to express their views will be given an opportunity to speak. To preserve the right of all to express their views, I ask that there be no interruptions.

When you came in, copies of the public notice and the procedures to be followed at this meeting were available. If you did not receive these at the registration desk, they are available.

I will not read the procedures or the public notice, but they will be entered into the record.

A transcript of this meeting will be prepared, and that record will remain open throughout the entire preparation of the Environmental Impact Statement. All comments, by the way, receive equal consideration, those heard tonight and those in writing. Anyone who cannot attend but wishes to send written comments should forward those to the United States Army Corps of

Engineers headquarters in Concord, Massachusetts.

Lastly, I would like to emphasize again that the Corps of Engineers has made no decision regarding this permit. It is our responsibility to evaluate both the environmental and socioeconomic impacts prior to any decision. And in order to accomplish that, we need your input.

I will now dispense with the reading of the public notice of this scoping and have it entered into the record, please.

* * *

PUBLIC SCOPING MEETINGS
ON WIND FARM PROJECT EIS

The New England District, Corps of Engineers, will hold public scoping meetings in Boston (March 6) and on Cape Cod (March 7) on an Environmental Impact Statement (EIS) being prepared in response to an application from Cape Wind Associates, LLC for a Section 10/404 Individual Permit. The application is for the installation and operation of 170 offshore Wind Turbine Generators

(WTGs) in federal waters off the coast of Massachusetts on Horseshoe Shoals in Nantucket Sound, with the transmission lines going through Massachusetts state waters. The scoping meetings are for the purpose of having interested agencies and the public provide input on defining the issues that will be evaluated in the EIS. The applicant's stated purpose of the project is to generate up to 420 MW of renewable energy that will be distributed to the New England regional power grid, including Cape Cod and the islands of Martha's Vineyard and Nantucket. The power will be transmitted to shore via a submarine cable system consisting of two 115kV lines to a landfall site in Yarmouth, Massachusetts. The submarine cable system will then interconnect with an underground overland cable system, where it will interconnect with an existing NSTAR 115kV electric transmission line for distribution.

The proposed wind turbine array would occupy approximately 28 square miles in an area of Nantucket Sound known as Horseshoe Shoals between Nantucket Island and the Cape Cod mainland. The northernmost turbines would be approximately 4.1 miles from the nearest land mass (Point Gammon),

the southeastern most turbines would be approximately 11 miles from Nantucket, and the westernmost turbines will be approximately 5.5 miles from Martha's Vineyard. The estimated construction start date for the proposed project is 2004, with commercial operation starting in 2005.

Alternatives to be addressed in the EIS will include: The no action alternative; alternative wind park locations, including offshore vs. upland; submarine cable route alternatives; alternative landfall and overland cable route locations, and alternative connections to an NSTAR transmission line.

Significant issues to be analyzed in depth in the EIS will include impacts associated with construction, operation, maintenance and decommissioning of the wind turbines on the following resources: Recreational and commercial boating and fishing activities, endangered marine mammals and reptiles, birds, aviation, benthic habitat, aesthetics, cultural resources, radio and television frequencies, ocean currents, and land resources.

The public scoping meetings will be held

on Wednesday, March 6, 2002 starting at 1:30 p.m. (registration to begin at noon) at the JFK Federal Building, 55 New Sudbury St., Conference Room C, Boston, Massachusetts, and on Thursday, March 7, 2002 starting at 6:30 p.m. (registration to begin at 5:30 p.m.) at the Mattacheese Middle School, 400 Higgins Crowell Rd., West Yarmouth, Massachusetts. All interested federal, state and local agencies, affected Indian tribes, interested private and public organizations, and individuals are invited to attend these scoping meetings.

The Draft EIS is anticipated to be available for public review in the summer of 2003.

If there are any additional questions, please contact Mr. Brian Valiton of my staff at 978-318-8166 or at a toll free # 1-800-362-4367 if calling from within Massachusetts.

Karen Kirk Adams

Chief, Permits & Enforcement Branch

Regulatory Division

* * *

MODERATOR ROSENBERG: As I said, a

transcript of this scoping session is being made to assure a detailed review of all comments. A copy of this transcript will be available at our Concord, Massachusetts headquarters for your review. It will also be on our website for you to do with it what you may, or you may make arrangements with the stenographer to purchase a copy at your expense.

When making a statement, please come forward to either of the microphones, state your name and the interest you represent; and as there are many here tonight that wish to provide comments, we will be limiting that comment to four minutes. No more.

For your convenience, a stenographer is also available outside in the hall, and should you wish to dictate a longer statement, or any kind of statement for the record, please do so outside.

The traffic signal in front of you will indicate the following: The green light when comes on it will indicate that there are two minutes remaining; the amber light will indicate that there is one minute left; and the red light, of course, means that the time has expired.

Please identify who you are speaking

for, or representing a position of an organization.
If you speak as an individual, please say so.

I want to emphasize once again that all
who wish to speak will have an opportunity to do so,
and we will be here as long as you do.

Once again, there is a stenographer
outside, detailed statements, as long as you like.

We will now receive your comments
according to those hearing protocols that are also
available. Again, a four-minute limitation.

Before we start, I would like to
acknowledge Susan Bowes, who works for
Representative Ruth Provost, who is here this
evening. Thank you for coming.

And I got a call from my office a little
earlier that Mark Forest will be here a little
later, if he didn't already arrive.

Our first speaker will be Doctor Alan
Donheiser, and he will be followed by John
MacMullan.

ALAN DONHEISER: Good evening.

I am a resident of Cotuit. I am a
member of IEEE. I am an economist, an expert
witness in federal policy issues, including long

distance transmission power, solar energy, utility industry antitrust litigation.

I have a statement which I have already provided and will read it in any event.

Why investigate economics? Stakes of inestimable value rest on the long-term viability of the proposed wind farm at the Horseshoe Shoals. The specter of the financially unsuccessful project hangs over this proposal. The risk to the Cape stemming from potential abandonment of many massive windmills in proposed locations is a subject worthy of detailed study. Wind energy does not yet have a strong financial track record and leans heavily on tax breaks for the stockholders and subsidies from traditional utilities. Notwithstanding the private nature of the financing of the project, a pro forma understanding of the underlying economics would allow a better understanding of the risk the Cape faces in respect to possible stranded windmills at the Shoal. At present, the proposal is no more than an idea and hardly presents itself as a viable system.

A proposed study approach. To evaluate the proposal, the Corps should be prepared to

examine both the investment requirements and the electrical market factors in considerable detail. Because energy demand is subject to many influences: seasonal, peak, cost, availability is essential that this plethora of factors be quantified and modeled.

On the proposal's supply side, myriad cost-of-production and integration assumptions should be examined. Similarly, capital factors, that is debt/equity combinations, interest sinking fund requirements and source of uses of funds needs to be identified and plugged into the model as well.

Study method. A substantial quantitative inquiry should be undertaken to understand how changes in each input factor will effect pro forma, or bottom-line results. Call this a parametric study designed to test project viability thereby providing everyone with a concrete risk assessment. To accomplish this, a thorough inventory of all variable market and system factors must be made along with the development of a quantitative industry model. This proposed approach would draw on utility systems engineers, econometricians, and industry experts. This effort will test the project's key operating theories and

validate the review claims of the project's sponsors.

Thank you very much.

MODERATOR ROSENBERG: Thank you, sir.

The next speaker John MacMullan, followed by Peter Hirst.

JOHN MacMULLAN: My name is John MacMullan, and I'm here as a citizen, and I reside in Chatham, Mass.

And I just -- I -- I have read a lot of the literature that is available tonight already, and a lot of the concerns on fossil fuels and nuclear energy and oil dependence and costs, et cetera, are all included in there already.

I just want to speak for the proposal being afforded due process, judged on the facts and factual data, and its merits, and say that in my opinion, it probably represents an opportunity to -- for a legacy for future generations of a much improved energy source of electricity.

Thank you.

MODERATOR ROSENBERG: Thank you, sir.

The next speaker, Peter Hirst, followed by Bob Mahoney.

PETER HIRST: Thank you. My name is Peter Hirst. I am a lawyer from Orleans. I also practice law out of Washington, my office in Washington, D.C., where I have been in the energy and natural resources environmental practice for some 20 years.

Some, who have already expressed opposition to this project, have done so on the basis of its impacts on tourism, fishing, navigation, wildlife, and especially on the view of the Sound from our South Shore and the islands.

My purpose here is to discuss some of the local benefits that have been associated with the project and to ask something of all factions, but particularly -- particularly the Corps, and that is to take into consideration those benefits, if they can be proven to be a result of this project, particularly in three areas that have received a lot of publicity in our local press in recent days.

First, affect on our dependence on foreign oil, which has become not just an economic issue, but a security and patriotic issue as well.

Second, potential of displacement of the polluting fossil fuels.

And, third, possible reductions in the price we pay for electricity.

First, on the question of foreign oil, one recent comment in one of the local papers asserted that 80 percent of our consumption of electricity on the Cape and islands comes from burning oil. As of last year, according to NSTAR's figures, that number was actually 19 percent and dropping. If you look at New England overall, the answer is much the same, only even a little bit better. In New England, oil only accounts for 14 percent of our electricity production, and that number is dropping overall. So now when the board hears this testimony, as I'm sure it will, about the potential for this project displacing foreign oil, it needs to look very, very carefully at the statistics and the data being presented to it, because my fear is that issue is much overblown, and the question -- and the question remains as to whether a project even of this size can even begin to address that issue.

Second, with respect to the displacement of fossil fuels, many commentators talk about replacing fossil fuels as if they were all the same.

They are not. The cleanest of these, natural gas, is overall about 86 percent cleaner than the worst polluters of the fossils, coal and oil, but even assuming that this wind energy will -- will displace some of the dirty fuels, the coal and the oil, the question remains, how much? Now, on a one-to-one basis, if we could be assured that all 425 megawatts at this plant were displacing one-to-one coal and oil, then I think some of the statistics, some of the publicity we have heard lately become very impressive.

What I would urge the Corps to look at though is the assumptions that lie behind those studies and the assertions that wind will replace coal and oil one-to-one. My fear is that it will not. My fear is that wind will be competing at the margin with other and other cleaner fossil fuels, such as gas and with other green and renewable energy sources, such as hydro, municipal trash, and even solar energy, and that wind will not displace all the oil on a one-to-one basis, but will, in fact, displace much cleaner technologies than coal and oil.

I would urge -- I would urge the Corps

to take a very close look at that, and I will challenge the sponsors of the project to demonstrate to us through studies, which we know that it has, because they -- they have been quoted to this, exactly what will be the displacement of -- of dirty fossil fuels.

Finally, and more importantly is the benefits, as to who gets the economic benefits of this tower? This is really two issues: Whether they can actually reduce the price of power on the grid; and when, if ever, the Cape will realize the benefits of that price reduction by having the power sold here and not just transmitted through our territory.

Thank you very much.

MODERATOR ROSENBERG: Thank you, sir.

(Applause.)

MODERATOR ROSENBERG: Please, no interruptions.

The next speaker Bob Mahoney, followed by Patrick Butler.

BOB MAHONEY: Thank you, Mr. Moderator.

My name is Bob Mahoney. I am a Selectman from the Town of Dennis and Chairman of

the Cape Light Compact.

The Compact is an intergovernmental regional energy service organization consisting of all 21 towns and two counties on Cape Cod and Martha's Vineyard. We represent consumer interests in new competitive energy markets and the restructured utility industry. We operate the regional energy efficiency program for more than 193,000 customers. We facilitated the purchase of natural gas and electricity, facilitated the purchase of streetlights and have represented consumer interests before state regulatory bodies and state legislative proceedings.

We are a member of the New England Power Pool, the Northeast Energy Efficiency Partnership, and the Interstate Renewable Energy Council.

The Compact supports the development of renewable energy; however, following substantial discussion and meetings with Cape Wind Associates, the Compact believes there are many questions that still need to be answered and clarifications that need to be made. Of primary importance, the Compact believes there is a significant gap in the process under which Cape Wind Associates, or any other

partner, may be permitted to occupy an offshore site.

With the limited time available this evening, I would like to focus on this overarching issue, the aforementioned gap in the process.

As a major private project aimed at occupying 28 square miles of nearshore public resource shoal area, we need to be very careful about the precedent that is set in this review process. This project has gained national attention, and others have become interested in nearshore areas around Cape Cod, Martha's Vineyard and Nantucket that fall under federal rather than state jurisdiction.

We need to be very careful about how sites are reviewed and acquired, and the terms, conditions and standards that are used. Moreover, because the particular grant for this site may allow occupation by Cape Wind forever in perpetuity, we need to take great care to make sure we have a complete and viable process to permit the occupation.

Unfortunately, the gap in the current process affects both the ability to develop

standards and conduct a review. Typically, when a public resource site is identified for development and leasing, there is a competitive process that assures a developer is offering maximum benefits and least impacts. This provides a valuable measure for range of potential benefits and impacts that can help create standards for review, especially for a project that is the first of its kind.

Unfortunately, there is no such process in place to assist in the review of this project. As the permit process is currently structured, and despite the best intent to develop and apply reasonable standards, we may never know what the range of benefits and scale of environmental impacts might be from operation of a wind facility at the proposed site.

While this gap in the process may at first glance be beyond the scope of issues to be examined by the Army Corps of Engineers, it deserves close attention for the impact it will have on the review and permitting process. As part of the review process, we urge the Corps to consider the potential effects of a gap in the process and address the problem created by such a gap and the

precedents that could be set by such a gap.

In the future, hopefully, federal policy will create a two-step process for offshore wind facilities, similar to what is in place for offshore oil and gas leasing: (1) public comments on proposed offshore tracts to be offered to private use; and

(2) a competitive process for site acquisition for a specified period with full review and evaluation of the comparative compensation and benefits provided for use of this site, comparative environmental impacts and mitigation measures, terms of occupation, periodic compliance reviews and requirements for site transfer or closure.

Thank you very much.

MODERATOR ROSENBERG: Thank you.

The next speaker, Patrick Butler, followed by Janice Hyland.

PATRICK BUTLER: Good evening.

My name is Patrick Butler, and I am a resident of Centerville. I am a partner in the law firm of Nutter, McClennen & Fish in Hyannis, and I have been asked this evening to speak to you on behalf of the Alliance to Protect Nantucket Sound.

We appreciate this opportunity to comment on the scope of your review, and in particular, in the context of the joint review process with the Cape Cod Commission and the MEPA office.

We are in the process of preparing comprehensive written comments to the permit application that is before you tonight. Assisting us in that effort will be EarthTech Consulting, who will also be making comments this evening, as well as the firm of Horsley & Witten from Sandwich, Massachusetts.

You will be hearing this evening from many of the Alliance members regarding their concerns about the issues raised by the proposed project and its anticipated impacts. In particular, you will hear substantial testimony this evening concerning the qualitative and quantitative scope of your review.

My partner, Michael Leon, described to you yesterday the need for careful consideration as to the scope of the Environmental Impact Statement, the MEPA procedures and the benefits to be obtained from a consolidated EIS/EIR/DRI submittal. He also

emphasized the important need for significant alternatives analysis.

Simply put, this is an unprecedented project that requires unprecedented review. Prior to consideration of these issues, however, there is an overriding predominant threshold issue. That is the question of the proprietary rights to the possession, the use and the occupancy of 25 square miles of outer continental shelf seabed.

There is, we believe, a significant and substantial legal and public policy question regarding the ability of this applicant (or any private "for-profit" entity) to use and occupy this 25 square mile area and to place large structures 80 feet into the seabed floor without first having obtained through an appropriate governmental process the proprietary right to do so through lease, license, or other appropriate instrument.

More importantly, it is necessary to determine the amounts and methods of compensation to be paid to the United States of America for such use and occupancy. We simply cannot allow "squatters rights" to determine the future use of Nantucket Sound.

By way of example, if the 170 structures proposed in this application were oil derricks, an auction and bidding process would have been conducted, which was referenced by the prior speaker a few moments ago. Appropriate leases with the payment of royalties would have been executed. If the 25 square miles in question were utilized for aquaculture purposes, or the placement of fish weirs, or a similar type of use, some form of determination of possessory rights would have been required under the Doctrine of Public Trust.

Nothing in the record before you this evening, or the application materials presented, indicates any such determination of possessory right.

This fundamental issue raises into question not only the efficacy of this procedure, but more importantly, the validity of the application pending before the Cape Cod Commission. The regulations of the Cape Cod Commission clearly and explicitly require that there be evidence of ownership rights to the property in question, which will be the subject of DRI review.

On behalf of the Alliance, we will be

pursuing all appropriate forums and avenues concerning this significant question during the comment period. We appreciate the ability to speak this evening. We look forward to the submission of written comments to you.

Thank you very much.

MODERATOR ROSENBERG: Thank you, sir.

The next speaker Janice Hyland, followed by Alan Granby.

JANICE HYLAND: Yes, I am Janice Hyland, and I live in Hyannis, and I have lived here for about 14 years, and I live on the waterfront.

And I'm here not only to represent myself, but many of the summer people who can't be here because of living in other areas, like New York and New Jersey, who when we bring the subject up to them they say, oh, it's ludicrous. It will never happen. They would never destroy Nantucket Sound. Well, you know, it's coming far, and I'm here to say very simply that I think the environment in Nantucket Sound is so beautiful and to turn it into a Coney Island, I just can't believe this is even going to be considered. And I'm not only speaking for myself, but for many residents, who haven't even

heard of this and who run opposed to this, because they say it's too ludicrous, it's too outrageous. It will never happen. Well, I don't want this to come.

Thank you.

MODERATOR ROSENBERG: Thank you, ma'am.

The next speaker, Alan Granby, followed by Douglas Cotton.

ALAN GRANBY: My name is Alan Granby, and I live in Hyannis and have for several years.

I think alternative energy is a wonderful idea, but I'm a businessman, and I think most good business people when they start to think about where to place a business go location, location, location. If this project tried to go to Central Park in New York City, it would bring riots out in the streets, taking away the only public space the public tenants can enjoy.

Two planes flew into the World Trade Center on September 11th blowing up that entire neighborhood under the radar of our government officials. But this time this project is in view of our public officials, who I hope are going to protect us. That's your job is to protect us.

Now, I understand that these structures are over 400-feet tall. The city of Worcester, the second largest city in New England, doesn't have this many structures this tall. And I doubt the City of Boston does either. Forty square miles, this is our playground. This is our public park. Are we going to be knocked out of our public park? Is this what we need for activity to do.

Location, location, location. People spend their lives saving money to come to this area to vacation in summers and to retire. They come from Boston, they come from throughout New England, United States, and the world to enjoy this wonderful environment. And to think that this project could even be considered in this location, I find preposterous, and I'm actually insulted that this process exists, because the location is so insane.

At any rate, thank you for your time.

MODERATOR ROSENBERG: Thank you, sir.

(Applause.)

MODERATOR ROSENBERG: The next speaker Douglas Cotton will be followed by Gerald Chipperfield.

DOUGLAS COTTON: Good evening.

My name is Doug Cotton. I am a Senior Program Director with EarthTech in Concord, Mass.

EarthTech has been retained by the Alliance to Protect Nantucket Sound, and to review the technical issues that have been raised by this project. EarthTech is an environmental and engineering company. We have been around for over 100 years, serving communities throughout New England and including on the Cape and the islands. We have been very much involved in the energy market that is doing permitting and environmental reviews. We have permitted a number of power plants and pipelines, transmission lines, including the Nantucket cable, and we have some expertise in this area.

On behalf of the Alliance, we will be submitting some comments later during the scoping process to help define some of the issues that need to be addressed as part of the EIS.

As a general comment, I would like to identify that it is really important that the EIS properly establish what the purpose and need of this project is and what the alternatives that need to be considered that might also serve the overall project

purpose and need. That will provide the basis for the more detailed technical reviews and determination of whether the issuance of a permit will be in the public interest.

There are a couple of specific issues I just would like to highlight tonight, and the first is hydrodynamics.

I think the EIS needs to do a thorough evaluation of the impact of these structures in the Sound on tidal flows and wave readings. The Sound has changing sea bottom conditions and does need to be examined very carefully where there is going to be need to protect the towers themselves against scour; how the impact of the movement of shoals and sand waves might result in the potential exposure of previously buried cables. Now, that's important, because the evaluation of the amendment will rely on a certain depth of cover and also when the cable becomes exposed later on, it might then present a hazard for snagging fishing gear or boat anchors.

The issue of benthic resources is obviously critical, particularly potential impacts from the submarine cable installation on eelgrass as it enters into Lewis Bay.

The potential impacts to marine mammals and reptiles also are very important to us. The impacts of the structures themselves on the -- on the mammal feeding sites, the impact of shadows, lights and the structures on migration patterns need to be looked at. And also the potential that the structures themselves might cause a -- a way for abandoned fishing gear and lines to become -- to accumulate and pose a potential entanglement threat to marine mammals. That issue is also sometimes referred to as the ghost gear that gets caught up and can cause some problems.

And the final issue I would like to just highlight tonight would be the possible impacts of navigation and aviation. What additional costs would be borne by commercial vessels and aircraft that will alter the current travel routes to avoid crossing the wind farm?

And additionally, what would additional fuel use and emissions would there result from these ships and aircraft taking longer and more circuitous routes than they used to?

As I mentioned earlier, we will be providing more detailed comments. And I thank you

for your time.

MODERATOR ROSENBERG: Thank you, sir.

The Next speaker, Gerald Chipperfield, who will be followed by Stephen Buckley.

GERALD CHIPPERFIELD: Gerald Chipperfield, Representative of Mass. Commercial Fishermen's Association, a resident of Cotuit. I fish out of Hyannis, Massachusetts.

I represent approximately 200 fishermen, who fish this area, and we're very concerned about the placement of these being that they want to put these right where we fish. This is a traditional fishing area, and no studies have been done whatsoever in this area. I am a fourth generation fishermen. My family, my entire family has fished out here.

We're concerned about the configuration of the shoals. Now, you wouldn't stick these on the Great Barrier Reef or on coral reefs; and to do this to the shoals, the damage would be irreversible. The tidal flows out there, if you change the shoals, you're going to change the migration, the pattern of these squid, summer flounder, the scup, the sea bass, and most of the species that we make our

living there.

We have also just found beds of hard-shelled quahog clams off of Rogers Shoal, which I myself discovered in May this year. Now that we have approximately 68 people licensed to do it in this area, this proposed area, these -- the wind farm, this proposal to put these 170 towers, 400 whatever feet, this farm hasn't even been examined yet to see what kind of natural resources are there.

We believe these towers will be a hazard to navigation, and they shouldn't be placed in Nantucket Sound, especially these individuals who are doing it for private monetary gain. If you allow this to go through, what you are going to do is you are going to displace our tradition, our heritage, and the way we make at least 60 percent of our income in this area.

Thank you very much.

MODERATOR ROSENBERG: Thank you, sir.

The next speaker, Stephen Buckley, will be followed by Matthew Palmer.

STEPHEN BUCKLEY: Good evening.

My name is Stephen Buckley. I'm a resident of Chatham, recently returned to Chatham

after growing up there. I spent the last 20 years working in the Washington, D.C. area as an Environmental Engineer for five different federal agencies writing Environmental Impact Statements and reviewing other ones from other agencies. So I know a bit about the NEPA process.

One of the things that always frustrated me about the scoping process is that you could get never ahold of people we wanted to talk with between the scoping meeting and the issuance of the draft Environmental Impact Statement.

Over the past ten years or so, as most everybody in this room knows, there is something called the Internet now, which makes it much more easy to communicate. Scoping in my mind is more than a drop box, which as I understand it from statements you have made today, that the public input will still continue. You described this scoping, but being able to mail somebody a letter is not in itself sufficient to qualify this scoping. So I'm hoping that sometime over the next 16 months, I guess, or whenever, I think it is the next year when the draft EIS comes out, there will be something short of a 300- or 400-page document that

will be looked at, something like a 30- or 40-page document or something else of that sort that might be available on line.

I created an e-mail group, and I have some information if anybody wants to drop off their e-mail address to me, or pick up a piece of paper on the way out. I'm in the back. You can write this address down, and it's one way of continuing conversation over the next 12 months to the Corps. It's capecodwindfarm, that's all one word, @yahoogroups.com. Send something there, and you get information about how to join in our group.

I you know that it's hard to be a federal employee and to do something that is outside the box, because you believe it's never -- it's hardly ever awarded, and so I encourage the Army Corps to try something new, and I think the time is right. Five years ago something like this might not have worked -- prior to five years ago, and not enough people were on the Internet. Now, two-thirds of households or rather Americans have access to the Internet. My apologies to the third that does not yet have access to the Internet, but I don't think there is any reason to stop now, and we can go ahead

and use that mechanism for a dialogue, a one-way communication, but a dialogue between the interested and affected citizens and the people on -- and I used to sit on your side of the table, too, trying to do the best job we can as far as coming up with a useful document that would be informative to the public and also as useful as possible, hopefully not 300 or 400 pages, although I suspect it will be, maybe 200 pages, that will be useful to the decision-makers.

Thank you very much.

MODERATOR ROSENBERG: Thank you, sir.

Our next speaker before he comes up, Matthew Palmer, will be followed by David Chartier.

We're not going to respond to comments at this time. I think the last speaker made a very good point. There is an Internet site up at the Army Corps of Engineers. The address is available there. There's a page, and while we are hoping for a very detailed study, it could be thousands of pages, we'll also have an executive summary. All this -- everything is available to the public and to the Corps is on line right now, including Mrs. Holtham's briefing, and the transcripts that are

being made today will also go up there. There is also a direct e-mail link, and you will be responded to, as I'm sure many of you already have.

And I would like to welcome Mark Forest here. Mark, thank you for coming.

The next speaker, Matthew Palmer. Mr. Palmer may be in the other room.

David Chartier. And David will be followed by Christopher Stimpson.

DAVID CHARTIER: Hello. My name is David Chartier. I live in Kingston, Massachusetts, and I work at the Dighton Power Facility. Dighton Power Facility is a natural gas-fired, combined-cycle facility. And I'm speaking in favor of this project, even though it is in competition of where I work.

We all -- we all need to use electricity. That's -- we all realize this, it is going to be that way until the next great invention comes along. Where is it going to come from? Every fossil fuel-fired plant pollutes the environment, some more than others, and right now, you know, there is a lot of polluting plants out there.

Wind is free energy and zero pollutants.

That's the bottom line. Free energy and zero pollutants. And it's there, and I feel we should use it, take advantage of it for our immediate needs and the next generations to come.

I would also like to speak in favor of Energy Management Group, which is one of the partners involved in this project. They built a facility where I work. They developed the idea and forwarded it through to fruition, and it met with opposition during construction and this phase, and it is three years later, it's welcomed in the community of Dighton, Massachusetts. And they did beautiful job. They didn't cut corners. They followed things through. They did a nice job completing it. I want you to know that about some of the partners that are involved, and also, I -- as to the esthetics, I do not live on the Cape. I live in Kingston, but I grew up in Quincy, Mass. I went up there recently and looked out along the beach, and there is a wind turbine flying over Peddocks Island, and I thought it was beautiful.

Everybody has their own opinion of aesthetics and views, but I think these things are beautiful, can be beautiful, and I see them as free

energy that is not polluting, and it will take time, change is difficult, as always, change is difficult, but 50 years from now, if this project goes through, we might all be, you know, looking out there and thinking that that is beautiful, and I'm glad we did it.

MODERATOR ROSENBERG: Thank you, sir.

The next speaker, Christopher Stimpson, will be followed by Bryant Palmer.

CHRISTOPHER STIMPSON: Good evening, sir.

My name is Chris Stimpson. I have lived on the Cape for over 20 years, and I am representing myself.

What I want to address tonight is the fact that as a race, we have to readily change our thinking. We have to change it in a way that will make some of our concerns and preoccupations today seem irrelevant and redundant. If we don't, if we don't do it now, then power or usage and uninterrupted sea views, as nice as they are, will be the least of our worries. So understand what I'm about to say may not seem germane to the use of 25 square miles of Horseshoe Shoals, but in a very

fundamental way it is.

The world in general in the USA, in particular profit the users of this planet under new resources. Evidence is all around us of our waste and use of these resources, specifically petroleum products.

In the political arena, we make foreign policy decisions made solely to be sure that we continue the supply of cheap oil from foreign sources. Many of these decisions lead to behavior that clearly resound in entire populations and even gives rise to extremes, as we discovered last year.

As we use these resources in our typically inefficient ways, we come to aid this on foreign impacts. In my view, we as a nation and as race should be devoting a level of effort that we reserve for exploration, funding of new resources into research and finding alternative energy technologies. Our reasons for not doing so are being specious, and based on ignorance; and at the national level, on political inconvenience.

Of the alternative energies available to us, wind is one of the most common and easiest to convert into a usable form. It will never be used

directly in cars or aircraft, but it can serve to provide electricity to heat and air-condition our homes, run appliances, et cetera. The one indispensable feature of the wind energy collection program, however, is that the collection devices must be sited where they can be exposed to optimum wind conditions.

Now, ideal locations: Wind collection can come from coastal areas, hilltops and at sea, and the proposed site of Nantucket Sound is an excellent example of such a location. Ultimately, I hope that we may reach a point where we will see houses on the TV constructed of solar panels and windmills, but this is unlikely to happen while people still believe there is no energy crisis on this planet and those issues of convenience and opposed to unblemished horizons take precedence over our need for responsive stewards of this planet.

Now, perhaps in a general sort of way, some of you agree with me, perhaps you also have concerns of fossil fuel pollution, trimming the oil reserves, global warming, et cetera. So why is this a slam dunk of an argument? Why is there any opposition to start this promising project?

Well, we know why, don't we? After all, Nantucket Sound is in our backyard, isn't it? We're all in favor of reducing energy costs, reducing our dependence on foreign oil, reducing pollution just so that someone else does it somewhere else in some other backyard, just not here.

Let me put it to you, we cannot support alternative energy without taking responsibility for your part of the new paradigm it imposes on us. It's a new world, ladies and gentlemen. When you think about backyards, you can't think in terms of neighborhoods, towns, and counties. I expect to offer the reality of saving ourselves from ourselves on the folks next door. That's what I mean when I say we have to change our thinking, whether it's your backyard, beginning and end.

We -- we, we humans should be embracing projects like the wind farm. Had we done so years ago, our dependence on oil would be far lower, and we would be feeling the savings instead of destroying our planet.

To those who fear the tourists would stop coming to Cape Cod if the wind farm is built, I express that we, we Cape Codders, would instead

achieve a reputation of having led to a new salvation. In the long-term, this could do nothing but good for a backyard that begins at the Cape Cod Canal and ends at the fringe of space.

Thank you.

MODERATOR ROSENBERG: Thank you, sir.

The next speaker, Bryant Palmer, who will be followed by Richard Olson.

BRYANT PALMER: Good evening.

My name is Bryant Palmer. I'm a professional engineer under IEEE. I have been in the power industry for the last 20, 25 years, and I am also a resident of Yarmouth. I am concerned about Lewis Bay.

The proposed buried dual transmission lines running down the center of Lewis Bay to be used in conjunction with the windmill farm on Horseshoe Shoals is a potential hazard. Good space will be required to withstand the added stress to the required construction of the ocean bottom to properly bury these cables. The proposed transmission line cables will carry each 115,000 volts from a platform on the shoals to the electrical grid in Yarmouth. It will be placed

under the bottom of the Bay, quite shallow. And as many areas of Lewis Bay have less than two feet of water at low tide, a serious hazard and health threat to all who exist. We don't want our children swimming and boating mostly because of the high voltage transmission lines.

Does this burying a transmission line mean we cannot anchor our boats or shellfish in the cabled areas?

Will the cabled areas have to be marked with warning buoys to protect us all and therefore adding to the further disappointment of the Bay?

We must not let Yarmouth, Lewis Bay, the most beautiful recreation area become industrialized and pose a potential health threat to us all. I urge the Corps to stop the transmission lines from being placed in Lewis Bay.

Let me say further that during the Second World War, I learned to swim and sail in Lewis Bay and fish on the shoals, and I have continued to enjoy the magnificent and spectacular beauty of the area within this Bay. Further, since the late '60s, I have helped to teach hundreds, maybe thousands of children to learn to sail in this

unique area called Lewis Bay. And nothing must be allowed to change this. Lewis Bay is very unique in that no matter what is happening with the wind and so forth, you can get out there and sail and teach sailing, and it is quite -- quite something to enjoy.

Thank you very much.

MODERATOR ROSENBERG: Thank you, sir.

The next speaker, Richard Olsen, will be followed by Mary Jane Curran.

RICHARD OLSEN: Hi. My name is Richard Olsen. I live in Yarmouthport, and I think the best thing that you guys could do would be to get onto one of your tugboats in the canal, go down around Cuttyhunk, come back up through the Sound and just in your minds bring your kids and your wives, just think what it would look like to see this spreading out in front of you in the end. This isn't just our backyard. It's backyards for people up and down the East Coast viewing the Cape. We are just trying to protect ourselves, and everybody loves it, and it's great. Anybody can look on the map of the United States and see this isn't just another piece of land. It's unique. And it's just the wrong place

to put it.

If you guys don't see that in one cruise around -- I think you will -- and save yourself the hassle of all these other intricacies and legalities.

Thank you.

(Applause.)

MODERATOR ROSENBERG: Thank you, sir.

Thank you very much.

The next speaker, Mary Jane Curran, will be followed by Peter Hickman.

MARY JANE CURRAN: Good evening.

I coordinate the environmental technology program at Cape Cod Community College, and I have lived in Harwich for 60 years. I am speaking tonight as an individual, not as a spokesman for the college. But the study that you are beginning is an incredible educational opportunity for our students to learn about renewable energy.

I am very proud of the steps we have taken at Cape Cod Community College to become a breeding campus. We have undertaken extensive water conservation measures. We have a fuel cell that

heats and cools our library. We are installing heating panels that will capture solar energy power, the electric cars on campus, and we have a meteorological assessment test tower on campus that is gathering data to determine if we have the right conditions to install a wind turbine on campus in the near future.

Through these measures, we are educating our students and demonstrating to all Cape Codders how we can become independent of fossil fuels, address national security issues, and become a truly sustainable Cape Cod. I firmly believe that your review of the Cape Wind Project will give us a chance, all of us, environmentalists, businessmen, fishermen, students, to listen and learn from the experts who provide you with the information that you need. This is a tremendous opportunity for Cape Cod to lead the United States in the first major offshore wind farm.

There are many issues to consider, but I hope that we will keep foremost in our minds that it is our responsibility to provide future generations with a pollution-free environment. It's time for us to clean up our act. This wind farm is an

opportunity to begin this process.

Thank you.

MODERATOR ROSENBERG: Thank you, ma'am.

Our next speaker, Peter Hickman, will be followed by Lindsey Counsell.

PETER HICKMAN: Good evening.

My name is Peter Hickman. I live in Cotuit, the Town of Barnstable. You can tell by looking at me that I have been around for awhile.

I want to make one point before I make three points that I was coming up here to speak about. The first point I would like to make is that of all the oil used in the United States, 70 percent is used for transportation, and most of that is used for private road vehicles. Less than 2 percent is used to generate electricity. If you want to save the importation of Middle East oil, improve the gasoline mileage of our vehicles and design better engines for our vehicles, then you're attacking the big part and not the tiny part. Now, let me make my three main points.

The first point is the problem. The problem is the information that has been disseminated by the proponents since they first

published news of their project in the Cape Cod Times last August. I have been devoting my time, since I have been long retired, to looking into this project in great detail over the last three months. Most of the information that has been fed to the public exaggerates the benefits and underestimates the damages to our environment, and nothing illustrates this more than the computer-generated photograph, which appeared in their Environmental Notification Form submitted to the permitting agencies on November 15th, and widely displayed in public meetings and in the press.

I have that photograph here in my hot little hands for anybody to look at. The principals of Cape Wind Associates assure me that this photograph of shore views from Cotuit to the beach and Hyannis Port are absolutely accurate. Anybody that has ever been out on the waters of Nantucket Sound know that these computer-generated photographs are false.

One reason I know they are false is that the view from the shore in Cotuit shows a curved shoreline, and the shoreline is, in fact, straight. That photograph, as any professional photographer

will tell you, is taken with a wide-angle lens that distorts distances and makes the computer-generated wind towers look like fleas on the horizon.

(Laughter.)

PETER HICKMAN: And in fact, the top part of this picture, which is from Hyannis Port, whether purposely or fantasy, shows nothing visible at all on the horizon five and a half miles away. These wind towers are 40 stories high. Nobody who knows these waters is going to believe that these wind farm towers are going to be virtually invisible, as they claim, five miles away on the shore.

Now, I have a suggestion or a request to make. My request is that when you ask for data on this project, you specify what data, how it's gathered, when it's gathered, and who gathers it. It's not enough to ask their consultants to provide the data. I have dealt with consultants all my business life, and I never hired a consultant, who came up with a report that was unfavorable to the company that was paying its fees. They have got to be independent people, or at least done to independent specifications.

And my last point is a suggestion. We can resolve this visibility problem very easily if you, the Corps of Engineers and the other two permitting agencies, were to arrange to put up a large balloon from a barge at 270 feet, the height of the tower with its 56 foot long by 18 foot engine room on the top and on top of that another small balloon at 426 feet and station photographers along the shore from Nantucket, Martha's Vineyard and the Cape. That will resolve this problem once and for all.

Thank you, sir.

(Applause.)

MODERATOR ROSENBERG: Ladies and gentlemen, please, we are trying to get through this. Thank you.

Our next speaker, Lindsey Counsell, followed by Bruce Gibson.

LINDSEY COUNSELL: Thank you very much.

My name is Lindsey Counsell. I am the program manager for Three Bays Preservation in Osterville. That is an environmental advocacies group in the three-bay area of Barnstable, which includes North Bay, Cotuit Bay and West Bay. We are

a 570-member organization, and recently our board voted unanimously to oppose this project, and we have been surveying our members as well on that subject. Specifically and overwhelmingly, our members are opposed to this project.

Three Bays Preservation has been active in restoring bird habitat in the three-bay area over the last five years. Recently this last winter, we completed our second part in the habitat restoration project, with an acre and three quarters being restored on Sampson's Island.

The potential risks to the federally endangered Roseate Terns and the threatened Piping Plovers that use these habitats to be created is of great concern to our organization. And I want to quote to you from the Environmental Notification form that was submitted for this project. It states, I quote, Known and suspected risk factors for potential avian community impacts are, for the most part, lacking in this Project. The probable absence, of high use by birds is most important. Few species would be present or present long enough in the Project Area for significant risk to occur, end quote.

According to the Massachusetts Audubon Society, we work closely with, this site is one of the highest concentration of sea ducks and terns in the Atlantic seaboard, which shows dislocation of our ample feeding opportunity for these birds. Few offshore wind farms, and certainly none of this scale, are available to judge impacts to these birds.

A rough estimate by Audubon between one quarter and one half a million birds use the Sound during the year.

Half of the North American population of Roseate Terns in Buzzard's Bay nest in this area, and these particular birds spend a significant amount of time feeding and staging for migration in the Sound.

Ample data on these effects to these -- ample data on the effects of towers on birds is currently available. Thousands are killed each year by these towers; and for some species, such as the Roseate Tern and Piping Plover, a single death as a result of this project can be regarded as an unacceptable level of impact to the Endangered Species Act. Leatherback turtles, endangered

species, migrate to the Sound and often reside there. Endangered Ripley's turtles and threatened loggerhead and green sea turtles use this area for feeding.

Potential construction impacts need to be evaluated on this project for things such as turbidity on these food resources for these species. Sea turtles may be attracted to the new structures and the project risk assessment, with a positive or negative should be evaluated. The Environmental Impact Statement should evaluate the convergent currents in the area that may concentrate jellyfish as a food source for the leatherback turtles. And what will this array do to these currents? We need to know.

Marine mammals, that is another area of concern for our members. What will the effect of underwater noise from vibration of turbines? Thousands of Gray Seals use the Sound part of the year. They are a species of special concern and these impacts are going to need to be evaluated.

Even low levels of loss of Roseate terns and Piping Plovers is unacceptable. Potential impacts to sea ducks, migratory land birds, sea

turtles and Gray Seals must be carefully evaluated. Study periods need to be comprehensive and long-term.

Given the size of the project area, complete evaluation of various habitats in the Sound are necessary. Lacking this information, no project of this size can be permitted in this valuable ecosystem.

Thank you.

MODERATOR ROSENBERG: Thank you, sir.

The Next speaker, Bruce Gibson, will be followed Ron Borjeson.

BRUCE GIBSON: Good evening.

My name is Bruce Gibson. I am not a professional speaker, so please bear with me.

Dear Chief Godfrey:

As a member of Cape Clean Air and a resident of Harwich, I would like to request that you include in your scope a section in the government's Environmental Impact Statement on the topic of public health costs and premature death as offset by power generating from the proposed wind farm.

This offset should be compared to health

costs and premature deaths from pollution minimums by the aggregate average of fossil fuel plants in the New England Power Pool managed by the ISO New England, based on the production of an equivalent amount of power that will be displaced by the wind farm.

To be specific, I ask the government to first focus on the fossil fuel offsets of annual emission tonnage of the equivalent national ambient air quality standards criteria of sulfur dioxide, nitrogen dioxide and carbon monoxide and particulate matter that will be displaced by the estimated average annual contribution of the wind farm's 170 megawatts of power.

Based on these annual reductions of these NNAQS brought together with new ones, I ask that in turn the government evaluate the associated statistical annual reduction in our regional premature deaths, the number of emergency room visits, the number of asthma attacks, and the number of upper respiratory symptoms that would be eliminated by the wind farm's power contribution compared to the fossil fuel plants above. Reference to the Harvard School of Public Health study of

estimated public health emissions of criteria polluting air emissions dated May 2000.

I also ask the government to then establish a monetary value of the annual premium towards us in healthcare costs as statistically represented in the Harvard study, or equivalent study.

In addition, I would like to request that the government estimate the annual emission tonnage of carbon dioxide produced individually by oil-fired units, coal-fired units, and natural gas-fired units in ISO New England for the average annual production of 170 megawatts of power and each type of fossil fuel unit.

And, finally, I would like to request that you estimate the annual reduction offset in gallons of fuel oil, tons of coal, or BTUs of natural gas consumed in the production of 170 megawatts of power and each type of fossil fuel unit.

I would also like to state that at one time there were over 1,000 windmills that dotted the landscape on Cape Cod. We may have to go back to that 1,000 windmills when we run out of the fossil

fuels that are available on the planet earth.

Thank you.

MODERATOR ROSENBERG: Thank you very much.

I would like to thank Representative Atsalis, who is with us tonight, just to let you know the Representative gave a statement yesterday in Boston on the scoping. So thank you very much for joining us again tonight.

Our next speaker, Ron Borjeson. I know I mispronounced that. I apologize. He will be followed by Murray Glusman.

RON BORJESON: Ron Borjeson, Vice President of the Massachusetts Commercial Fishermen's Association, and I also sit on the Board of Directors of the Massachusetts Fishing Partnership, which is an organization of 19 state and different groups, fishing groups throughout Massachusetts.

And our board has come up with a statement to say that we, Massachusetts Fishermen's Partnership, representing more than 3,000 fishermen throughout the state, support the development of alternative energy sources.

We strenuously object to this plan to construct this plant in Nantucket Sound. Our concerns are: The elimination of prime fishing grounds; windmill plans proposing of 140, 40-story structures would completely block off 28 square mile of public resources that for generations has served as a prime fishing ground for the local fishermen. At the height of the season, there are as many as 40 boats daily working this area.

Simply put, the local fishermen would not be able to maneuver their gear around these enormous windmill structures. Furthermore, placement of the towers producing vibration, constantly with noise on or near the seabed, may disrupt the essential fish habitat, which may violate federal law.

Another concern is the navigational hazard. Placement of the 170 towers in this body of water routinely sees fog and represents a significant hazard to navigation, not only for the commercial interests, but for recreational boats also.

Another concern that we have is the economic displacement we are going to have. Sixty

percent of the annual income of a lot of these boats is derived from that particular area, so it would be a devastating blow. It's unacceptable for a small group of private investors to make millions of dollars by taking over public resources and in the process jeopardize the livelihood of fishermen, who have been working these waters for many, many years.

Mass. Fishermen's Partnership supports community-based alternative energy sources that generate electricity, but this project represents a very real threat to an important part of our local culture and its economy, as well as the ecological health of a sensitive habitat that reduces fishing in this fishing ground. We, as a society, are interested in seeing our fishing legacy preserved. We must recognize this threat and object to any attempt to privatize such a valuable public resource.

Thank you.

MODERATOR ROSENBERG: Thank you, sir.

Our next speaker, Murray Glusman, will be followed by Matthew Palmer.

MURRAY GLUSMAN: I am just a resident on Cape Cod, Woods Hole, and in listening to the

arguments for and against the windmill, it seems to me they fall into two categories.

The first is a -- is on a doable level and deals with the merits of retaining renewable energy versus the terror of going back to fossil fuels and so on. Well, nobody argues against clean renewable energy. That is like arguing against motherhood.

The real issue, and that is one that is not addressed by Cape Wind Farms, is what is the compelling necessity for setting up this monstrosity in the middle of a region that is famous for its beauty, and is one of the national treasures?

Why must these wind farms -- why must these windmills get stuck like a stake in the heart of this region, stuck like a stake in the heart of Nantucket Sound, Horseshoe Shoals?

This is an area that is famous for its beauty and as a resort. It's the most -- the most important resort area in the Northeast, and simply putting wind farms in will do irreparable damage to it. What is the compelling necessity other than the profit for locating the wind farms here?

We have got thousands of miles of

coastline along the Atlantic coast, the Pacific coast and the Gulf coast. Why pick the very, very heart of an extremely valuable resort area and destroy it?

The damage to the Cape will be irreparable, and it seems to me that the Cape Wind is arguing the merits of clean renewable energy versus the fossil fuel energy is really diverted to the main argument from here to a global benefit of renewable energy versus fossil fuels, and that is an entirely different argument, but it's being pushed by Cape Wind Farms to the exclusion to really conceal the major problem which is why here? Why right here?

And to say that this is only the place that there is is absolutely disingenuous and utterly ridiculous. There are many other places; and if you can't find them in the thousands of miles of coastline we have, how can Denmark and all these other little countries locate similar places for wind farms?

Thank you.

MODERATOR ROSENBERG: Thank you, sir.

The Next speaker, Matthew Palmer, will

be followed by Clayton Lang.

Mr. Palmer doesn't seem to be here.

The next speaker, Clayton Lang, will be followed by Maggie Geist.

CLAYTON LANG: Good evening.

My name is Clayton Lang, and I'm a resident of the Town of Barnstable. And I would like to thank you for the opportunity to provide some input tonight. My comments tonight relate to the permit application for the test tower.

I'm in favor of alternative energy sources. I am also in favor of supporting the effort to preserve Nantucket Sound as one of our country's great national treasures.

However, because of all the public concern and the extensive review process required for a project of this magnitude, I believe that it would be premature at this time to permit the construction of a test tower before it is determined that this industrial park itself would be permitted in Nantucket Sound. I respectfully urge that a decision toward the test tower be postponed until the results of the review process are complete.

Thank you.

MODERATOR ROSENBERG: Thank you, sir.

The next speaker, Maggie Geist, will be followed by Wayne Kurker.

MAGGIE GEIST: Good evening. Thank you for the opportunity to comment.

I'm Maggie Geist, the Executive Director of the Association for the Preservation of Cape Cod, a 5,500 member organization, whose mission is to preserve the resources of Cape Cod.

And, gee whiz, way back in the early 1970s my predecessor's predecessor went through some kind of a process like this when the question was whether or not to site oil rigs on Georges Bank. And at that time, APCC went through the process of providing comments for a while. We did the same thing with the outfall pipe back in the early '90s, and we will go through this process again submitting comments, learning as much as we can, and helping to move through the process.

We have been looking at this very carefully, and one of the biggest concerns that a lot of people has been, number one, the fact that there is no permitting process in place in siting these things, and other speakers have spoken about

that, and I am hoping things will happen to get some sort of a process in place for that.

Another problem that we have is that we don't have yet guidelines for siting these things offshore. I spoke with some of the Corps people and have been told that you'll be looking at some of the European review processes, and I think that is a wonderful place to start. They are significantly far ahead of us in a lot of this.

I'm also very happy to hear that you are going to be providing so much information on your website. One of my comments was going to that I would hope that perhaps part of that would be as much independent information as possible. Obviously, this is a very contentious project. People are very, very concerned, and we're hearing sort of hysterical comments on both sides where we need a lot of facts. And if we could have a place where some independent information will be available, I think it would be very helpful.

Now, this proposal, as we all know, poses numerous environmental, aesthetic and economic questions, all of which require detailed evaluation on a scale of which none of us has any experience.

I would like to suggest that the Corps consider using a technique that the EPA has developed, an ecological risk assessment, which allows a framework for decision making that on the one hand allows everything to be put into one picture where you can really evaluating risks and benefits for a particular process.

I just want to hit on a couple of things that other people haven't mentioned.

Am I already on the yellow?

MODERATOR ROSENBERG: No. Plenty of time.

MAGGIE GEIST: One of the things -- oh, green. One of the things that I have been reading about is some -- and I don't know whether the Corps can do this, or someone else can do it, but everyone is concerned about 25 square miles, and these wind towers are so tall and so far apart. I know in Europe there is some looking at what kinds of wind farm layouts would be better. How do you do the arrays, how can you design them so that they are the least obtrusive as possible?

Due to the scarcity of available data and the large size of this proposal, we think that

both base and site-specific research have to be undertaken in order to develop reasonable and responsible guidelines, which will be necessary to evaluate, you know, this proposal. And we think that some of the elements that we begin this review include, of course, the environmental impacts on marine and avian species, impacts of construction, operation, maintenance and decommissioning of the installation on birds, fish, invertebrates and sea mammals. Oh, my goodness, that gets bright yellow, doesn't it. Couldn't see that in the back. Wind and noise vibrations, sediment resuspension, redistribution, navigational lights, artificial electric and magnetic fields, et cetera, et cetera. We believe that we really need a couple of years of baseline data to be gathered before we would know about that.

The rest of this, I would just like to pass in with the rest of my written comments. We look forward to commenting further on this proposal.

Just at the very end, I would like to say that we need to get off of our use of fossil fuels, and this particular project gives us a wonderful opportunity to learn everything that we

can and see what exactly, what trade-offs we are willing to make to do something right for the environment and the people.

Thank you.

MODERATOR ROSENBERG: Thank you very much.

The Next speaker, Wayne Kurker, followed by Craig Ashworth.

WAYNE KURKER: My name is Wayne Kurker. I'm one of the founders of the Alliance to Protect Nantucket Sound.

And we started just trying to make people aware of this project; and as they became aware, to date, we have received over 1,500 letters protesting this project.

We have also received the support of organizations and municipalities all over the state. All of the towns that surround the area for the proposed windmills are unanimously against. The Town of Barnstable, the Town of Mashpee, Nantucket, Martha's Vineyard is now looking at it, and the only town that has taken a vote is opposed.

And the organizations of Cape Cod, the business organizations are opposed, because we are

concerned about the economic impacts. A large Cape Cod chamber is opposed and the -- and the only other thing -- all of other smaller chambers, which have voted, are all opposed.

And many environmental groups you are hearing from. You would normally think that this type of proposal would only be in favor or opposed. They are opposed obviously because of the location, as we are.

And the fishermen's organization you have been hearing from are opposed, and I'll speak about that further in just a minute.

Because I want to talk about the economic impact of the proposals and some of the alternative sites that it is going to be potentially placed in.

You know, the developers have been all over the Cape promising us jobs and telling us that Cape Cod will have the bragging rights for the first wind farm in the United States. And that -- and in our community it draw us ecotourism.

The developers have heard our response to all of this over and over again, which is after years our tourists come to the Cape for -- to avoid

everything that these fellows are trying to bring us, which is industrialization of some natural space.

And if the European model is any -- is any guide for us, what happened over there is wind farms were built, tourists came to see them once, didn't come back to see them over and over again. And that is not what we need for our people. We need our tourists to come back over and over again, and for decades they have.

So over and over again, we told developers this will be an economic disaster for us, and it will be dangerous. The Barnstable Municipal Airport said that they came out vehemently opposed, and they are one of the biggest, busiest airports in -- and I think next to Logan they are like the second or third busiest airport in Massachusetts.

And the Coast Guard has received over a thousand letters from boaters, because this 25 square miles overlays well-established routes between Cape Cod and the islands; and obviously, I am sure you have heard from a lot of people saying that this is a major boating area. It's where people go to fish and recreation, and it's where

commercial fishermen make their living. And the developers respond to that by saying the obstructions will be on the charts. And we have said, yeah, but what if we don't want it, and what if they -- then we said, what about when it gets foggy? It's famous for being a fog area. And they have responded by saying, well, boats have radar. Well, you know, small boats don't have radar, so we find ourselves with people with smaller or less fortunate who can't afford radar are basically out of this area, because fog is pretty unpredictable.

And personally, I have worked in the marine industry. I run the Hyannis Marina, and I know the reason that people come to Cape Cod. They come here to join us in our -- in a place like the Sound, which is our wilderness, our national -- our national park.

And this world-famous boating and recreation and tourist destination is also one the most productive fishing grounds for our commercial fishermen. A man said earlier that 60 percent of their annual catch is caught out there. Well, I have heard from dozens of fishermen at this point who say that they would be forced out of this area,

because they can't fish or restock this whole coast. This isn't a matter of choice like some of us have been led to believe. These guys are being pushed out of this area permanently.

MODERATOR ROSENBERG: Sir, thank you very much.

WAYNE KURKER: All right. Thank you.

MODERATOR ROSENBERG: Our next speaker is Craig Ashworth. Following Mr. Ashworth, we will take a 15-minute recess.

Mr. Ashworth.

CRAIG ASHWORTH: Good evening.

I am a citizen from the Town of Barnstable. I am a sailor and a fisherman.

This is an interesting project. I stand here in awe. The magnitude, as a advanced sailor, I think it's -- the scale is unimaginable.

I think the proposal is an assault on our national treasure, which is Nantucket Sound. You wouldn't have any less resistance if you proposed this at Gettysburg, or on top of Mount Rushmore. I think it would be easier to maintain if it were at Gettysburg.

I have been a sailor all my life, and I

know that those are a constant source of wear, and you are going to combine the marine environment, mechanical elements, and you don't really have quick facilities for support, for maintenance. I don't know who you are going to get the boat slips or the -- there are so many other areas. The next few weeks are going to bear out a lot of interesting discussion, but I think at some point as this proposal moves forward, you're going to have to have a test tower, as has been requested; and I think of a test tower, and I wonder is that going to be an open skeleton structure, someplace offshore, well offshore?

I don't think that that really does it justice. I think if we are going to have a test structure, I propose that that structure be a whole size unit, and I would like to see it 4.4 miles off Point Gammon. I would like to see it have operational lights and a lot of sound signals as required. I would like to see it left there for a while and get some comments.

I don't know if anybody came into Hyannis last summer. I think for a period of two weeks there was a large schooner, the Georgia, a

massive thing, 160 feet tall. You could see it from the Sagamore Bridge. We're talking about putting something two and a half times the size of that right off our beaches, right off our shore. It's amazing. I will be very interested to see how it plays out.

MODERATOR ROSENBERG: Thank you, sir.

Just a reminder before we take the short recess. A stenographer is available for longer statements in the hallway. Please take advantage of that. All statements have equal value in the record. We will reconvene in 15 minutes at 8:30.

Thank you very much.

(There was a short break taken.)

MODERATOR ROSENBERG: We're back.

Ladies and gentlemen, our first speaker to lead off is Matthew Palmer. Did he make it back here?

Our next speaker will be John O'Brien. I think Mr. O'Brien may have left also.

AUDIENCE PARTICIPANT: He did leave.

MODERATOR ROSENBERG: The next speaker, John Spillane from Hyannis and Worcester, and he will be followed Marybeth Christensen.

JOHN SPILLANE: Thank you, Mr. Rosenberg and Ms. Godfrey and Ms. Holtham.

I certainly want to indicate to you that my name is Attorney John W. Spillane, for the record, General Counsel for the Massachusetts Marine Trades Association here in Massachusetts.

We have some 230 members. We are sort of known as the -- as the gas stations of the waterways. We are certainly very familiar and do adhere very closely to a myriad of environmental laws.

I also want to tell you that I have been a 40-year resident of the Town of Yarmouth, having summered here for that period.

Mr. Chairman, and your board, I first want to comment on the Corps of Army Engineers and the professionalism of this whole process. It's a pleasure to me as an attorney to be able to appear before you and to assist you in creating the administrative record that I think is so important here.

My first concern is one of housekeeping, and I do refer you to your federal register in Volume 67, No. 20, on Wednesday, January 30, 2002.

That's your notice. And with respect to that, traditionally, under your federal rules and regulations that are required, and you have attempted to do so to mention the kinds of laws under which you are acting, at least the spectrum of your authority. And respectfully, as I had indicated to you yesterday before, and as always have shown a great deference to the state laws. And in this instance here, there is a vast absence of the recognition of Chapter 91, and the very extensive regulations that we have in 310CMR900.

When you contrast, they -- that program put on the books in 1890 -- 1870, I believe -- '78, I believe, in contrast to the harbors -- Rivers and Harbors Act of 1899, of Section 10, there is an absence of specific regulatory direction, and I think that your structure would be -- needs to be combined with Liz Horace, who runs the north and the southeast region in the Chapter 91 program.

I also note that you probably don't have a specific reference to the Submerged Land Act, which is at 43 USC 3811. And in that regard, that particular section, if I could read it under Section 3A of the Submerged Land Act, the states

have title to their ownership of the lands beneath the navigable waters within their boundaries, and that is reference to 43 USC 3811A. My concern is, as Mr. Butler pointed out, there is a proprietary interest here, and to address the fact that we have an ownership or claim of ownership by the Commonwealth of Massachusetts under MGL, Chapter 1, Section 3 and on the ocean -- the Island Sanctuaries Act, which I really hope you will involve in this process under 132A, Section 13C.

My concern is that in building an administrative record, and in the event that court action is required by either side, certainly by interest of our side, that the involvement of the state laws is rather crucial. I have a concern, a very serious concern, and I addressed it the other day, but I want to underscore it. I'm going to be requesting that your process, with respect to this tower that you commit, that you will not commence any erection of that tower. Your engineer for the Corps, without advice and consent of all of this process recommended that that be put out, and I don't think he has had a benefit -- I would like to -- I'm going to direct a communication to you in

that area.

MODERATOR ROSENBERG: Thank you.

JOHN SPILLANE: Finally, I would like to say that I hope that you do concentrate on the alternative, the land base; and as I had indicated to you yesterday, former President Kennedy enjoyed these waters and the shores, and I think if he were around today, he would recommend to you that land base alternative.

MODERATOR ROSENBERG: Thank you, sir.

JOHN SPILLANE: Thank you very much, Mr. Chairman.

MODERATOR ROSENBERG: Marybeth Christensen will be followed by Wendy Garpow. I hope I didn't mess that up too bad.

MARYBETH CHRISTENSEN: My name is Marybeth Christensen.

For 42 years I have summered on Shore Road in West Yarmouth, and I am an abutter to the proposed landfall location. There are three concerns that must be addressed in the Environmental Impact Statement.

These concerns are: The effect of the electromagnetic radiation; the positioning of the

service platform; and the installation of the cable lines.

Specific details need to be analyzed on the underground transfer station that would be constructed to connect the subway cable from the wind park to the overland wiring. Proponents of the project have secured an easement at 43 Shore Road for this purpose. We need to know the health hazards related to the electromagnetic radiation of the cabling as it crosses Lewis Bay and then linked by right angles at Shore Road and then again at New Hampshire Avenue. It is a scientific fact that energy dissipates its greatest where there are right angles.

My second concern is the positioning of the 15,000 square foot service area platform situated 39 feet above mean sea level, supported by six, three foot in diameter pilings, with a heliport on top of the structure. This structure does not appear to be included in the proposed 25 square mile wind generation park.

The total length of the submarine cable, including the federal waters, will be 10.2 miles.

How will the digging of these cable

lines affect our environment?

How do the proponents plan to restore the sea bottom?

This structure does not -- I'm sorry. Natural sea currents are slow flowing in this area so natural restoration will take time.

The economics of this project to me is mind-boggling. The proponents should not only be required to bond the issue 100 percent, but to deal immediately with the hidden costs, which will affect all of us taxpayers.

Specifically, what will the destruction to public and private property be? We need a full analysis of the high water conditions, which exist at landfall in either the location on Shore Road or New Hampshire Avenue.

Specific construction and maintenance for the life of this project could be impossible to estimate. And, finally, the anticipated amount of federal, state, county and local dollars for the project.

Lewis Bay is a popular water recreational area. Last summer, 400 of our young and old sailors were involved in the sailing program

here. Let's just take a close look at the affect of landfall in this area will have on these people.

Thank you.

MODERATOR ROSENBERG: Thank you, ma'am.

The next speaker, Wendy Garpow, will be followed by Timothy O'Keefe.

WENDY GARPOW: Good evening.

My name is Wendy Garpow. I'm an Environmental Planner with Horsley and Witten. We are an environmental consulting firm in Sandwich. We have been retained by the Alliance to Protect Nantucket Sound.

Some of the issues I would like to talk about tonight have already been mentioned, but first I would like to reiterate a few brief points.

First, as a wind facility submarine cables will be traversing coastal land. We encourage the Corps to investigate, quantify and evaluate the cables' potential impact on eelgrass and other benthic habitats, many of which are already impacted or degraded by other development.

Second, we encourage the Corps to analyze the wind park's potential impact on migratory birds and water fowl.

And third, there have been many comments here tonight regarding the proposed project's impact on the Cape's beautiful scenic resources. We would encourage the Corps to utilize economic analysis tools, such as continued sea valuation, which can quantify the value of these scenic vistas and other intangible resources, either through proxy assumptions or through survey of residents and tourists.

Thank you very much.

MODERATOR ROSENBERG: Thank you, ma'am.

The next speaker, Timothy O'Keefe, will be followed by Roger Stoll.

TIMOTHY O'KEEFFE: Good evening.

I'm Timothy O'Keefe, a resident of the Town of Barnstable and Commodore of the Hyannis Port Yacht Club.

The Hyannis Port Yacht Club, an organization of over 300 adult members, wishes to go on record as being firmly opposed to Cape Wind's proposed project for Nantucket Sound. We view this site clearly from our houses and daily use these waters for work, recreation and feel our interests here are second to none.

The question before you is not about the region's energy needs or the proper sources -- sources or mix of sources for the generation of this energy. The issue is one of the appropriate uses for this particular body of water. There is a treasured place that is constantly used and enjoyed by countless thousands of people in its natural, unspoiled, and unaltered state. The appearance and the use we make -- the appearance and the use we make of these waters is virtually the same today as it was at the time of our earliest ancestors. This is not just a matter of good luck, but a caring and thoughtful stewardship by generations of determined Cape Codders. Hard work as in -- has ensured that regulations have been put into place governing such things as sewage outflow, fuel discharge, and sustainable fishing.

If Horseshoe Shoals falls under the aegis of the federal government, then there needs be a national set of guidelines as appropriate -- as to appropriate locations for various uses, just as in Europe where federal governments have established zones where development is permissible.

The first step in the US must be to

determine on a national scale a plan for the best utilization of our various waters. Under such guidelines and given the vast waters of land under your jurisdiction, Nantucket Sound should never be considered as an eligible location for a large-scale industrial project. It is in the heart of one of the East Coast's most heavily visited and long established recreation and tourist destinations. It is the pure ocean and the ocean vistas that lure people to these shores and onto these waters for over a century.

You have heard ample testimony over the past several months, both objective and subjective, stating the incompatibility of the wind farm with the safe, unimpeded use of this valuable public resource. We have also heard the environmental, visual and aural impact that this project, the largest in the Cape's history, will have. Whether or not you assess each and every fact or argument, there could be no doubt that you have heard a large negative response from concerned local citizens.

We don't want the sight and sound of this wind farm to spoil our appreciation of our surroundings -- of our surroundings by day or by

night; nor do we want our activities on these waters to be restricted and made more dangerous by its presence. We're opposed to -- we're opposed to exposing this fragile place to the necessary degradations caused by construction maintenance removal, not to mention the potential for environmental disaster, unforeseen accidents or acts of God.

In yesterday's Cape Cod Times, Christine Godfrey was quoted as saying, We're chartering new territory. Who can doubt that? But this is not the place for such an experiment, one that is of a type and scale never before seen. The developers have chosen this location, because they believe it is beyond the administration of the Commonwealth and local government agencies, whose environmental regulation would prohibit this project. Why should your level of protection here be any less stringent?

The same -- therefore, it is to you we turn to preserve the public's interest for the protection and of the natural environment. We urge you to prohibit all such projects and Cape Wind's project in particular in Nantucket Sound. The consequences and risks are too serious to allow them

to proceed in this sensitive place of irreplaceable beauty.

MODERATOR ROSENBERG: Thank you, sir.

The next speaker, Roger Stoll, who will be followed by Charles McLaughlin.

Sir.

ROGER STOLL: Thank you. My name is Roger Stoll. I am a resident of Osterville. I'm here just as a citizen of Cape Cod.

And the points that I want to make to the Corps of Engineers is, first, as I watch this process go on, I'm looking at the mechanics of someone going through and saying, what is an environmental impact, and we are doing all the rights things and doing the job.

The thing that escapes me is how someone can take 25 square miles of waterway out there and just heist it from the citizens of Cape Cod and all the tourists that come here every summer. This is a tourist destination. It is not just another piece of water.

Every summer we have an enormous amount of influx in tourists in the Cape and the islands, and it's because of its natural scenic beauty. And

I can't imagine someone putting a wind farm down in other national parks, or other areas of scenic beauty. It just doesn't make any sense. And what I really resent is being put in the position of being against something that is environmentally sound potentially. We don't know if it really is, but potentially as a potential and could save maybe some hydrocarbon resources. But we are told in the brochures from this organization that this is one of the few sites that they can pick. If that's really true, then there is no way we are going to save a lot of fossil fuels, because there have to be a lot more sites.

So the points I want to make are very quick:

No. 1, there have to be more than one site in the middle of Nantucket Sound, and I would urge the Corps of Engineers to look at other potential sites, because I think to have wind farms may be a useful answer to some degree for savings of natural resources, but to plunk it in the middle of something that is almost a national park seems at the height of absurdity. When I first heard it and read it the newspaper, I couldn't believe that

anybody could be so callous to even recommend it.

I looked at some of the literature that came out, and I'm again wondering why can't we look at land-based windmills as well as water-based windmill systems?

Why can't we look at multiple sites?

There is a large tower out in -- a navigation tower in Buzzard's Bay. Somewhere around that area, perhaps we could put a few towers. And I'm really puzzled by putting one tower into this area, whether we are going to get enough data to replace what the impact of 50 or so towers would be running all at the same time.

I also would urge, finally, that the Corps of Engineers please go directly themselves to some of the European governments, who have had unfavorable experience with these type of systems, and get the data themselves from those sources rather than relying on the project leaders.

That's it.

Thank you very much.

MODERATOR ROSENBERG: Thank you, sir.

Our next speaker is Charles McLaughlin.
He will be followed by Edward -- I will never get

it right -- M-c-I-L-V-E-E-N.

CHARLES McLAUGHLIN: Good evening.

I'm Charles McLaughlin. I am an attorney and stockbroker, and a member of the Alliance to Protect Nantucket Sound.

My professional background leads me to comment on a couple of things. One of your primary obligations that you touched on yesterday and today is the search for alternatives to this project. You need look no further than the Town of Hull to see their recent experiment, recently put on-line, a single tower about half the size of the tower that is present here, or proposed here, and only one tower. I invite you to contact the town manager there, who is a wealth of information, both practical and experiential, given the finances involved to put that tower up \$750,000, and they say it is about half the size of the one proposed. They are generating about \$55,000 annual income from it, give or take. I forget the exact numbers.

But my point is that with all of the financial crises that the towns and the Commonwealth of Massachusetts are facing, I would like to suggest to you that if the towns within the Commonwealth put

up only two towers each, if indeed this is a good proposal, in the abstract, if the towns were to pursue that and start generating income and given the fact that the towns don't have to worry necessarily about what little profit margin and what the private sector does, given the fact that the towns can wend these out at municipal tax-free interest rates in fours even on a 20-year bond. These are eminently viable projects for these towns to consider to generate instant income for the towns; and if the Commonwealth chose to do it on some of its property for the Commonwealth, and it is an answer that provides some very real savings, not the least of which is the protection of an absolutely valuable asset that we all enjoy and should continue to be allowed to enjoy.

The -- another question to be answered by looking at the Town of Hull project. I am going to submit, when I complete my comments, a couple of photographs. If you go to Quincy Shore Drive, if you go over to Great Hill in Weymouth, which is at the eastern side of the Fore River lookout, you can see this project very, very clearly. We happened to be visiting up there the other day with relatives,

and we didn't realize we could see it until all of a sudden it caught our attention. Coincidentally, the view from the Quincy Shore Drive area is at exactly, give or take, a tenth of a mile, the same distance as this project proposed will be to the shoreline of Cape Cod. I promise you that these units are eminently viewable.

The photograph that I'm going to submit to you for the record is taken at a distance of 3.3 miles from the Weymouth shoreline and shows this project in Hull just dominating the area, and the building being next to it with the red roof is the Coast Guard building. It's a two-and-a-half-story building. You can see how it dominates.

Related to that, we have the blessings of digital enhancement. We copied the size of that tower and blew it up to its relevant size and put it on there. You can see how truly massive that representation is, and the Alliance will be spending quite a bit of time with some professional protocols involving some unsalable photographs of digitally enhanced and in real life with reference points to show you what this is going to look like from our shoreline. It is not as represented by Cape Winds.

I have so many other comments to make, I will submit them in writing. I am vitally concerned about navigation and safety. The south end of this is a prime thoroughfare for hazardous materials going to and from Nantucket. We have all seen vessels break down and drift. We have the tugboat I owned a couple of years ago that did an estimate of damage to the lobstermen down there. Accidents happen. We are very concerned about those issues, and we are very concerned about standards that are to be applied if indeed this is going to be a national model. We would like to submit those comments in writing.

Thank you very much.

MODERATOR ROSENBERG: Thank you, sir.

Ed McIlveen.

EDWARD McILVEEN: My name is Ed McIlveen. I am a resident here in South Yarmouth. And I'm a consulting engineer particularly in the matter of cables. So perhaps you will understand why I'm taking the particular slant I am in this presentation.

I feel that it is now time to get down to at least some of the preliminary nitty gritty

engineering details in order to evaluate the feasibility of this proposed venture and their affect on the environment.

First, we need a scaled layout on a NOAA navigational chart, and I picked this number, because it's hanging up in my office, No. 13237, to give you an idea of the size on the chart of the proposed site locations of each of the 170 turbines towers;

(2) Show on the chart the route of each submarine cable connecting the towers to the seldom mentioned substations on the intermediate platforms and the route of the main trunk cables to the power grid on Cape Cod;

(3) How will the farm operators repair or replace cables that have gone faulty, because of mechanical damage, insulation failure, or a catastrophic event, keeping in mind the maze of cables, especially at the substation platforms;

(4) Will they have replacement lengths of cable on hand in the event of a cable outage;

(5) Estimated life of the farm, and who will pay for the removal of the towers in the event that corrosion or wind and tide take their toll or

they become uneconomical;

(6) I would appreciate if what you -- I suppose you would call a pro forma financial statement to show just what the whole darn investment is going to amount to.

Thank you.

MODERATOR ROSENBERG: Thank you, sir.

Thank you very much.

EDWARD McILVEEN: Thank you.

MODERATOR ROSENBERG: Our next speaker, Karen Goggins, will be followed by Francis Lowell.

Francis Lowell.

FRANCIS LOWELL: My name is Francis Lowell, otherwise know as Pete Lowell. I am a property owner in Cotuit. I have been a resident of Falmouth since 1966, a member of the IEEE and the ASME.

I don't want to repeat too much of what has been already said, because this meeting is going on pretty long, but I would like to reiterate something the gentleman on my left said, which is if Nantucket Sound is the only feasible place to put this wind farm, then there is no market for wind farms, because there isn't any other place to put

them. If there is somewhere else to put them, put them somewhere else. You know, put them off Nantucket. Put them further offshore.

If the issue is cost, and particularly the cost of cable, and I'm now coming back to the gentleman, who spoke ahead of me, if you think there is 170 turbines in the average distance from this central platform to each turbine is around two miles, you have got 340 miles of cable you are going to lay in the middle of Nantucket Sound, not counting the 10 miles to go into its bay. You could easily extend that cable out of Nantucket, south of Nantucket. We know there is plenty of shallow water out there, because many ships have run aground. If you're sinking the footings 80 feet into the bottom, it doesn't matter whether the water depth is 15 feet, or the water depth is just 30 or 40 feet. You have roughly the same structure.

But in addition, there is an issue, which also has been mentioned, but I think it was not mentioned strongly enough, which is if you are putting cables in the bottom, you have to bury the cables. In areas like Nantucket Sound where there is a lot of current, there are sand waves. These

sand waves move. You have to bury the cable over its entire length deeper than the deepest trough of the deepest sand wave; otherwise, it will become exposed as the sand wave moves. This was a major problem in the North Sea when they were laying pipelines coming in from the North Sea fields to the land. And this caused a lot of problems, and I think this will cause a lot of problems. I'm not aware of equipment that will bury cable through from the highest top of the sand wave down to, let's say, three or four or six feet below the lowest sand wave when it's being laid. So that that might be 10 or 15 feet in depth for burial of the cable at the time that it's put in.

Thank you.

MODERATOR ROSENBERG: Thank you, sir.

The Next speaker, Paul Bergman, followed by Viola Holmgren.

PAUL BERGMAN: Thank you. My name is Paul Bergman. I am an engineer with 24 years of experience in the State of Massachusetts. I have an engineering firm with about a dozen employees. I have been working in energy since 1978 in one form or another, so it gives me about 24 years of

experience.

Recent accomplishments my company was involved with were the survey, geotechnical and civil engineering of a 6 megawatt wind project up in Searsburg, Vermont, built by Green Mountain Power a few years ago. It was built adjacent to a sensitive wilderness area. It's environmentally sensitive, similar to the Nantucket Sound site. And today that project is visited by school children from the area, and it's generally admired and pointed to as a source of admiration by the local residents.

The Hull High School project that was mentioned several times, as the Hull project, in 1984, I was wind program manager for the State of Massachusetts Energy Office. And, unfortunately, one of the few claims to fame during my three years there was a 40 kilowatt wind turbine in that very same location that I oversaw the installation of at the Hull High School. Hull Municipal Light was involved.

Interestingly, both projects had significant operation -- or opposition, that is, before they were built; and just as interestingly, both of those projects today, the new machine at

Hull High School that has been referred to several times and the Searsburg, Vermont project, environmentally sensitive areas, are both admired by abutters and residents. As a matter of fact, the people in Hull were asking the light plant when additional turbines are going to be installed.

I had the good fortune in July of last year to attend a European energy conference in Copenhagen. And more than one day of conference was dedicated to offshore programs that European countries are involved with, more countries than I can mention that are involved in: United Kingdom, Sweden, Denmark, the UK, Holland, Germany. They all have operating offshore projects, and they have more projects in the wings.

I would like to suggest to the Corps if you have good objective engineers that you not only look at all the issues associated with this project, but you might try to learn from projects that have already been done. Projects like these overseas where you have operating experience.

I have a copy of an Environmental Impact Statement. It's actually a summary for one of the Danish projects. And interestingly, listening to

the people speak here, so many of the issues that they have brought up as issues are mentioned in the Danish EIS. So their issues of high population density, high real estate cost, vessel traffic, tourism, fishing grounds, et cetera, are mirrored at these projects overseas.

I would simply suggest that the Corps of Engineers, like good engineers, take an objective view of this project and look at what has been done successfully overseas.

Thank you.

MODERATOR ROSENBERG: Thank you, sir.

The next speaker Viola Holmgren, followed by Cate Gulliver.

VIOLA HOLMGREN: Good evening.

I'm Viola Holmgren. I live in South Yarmouth. I have lived on the Cape for about six years now. I am also a business owner here on the Cape.

I have done some research on this topic on primarily through the Internet, and some of things I have just found out is that the wind farm located in Nantucket Sound is not a good thing.

And here are some of the reasons why,

and I'm quoting these from the website: Irreparable ecological damage; insignificant and unreliable contribution to our energy needs; small and uncertain pollution savings, and advocates for wind farms like to use the phrase, NIMBY, not in my backyard, as a tool to suppress questions from people.

The term NIMBY is denigrated to our basic instinct to preserve our environment. The website also specifically discussed the negative wind farm effects on noise, safety, tourism, jobs, house crisis and the effects on birds.

The names of some of these sites are: Misplaced wind power; country guardian; the case against wind farms; the campaign for the protection of rural whales. I urge you to review them.

In closing, Nantucket Sound is a natural gift to this country. It is something to be admired, appreciated, and most of all, respected. It should be preserved for future generations. People visit Cape Cod not for a wind farm, but to enjoy the natural beauty of Cape Cod and its waters. A wind farm located four miles off the coast of Yarmouth in Nantucket Sound would be a death to the

beauty of Cape Cod. Saving it is patriotic.

Thank you.

MODERATOR ROSENBERG: Thank you, ma'am.

The Next speaker, Cate Gulliver, who will be followed by Richard Copley.

Richard Copley.

Richard G-E-G-E-N-W-A-R-T-H.

RICHARD GEGENWARTH: Close enough.

MODERATOR ROSENBERG: I can spell it correctly.

(Laughter.)

RICHARD GEGENWARTH: Hi. I live in Yarmouthport.

MODERATOR ROSENBERG: Please, can you state your name for the record.

RICHARD GEGENWARTH: The name is Gegenwarth, Richard Gegenwarth.

I've boated and sailed in Nantucket Sound for 52 years. Last summer I sailed 40 days out of Bass River, Hyannis, Osterville, half the time out in that general area. I'm a retired engineer physicist. There are -- and I've had a long interest in energy when I was in the Corps of Engineers at Fort Belvoir. I was very effective in

reducing the energy requirements along the housing for offices and enlisted men off-site.

So I'm, you know, oriented that way. I had a company, H and R Solar Home designing energy-efficient houses with solar hot water systems; and as an engineer and researcher at IBM, I followed my colleagues in the development and research of silicone cells and the off-line efficiencies. And there are lots of ways of renewable of ringing energy out of the universe.

To put wind farms up to this extent, there is a lot of work to be done. There are issues of sound.

For example, I don't know if you took a walk around Cape Cod on September 11th, but it was like being up in the woods of Maine. It was absolute quiet. There were no planes taking off in Hyannis. There were none taking off in Logan, and the sound level was really eerie. I was walking on the beach and just having that background level of noise eliminated. When you ring 420, quote/unquote, megawatts out of air, it's not going to come out without making some noise, and it's going to create a background noise over a good portion of the Cape.

That's got to be looked at.

The effect ergonomically of one against the other, you put 170 windmills out there, and they are going to get in each other's way. People can do studies on computers and in wind tunnels to see what the effect is and the orientation in the arrangement of them to get efficiency. The other is the 420 megawatts stated is under some ideal condition. Today, I'm sure they wouldn't get 120 with the wind that was here today. Yesterday, they probably had to throttle it back, because the wind was too strong. And if someone has the information of what the wind velocity and directions are out there, day, by day, by day over the course of the year, and average it over 10 to 20 years, then they can do a proper study in Harvard and enter into testing.

The other thing you have got to look at pulling all that energy out, you are going to change the temperature of the air. You may be causing more fog locally. That section may be very foggy a lot of times when there is no fog anywhere else. You've got to look at the temperature/humidity situation that is going to be created. You're certainly not going to sail through there.

It's a funny thing, but last spring I bought a new boat, and I named her Dulcinea, because I'm somewhat of a Don Quixote, but I didn't plan on sailing through a wind farm. I'm not going to joust with those windmills. They are huge. No one in their right mind would want to sail through an area with 510 spinning blades, because if one of them let's go, you've had it. So, you know, that is going to be an area that nobody sails on boats.

MODERATOR ROSENBERG: Thank you, sir.

RICHARD GEGENWARTH: Thank you.

MODERATOR ROSENBERG: The next speaker, Gregory Egan.

Chris Neill.

CHRIS NEILL: My name is Chris Neill, and I'm Chairman of the Cape Cod group of the Sierra Club. We have about a thousand members on Cape Cod.

I have got a couple of comments. We are taking a very close look at this project, as we would if it were anywhere, because it has a potential to significantly affect natural resources in the municipal water here on Cape Cod, but what I really wanted to talk about is sort of what we would like to see come out of this process, and I think

right now we have no guidelines for siting a project of this nature. We really don't know what we are up against. We don't know. We don't have any data to speak of in North America on what offshore wind farms will do.

So what I would like to see come out of this process is a way to move forward with good public comment, bringing data on this issue for developing guidelines, zoning, ecological zoning like we have for offshore enhancement development where we can say, no, these areas are off limits, and these areas are appropriate, so we don't have to -- so we can move forward, because we really do have to move toward more energy; if we come out of this process, and it just closes the door, we haven't gone anywhere. We haven't been honest.

So I would like to have you think about the way we structure the process, and a couple of the things that I need to be in that process are a very, very detailed look at alternatives.

Another thing is a very, very good and thorough assessment of your own situation, because they experience this you don't have to start from zero, I would like to see some of that information

as you come across it posted up on the website so the rest of us can evaluate it.

I do have a couple of things to say about natural resources that we are extremely concerned about. We're concerned about the wildlife, the fish in those shoals are very important to the fish habitat. Very important for marine turtles and Gray Seals, which are sort a southern range here. That area is extraordinarily important as an interim ground for a large variety of sea ducks, black stovers, whitening stovers, surf stovers, long-tailed ducks, red tail loons, common loons, probably a significant fraction of the entire aviary population of some of those species. They are residents of a significant portion of the nonmating season. That has to be looked at. And I really think it's going to take some time to figure out what those numbers are and what the risks of strikes, the risks under foggy conditions, the risks under certain normal conditions, and depending on how long the birds are there, how many towers are there.

On other fronts, we are concerned about the long-term viability if something were to happen

and if they go bust, who suffers and who pays the cost. We're concerned to bring into this process some benefits for Cape Cod for having this thing here. That is, you know, if we don't see on Cape Cod any benefits in energy cost then I think that is a negative. I think that those communities, those places going out on a limb and suffering the negative impacts associated with any kind of energy project need to see some of the benefits, and we need to think very carefully about how we are trading energy for energy, as we are building, you know, plants that replace the newest, cleanest technology, we are not gaining very much. If we can setup a system where the new technology, the clean renewable energy is replacing energy that is coming from coal, maybe not in New England, but upstream in our air space, when we see some real health benefits and some real air quality benefits. Those will have they have to surveyed and very carefully done.

So I think those are some of the things that can move us forward for a bigger regional picture of -- even a global picture if we were less dependant on fossil fuels, but we have to see this sited in the right place.

MODERATOR ROSENBERG: Thank you, sir.

The next speaker Joe Remillard.

Frederick Wrightson.

FREDERICK WRIGHTSON: My name is Frederick Wrightson. I am a resident of Osterville and the Town of Barnstable.

We have heard a lot of things here this evening, and we have heard about the misrepresentation of scale in photographs, and we have heard about we should go look at Hull, because Hull has an operating windmill, yet we have been -- we weren't told that that windmill was one half the scale of the proposed windmill here. So I think that we as taxpayers and citizens are relying on the Army Corps to make sure that the correct facts are taken into consideration and evaluation -- in evaluating this project.

I have a past association with an alternative energy company that about eight years ago did some research into windmills. What they found was that windmill farms are not economically viable, unless there is a government subsidy. So the question is, if this a government subsidy , who pays that? And of course, the answer would be, we

the people, the taxpayers.

So does that mean that wind-generated energy is really more expensive than normally produced energy via hidden costs. I don't know whether this is within the scope of what the Army Corps is supposed to do, but it has been asked tonight. I think that we need to know the true economic parameters within this project. Scales are important to the fact that we need to look at them.

But I guess what it comes down to is, I would want to ask the Army Corps to make sure that the impact on those windmills on our migratory bird population is considered; that the impact of the windmills on commercial fishing is considered; that the impact of the windmills and the large cluster of fog horns that will be running in the foggy season what effect that will have on the bird, fowl population, and the impact of the sounds of vibrations of the windmills on native fish and bird populations.

And finally let me say that if this were a request to install oil drilling rigs, the proposal would be required to post the bond to assure that these would be removed should the proponent decide

to vacate the project. I think we need to make sure that the taxpayer is not burdened with such removal should this happen.

Thank you very much.

MODERATOR ROSENBERG: Thank you, sir.

The next speaker, Peter Kenney.

PETER KENNEY: Good evening.

My name is Peter Kenney.

I came from the Vineyard today where I worked, but I have been flying back and forth from Nantucket this week. I have been flying over Horseshoe Shoals. I have also been hearing that it is not in anybody's flight path. I would encourage the Corps of Engineer to be rigid in its discipline. You say, how much? Prove it. You say, how high? We are asking, how wide, how many, how often, how long, why, how much?

There has been an awful lot of information disseminated about this project, and if half of it is even partially true, I would be amazed.

For example, the only possible site. And then we're told about wind farms operating successfully in all these other places. Two weeks

after one of the principals of this project on this stage said, no, we couldn't even look at any other location within Nantucket Sound, a company in Texas announced they are looking at something south of Nantucket nine miles away from the site.

I think the Corps of Engineers would be entirely justified in considering the viability and permissibility of this project from more than just an engineering perspective, more than just a navigational perspective, more than just an aviation perspective, because the value of this project has been pinned on certain nice things like saving us all money and generating clean energy.

The previous speaker is the first person I have heard articulate it carefully. Since this project relies heavily, I presume, on a federal subsidy for kilowatt-hour generated energy, that means we are all paying for it. So you can't say that this is going to cost, let's say, five cents per unit instead of six and a half cents per unit. The one and a half pennies will be paid, and we will pay them all of us.

Furthermore, does Cape Wind consider that it will be eligible for any federal energy

generating tax credits for generating non- or less polluting energy, and do they intend to sell, trade and swap or simply move those tax credits, let's say to Canal Electric, who would then be allowed to expand their generating capacity and poison all the little children. There is a lot going on that has to be asked, that has to be questioned.

Now, I have a proposal tonight for an alternative use for Horseshoe Shoals, and I think I have the same right to make this proposal as they do. A far more immediate problem for those us on the Cape and Islands is the alarming rate of disappearance of unsullied shoreline, undeveloped, unbuilt. Now, we see these trophy homes all over the place.

So here is the deal. I'm going to sink 180 22-foot diameter concrete piers covering 25 square miles of Horseshoe Shoals; and I am going to build energy-efficient luxury homes on them, complete with their own discreet heliports, boat moorings, all kinds of alternative energy, you know, solar, tidal, plumbing, you name it. We'll be off the grid. We won't be polluting. We won't be bothering. We might have a few lights, a few fog

lights. And what makes this profitable is, I don't have to pay a nickel for the property, because it's public. It's free. It's there. And you know ultimately the reason I'm going to do this is because I want to. Okay. Can you stop me?

MODERATOR ROSENBERG: Thank you, sir.

Our next speaker, Elizabeth Argo.

ELIZABETH ARGO: Good evening.

I am Liz Argo of Orleans.

Last night I was a panelist at the Harwich Middle School that the high school students put together, and a lot of the fears that we have heard brought up here tonight were refuted. A lot of questions were answered, too. I know you have pretty much heard it all tonight. We know that the need for clean, renewable energy is dire, and the proposed wind farm it's only the beginning, it's a beginning that we need. It's only a drop in the bucket. It's a drop in the bucket that we're going to need. Some of us think that a horizon's graceful windmill alignments to clean alternative energy is a dream come true. This is from Orleans residents, who grew up watching sunsets behind a wreck of our harbor, a great hulky rusted skull, which was a

popular postcard for our tourists here on the Cape.

Orleans is also the home of the Marconi Cable Station, which I'm sure met its resistance back in the -- probably 1800s when it was run, but now it's a museum, and it's visited by our tourists.

I trust the agency, such as the Army Corps of Engineers were responsible for this careful review process, will appreciate that many Americans who were born and raised on Cape Cod have an ardent desire to see this project through to its fruition.

Thank you.

MODERATOR ROSENBERG: Thank you, ma'am.

Next speaker, John Healey, Marston Mills.

Allen Goddard.

Matthew Palmer.

Karen Goggins.

Cate Gulliver.

Richard Copley.

Gregory Egan.

Joe Grennell.

It seems to be it for those who have signed in.

Is there anybody here who has not

spoken, who wishes at this time to go on record?

Ladies and gentlemen, Mrs. Godfrey.

MRS. GODFREY: Well, thank you for your patience, the people who are still here at this meeting tonight.

You have heard a lot of comments and statements, and I want to assure you that we will carefully consider all the issues that have been brought up today as we move forward with this Environmental Impact Statement.

The record will be open throughout the preparation of the EIS. However, to ensure that the outline for the scope is as complete as possible, if you could forward me any additional comments you have in writing within the next 30 days, that would be very helpful.

All written comments that we receive will have equal weight to the oral comments that we receive tonight.

Finally, before I conclude the session, I would like to extend my appreciation to the Town of Yarmouth providing the school to have this meeting and the Yarmouth police for their support. And also all of you who took your time out of this

day to come here and give us your comments.

Thank you very much. Good night.

(Whereupon, at 9:35 p.m., the public
scoping hearing was adjourned.)

S T A T E M E N T S

MICHAEL DEELEY: My name is Michael Deeley, which is D-E-E-L-E-Y. I live in Osterville. My address is P.O. Box 397, Osterville, Massachusetts 02655.

I'm a citizen and have been a resident in Osterville for 23 years, and I'm speaking on behalf of myself and my family, also on behalf of Mr. and Mrs. John McGraw, who unfortunately cannot be here and their children who number some -- and grandchildren number some 15 people, as well as Sam and Geri Gerson, who also cannot be here this evening who have children and grandchildren.

We all sail. We all use the water a great deal. We all actually live on the water and therefore, of course, pay substantial taxes.

We've all come to Cape Cod, because it is a natural, beautiful place, because it gives unrivalled sailing opportunities and a great sense of calm and pleasure.

Any intrusion of the type described by Cape Wind Associates, involving towers 425 feet high at their highest point, must be an objectionable

change to our environment.

Of course, it's easy to argue the point that this is a green activity, but greenness and environmental pollution also involve visual pollution and social pollution and the imposition of 170 of these objects into a natural place like Nantucket Sound is environmentally bad.

I don't even hear that the benefits of the electricity generated will go exclusively to the people who are going to have to put up with the ugliness and the dangers involved with these constructions.

I don't hear any bonds being put up to guarantee the removal of these machines in the event that the business project of Cape Wind Associates fails. If it does, who pays for the removal of these objects?

It seems to me to be a very exploitative activity which has chosen a beauty spot to pollute. We all object very, very strongly.

Thank you.

ALLEN GODDARD: My name is Allen Goddard, G-O-D-D-A-R-D, 25 South Street, Hyannis, Massachusetts 02601.

I'm going to start. As part of the scoping process, I ask the Cape Cod Commission or another agency to prepare a reliable estimate of population growth in this region, in particular, Mashpee, Barnstable, and Yarmouth. The potential numbers for 2025 and 2050, would be important.

I believe authoritative studies predict a 50 percent rise for both the planet and the United States in 50 years.

A similar spike in our local population would see our grandchildren struggling with levels of crowding, congestion, and structural decline 50 percent greater than those currently overwhelming us.

And when our grandchildren, looking for a time of release and quiet reflection, turn to the seaside as we do, they will encounter a 25-square-mile forest of 170 42-story electric turbines with hazards lights flashing and blade tips hissing by at 170 miles per hour.

Their response to us will not be thanks for a statistically insignificant amount of renewable energy. It will be why did you have to wreck the ocean too?

The highest value of Nantucket Sound to this region and this country is as open space, a marine sanctuary protected in perpetuity. This should be the preferred alternative recommended by this process.

The amount of electricity generated by this plant will be small in absolute terms, essentially of symbolic value at this point. It will only briefly delay painful energy decisions this country will have to eventually make.

These decisions will include serious energy conservation and restructuring car and oil industries predicated on profligate consumption as well as many others.

The review participant should, in the alternative, develop a scenario of local conservation options which could deliver some or all of the savings which the proponents claim for their facility. We could then go on to our eventual national energy day of reckoning with Nantucket Sound intact, not wrecked and to no purpose.

Finish.

Thank you.

SUSAN DRINAN-BOWES: Susan Drinan-Bowes,

D-R-I-N-A-N - B-O-W-E-S, for Representative Ruth Provost, 16 Dexter Avenue, Sandwich, Massachusetts 02563.

The Representative is tremendously in favor of potential sources of renewable energy.

She looks forward to hearing the results of the scoping process, including public commentary, along with environmental and socioeconomic impact studies.

KAREN GOGGINS: My name is Karen Goggins, G-O-G-G-I-N-S, 17 W-H-E-L-A-N Road, in Harwich.

And my concern is with the fact that the Cape is a major migratory flyway, and the American Wind Energy Association in Washington, D.C., which is a proponent of wind power, they state that higher levels of mortality have been found by some studies in coastal locations with large concentrations of waterfowl, and it seems appropriate -- and it seems appropriate to use greater caution in siting wind projects in such areas of high migration, and they go on to say that this is an area that still needs more study. They don't -- end quote.

They apparently don't have enough data

to let us all know how many waterfowl are going to be impacted.

So, my question to the Corps is how can they conduct an environmental review when a proponent, an organization that is a proponent of wind power says there isn't enough data out there yet to have a review?

And my final comment is that Denmark and Western Europe has been mentioned as a place to go to to see how wind power projects are doing, and my only comment is that Western Europe has a notoriously abysmal record when it comes to protecting wildlife of all sorts. There isn't much of any there any more because of that.

So, it would seem to me that Denmark and Western Europe is not a great place to look.

MIKE LANAHAN: My name is Mike Lanahan. The spelling on the last name is L-A-N-A-H-A-N. My address is 49 Shammass Lane, S-H-A-M-M-A-S, Marstons Mills, Mass.

I'd like to go on the comments and -- as a favorable proponent for the Cape Wind Project as a private citizen, and I'd like to -- I'm speaking on behalf of the project.

The reason I'm doing that is because I also work in the power industry. I work in the fossil fuel industry, so I would suggest to the Army Corps of Engineers that they look into the Freedom of Information Act, and they acquire all the data that they need on the combustion of fuel, fuel oil, No. 6 fuel oil and also on coal to see what the health impacts are and the pollutant impacts are from the combustion of those two types of fossil fuels.

I know from the work that I do that we emit millions of tons of carbon dioxide, sulfur dioxide, sulfur trioxide; and these pollutants simply can't be healthy, and they're done on a daily basis. They're done on a yearly basis, so they're quantified every year in annual reports.

I think that there's got to be a better way. So, I look at the Cape Wind Project as a beginning. It's a start somewhere.

The technology, the resource is free. I know that 97 percent of my operating budget is for the cost of fuel oil, and it's a tremendous amount of material that's burned during the course of the year and for the production of electricity.

Horseshoe Shoals was selected because of its -- the data results provided positive electrical generation capabilities. It also had shallow waters that allowed the infrastructure to be placed out there and for the electrical cables to be brought ashore.

Having friends who have also done some study in the marine research, I can argue with all the commercial fishing interests that if they're so concerned about the industry, the fishing industry, I'd ask them why are we still using dragging technology?

Dragging technology is nothing more than taking an iron rake and going across the ocean bottom, so you're destroying the habitat. If there's no habitat for bait fish, there's no food for predatory fish.

I'd also argue with the Chambers of Commerce in the towns of Barnstable and all the other towns that have opposition against those type of projects saying that we're ruining the aesthetic value of Cape Cod.

Being a resident down here in the past 15 years, titled a wash-ashore, I'd ask why the town

councils didn't -- why didn't they stop growth? Why didn't they act more responsible with the Land Bank Initiatives years ago? Why did they allow this growth to go unchecked, strip malls and development of Hyannis; the traffic pollution that we're facing now; the pollution that we face because of nitrogen loading and eutrophication of all our estuaries and bays from septic tanks that are all located so close, homes built so close to all these rivers and bays; the size of these trophy homes that are all posted up along the coast; the audacity of people to come in, take a one-million-dollar house and knock it down and build a ten and 15-million-dollar mansion on that site on that piece of property. Why isn't that -- why isn't that questioned? Why is that allowed? It's all for financial gain.

I just see a lot of wrongs in it. I don't think that the -- the Cape Wind Project, because all the electricity, the 170 megawatts, the 420 megawatts that is going to be produced by this particular project is all going to be sent out into the New England Power pool grid. Those are the rules that are set up by the Federal Government.

If you or I put a windmill in our

backyard and we could produce, you know, 10 kilowatts, that's going to be sold out onto the grid if it's extra energy, but the regulations have to be looked at that the output from these projects, from this Cape Project has to come back to satisfy some of the Cape Cod citizens.

If the electrical load on Cape Cod peaks on at 400 megawatts in the worst summer day, the worst winter day, and the Cape Cod Project, the Wind Energy Project can produce 170, 180, 200 megawatts, depending on the various wind speeds and wind days, we can still defray a lot of the cost of that.

Any of the new green alternative energies are going to be a starting point. They're not going to displace all the new combined cycled gas turbine technologies that are on the market today that are being built on the New England Power pool grid.

There's been over 3,000 megawatts of new capacity put onto the New England Power pool grid within the past 18 months. Within the next 18 months, there will probably be another 3,000 megawatts of new capacity coming onto the New England Power pool grid, and that's all gas

turbine technology, combined cycle gas turbine technology.

You cannot permit a central utility station anywhere in North America. You can't put a coal plant up. You can't put an oil plant up. Gas is the game today. So they're putting everything -- they're putting all their eggs in one basket.

You have to have diversification in your energy portfolio, just like you or I have to have diversification in our financial portfolio. I would ask the Army Corps of Engineers, again, go back, go to these central utility stations, these fossil fuel stations, use the Freedom of Information Act to gather all applicable data that they can find to show what the health consequences are, the environmental consequences are, and anything else that just might come into play.

I guess that's about it.

RICHARD CRAWFORD: My name is Richard Crawford, C-R-A-W-F-O-R-D, 84 Cranberry Lane, South Yarmouth, Massachusetts.

Cape Cod resident for 40 years, an avid boater, businessman in the area, electrician, and I

just wanted to go on the record saying that I'm for renewable energy and all, but to ruin Nantucket Sound for this purpose is ridiculous, I think.

There's plenty of land-based places on Cape Cod. If Cape Cod is the place, why not use Otis Air Force Base? Why not when we cap over our dumps, use the dumps. Put the windmills onshore. I don't have a problem with windmills. It's just Nantucket Sound is the wrong place.

And I was wondering if anybody investigated using the tides and the canal for renewing energy.

That's about it.

DENNIS DONAHUE: My name is Dennis Donahue, D-O-N-A-H-U-E, 68 Ridgewood Ave., Hyannis, Mass. 02601.

I'm a commercial fisherman. I fish out to that area of Horseshoe Shoal, and I know when them towers are in there, I won't be able to fish the way I do now.

I think that with the tidal actions, through the towers, it's going to scour that bottom. It's going to make big gullies in there. The shoal will never be the same.

That's it.

VOICE: Tell them about your gear.

DENNIS DONAHUE: I tow a net. I tow an trawl with netting doors. The net's like 70 feet wide with ground cable up around 140 feet wide, and that isn't really the problem. It's -- the problem is that there's always like a 3-knot tide running across there; so, even though you might set out and think you're going to go a certain way, by the time you get a quarter mile down, the tide's got you going another way, and that's where the towers would be in my way.

I guess that's it.

Thank you.

CATE GULLIVER: My name is Cate Gulliver, G-U-L-L-I-V-E-R, and my address is P.O. Box 739, Hyannis Port, Mass. 02647.

The concerns that I have about these towers are what will the affects be on bird life, particularly migratory birds and the effects on marine life, again, migrating fish and other forms of marine life that inhabit those waters or pass through them.

I'm concerned about the effect it will

have on commercial fishing, in particular, but also recreational fishing and other kinds of recreational boating.

With everyone else, I'm concerned about the visual impact, and if there's such a thing as visual pollution, this certainly qualifies.

I wonder if there's -- what kind of studies have been done on how these towers will -- how are they being built to withstand 100-year storms, 500-year storms? Is there any kind of data that tells us how these kinds of wind turbines can withstand storms at sea?

In the Town of Barnstable, you can't even put up a garden shed within 100 feet of a wetland. You have to consider a 500-year storm to do so, and here we're putting these 50-story turbines out in the ocean without perhaps any concern about what happens in a storm or just how they get eroded away in the marine environment over time; and when they do collapse, who's responsible? Who cleans up the mess, et cetera?

I'm concerned about the economic impact on Cape Cod tourism and the impact on the cultural heritage of Cape Cod and the islands.

I think Nantucket Sound is a natural resource for the country. We have the Cape Cod National Seashore. We have the Sound as part of that whole environment, and it shouldn't be turned into an industrial site.

Let's see. Why can't it be put on land? Have alternatives been looked at? If it needs to be on the Cape, why couldn't it be put at Otis Air Force Base or someplace like that; and, in fact, why does it have to be here anyway if we don't -- we don't need -- this electricity that's going to be generated from these wind turbines will not benefit the citizens of the Cape.

And I would propose that all citizens if they're concerned about the use of dirty fuels start to reduce their use altogether of electricity and fossil fuels in their oversized cars, rather than putting up wind turbines. We can all live more simply and do with less, rather than destroying our natural environment.

I'm concerned about how it will affect aircraft in the area. We've got -- that's enough.

BRUCE WILLIAM GIBSON: Bruce William Gibson, G-I-B-S-O-N, No. 2 Post Office Square,

Harwich Port, Massachusetts 02646.

Having first heard about this project, like many, I had some fears involved. I've always considered myself a person who wished to have a better quality world.

I went to school at Salem State College. There I first met Ralph Nader, and he was in the area to clean up the rivers that were polluted in Salem and Peabody from the chemicals that entered the rivers by the tanners and whatnot. It was nice to see how the energy of people produced a cleaner environment in a very direct way.

Living on the Cape -- I've been here since '61, summered in the '50s, lived here since then -- I always looked at the Cape as virtually being ecologically pure. We noticed that obviously the tourism has created a lot of environmental difficulties, but basically the Cape's a clear area.

In some respects, we used to joke about the chemicals that floated across to us from New York and New Jersey created some beautiful sunsets, but it was simply, I think, in that time just a jestible [sic] -- jesting kind of a reality. And here I see with the wind farm, we have a

potential of being the end of the line of the air coming across the country where we receive the negatives from fossil fuel energy producers to do something as a statement to say we get your mess, but we're not going to add to it.

Where anything we produce in this region obviously floats to the east, to over international waters to other countries, we could at least do things that would lessen the impact of fossil fuel burning.

I have been a president of the Harwich Chamber of Commerce four years over the past 20 years, one of the organizers after the Chamber died in the early '80s. We have always been acutely aware of tourism and how it impacts our local community.

Harwich, we believe, is a destination point for -- on Cape Cod. Let's face it, the Speaker of the House of the United States of America chose to live in Harwich Port. Many of the country and world's people reside there from time to time.

But we who live there on a year-round basis feel that this is an opportunity right off of our shores to put up these majestic, beautiful

icons, in my opinion, to say that we're doing what we can not to continue to kill the planet earth, and it's really that simple.

I understand the fears that I've read in the newspapers I've seen at meetings like this of people who are afraid of progress. They're afraid of positive movement, because they think they are going to lose. If it was possible for these people to get outside their fears and take the bigger look from outside the box at how good this project can be, can be, then they may lose a little bit of that fear.

The Harwich Chamber of Commerce, as opposed to what one of the speakers said tonight, took a vote and did not oppose this wind farm.

What the Harwich Chamber of Commerce said, long before it was fashionable, that there is not enough information. It sounds good. There seems to be factual evidence that it will be good, but all the tests are not done. All the studies are not done.

The opponents seem to come out of fear-based arguments, supported by big money, for personal gain.

I don't understand where certain speakers have said public governments and private business organizations and associations of fisherman and whatnot have come out opposed to something that they do not know what it is.

It's not mentioned that the fishing boats that are accepted as owning the ocean weren't there 400 years ago. Who gave them the right to own the ocean in Nantucket Sound? Who gave them the right to ruin the seabed of Nantucket Sound so that it no longer filters out the nitrates that the people onshore continuously pour into Nantucket Sound.

They talk about the pristine Nantucket Sound. Biologists and naturalists have shown us and proven to us that it's a garbage dump underneath the surface of the ocean, and I don't mean garbage of floating paper and tin cans, but the human waste that is being -- that is entering into Nantucket Sound because the natural filtration system that the draggers have ruined -- excuse me -- the filtration system that was there prior to the continuous dragging of the ocean floor is now no longer there.

What they don't understand is that the

175 towers that would -- could be built there would, in themselves, be 170 ecosystems that would produce fish, that would produce bigger fish that would produce bigger fish, and they would also allow the natural filtration system of the ocean floor to rejuvenate and regenerate itself so that that, in itself, would help the nitrates that the humans are pouring into the ocean by filtering out those nitrates in a natural way.

It's mentioned that boaters might crash into these towers. Has it been mentioned that these same boaters are able to navigate small channels without smashing into each other? Do they notate that they're able to back into and come out of very small boat slips without smashing into them? So -- whether it's foggy conditions or not; so, whereas these towers would, in essence, be notification to boaters that there are shoals in this area. They would aid in the navigation and the detection for boaters that you're in a dangerous area, but it would also give them a place to harbor in the times of storms.

It's mentioned that draggers could not fish these areas even after the towers were built.

Well, I don't know many draggers that are more than a half a mile wide or a third of a mile wide, because that's how far apart these poles are.

The tremendous potential of these towers to be additional power producers in the future, even potential sites for water desalinization that could also be brought back to Cape Cod, these are just potentials that are down the road, but they're also very good potentials.

People talk about why here? Why now? If they believe NASA, if they believe other federal agencies that have done massive research on where the wind is on planet earth, they will find out that this location of Nantucket Sound and even slightly to the east where -- off the shores of Harwich are the best areas for wind-generated power.

They say put it out in the deep ocean. Well, unfortunately, the deep ocean is not the place for wind generators because of engineering problems of trying to have monopoles go 80, 100, 150 feet below the ocean. It's not as engineering possible as in the shoal area of Nantucket Sound.

Who owns Nantucket Sound? Do the boaters? Do the people who happen to have the money

to live on the shore? Do the people who own marinas? I think it's the people of the planet. The people of the planet have the opportunity to start producing fossil -- foss free -- excuse me -- fossil-free generated energy now, here, after the proper studies and permitting is done.

It's talked about the catastrophic problems that have been caused in Europe about collapsing of windmills. There are over 2,300 windmills, wind-generating windmills in production, in operating, producing energy in the world today, and two towers have collapsed because of wind shear in Europe. Two out of 2,300, I wish somebody could produce an automobile that was that good. I wish somebody could build a house that was that good, or I wish somebody could build a toilet that was that good.

It's just unbelievable that the opposition to a project so pure like this could stoop to the levels that they've stooped to to make it sound like a tragedy.

The pristine waters of Nantucket Sound -- look below the surface. It's not pristine. The devastation that has gone on onshore by human

beings, unbelievable and now they're pouring their nitrates into the ocean where a wind farm like this could begin to help solve those problems as well, not just producing fossil-free fuel.

People talk about automobiles, yeah, do something about the automobiles, but don't keep building more gas, oil, and coal-generating plants, because guess what, Mobil Oil, themselves have said that in about 40 years, we will virtually have depleted the fossil fuels that will be able to power the plants. What then? Are we going to start building windmills then?

We have to start now. We have to start somewhere. Why not start in the best possible area for wind-generated power. That's what I believe this project has a chance to offer.

I could probably go on and on and on, and at some time I will, but somebody else is waiting to speak, so I thank you very much.

ANN TRAER: My name is Ann Traer, T-R-A-E-R. My address is 27 Stoney Cliff Drive -- excuse me -- Road, in Centerville, Mass. 02632.

And I share a lot of concerns that have

been raised tonight. However, one thing that occurs to me there seems to be a lot of time and effort that will go into this analysis, something that it seems the majority of residents here are somewhere between mildly to vehemently opposed to the location. Could our time and efforts not be better spent moving onto a different location, one that is less contentious?

That's about it. Thank you.

SUBMITTED WRITTEN STATEMENTS

Written Statement of Thomas R. Hoppensteadt

7 March 2002

US Army Corps of Engineers

Attn: Mr. Brian E. Valiton

New England District

696 Virginia Road

Concord, MA 01742-2751

Dear Sir:

Greetings! The following comments and requests for environmental information pertain to the proposal by Cape Wind Associates to construct, maintain and operate structures on Horseshoe Shoals for the purpose of generating electricity. It is hereby requested that all informational requests herein be thoroughly addressed as part of the review process for said proposal. Specifically, these comments need to be addressed through credible scientific studies, and all findings must become part of the Environmental Impact Statement for the proposed wind farm.

When it comes to projects that present a potential for significant environmental impact, as

this project does, it is hereby recommended that a precautionary principle be applied. Namely, err on the side of caution providing that the environment is not harmed. This is particularly important wherever scientific information is insufficient to determine a potential for an impact. It must be incumbent upon project proponents to prove beyond a reasonable doubt that no significant environmental impact will occur. It should not fall upon opponents or other interested parties to show that an impact is likely to occur. This approach shifts the burden of proof to proponents, where it rightfully should be, and releases the public from onerous requirements of identifying impacts from something that is largely exploratory or unknown. A precautionary approach also requires that in the face of uncertainty the proposal be denied or action postponed until reputable information is presented.

In terms of specific information and potential impacts, it is hereby requested that proponents address the following:

1. What biological species inhabit or use Horseshoe Shoals: infauna, epifauna, plankton, nekton, marine mammals, and

avian species.

2. How much habitat (percent available on Horseshoe Shoals) for each of the species that inhabit or use Horseshoe Shoals will be impacted by construction and/or operation of turbines, generators, towers, foundations, cables or any other parts of the project?
3. If the project is permitted, will more than 25 percent of suitable habitat on Horseshoe Shoals for any specific stock or species, be adversely affected by any part of the project? If so, which stock or species and how will proponents mitigate these potential impacts?
4. Proponents must determine if any species that inhabits Horseshoe Shoals are, due to low vagility or other biological constraint, genetically unique stocks that warrant specific protection measures. Specifically, are there genetically unique stocks of fish (shellfish or finfish) that use Horseshoe Shoals, and if so, what

impacts will these stocks incur from the construction, operation, maintenance, abandonment and/or removal of the proposed structures and infrastructures.

5. How will marine currents and nutrient flow, in and around Horseshoe Shoals, be affected by the proposed project?
6. How will viewsheds from Cape Cod and the Islands be impacted by the proposal?
7. How will avian flyways, feeding areas, and resting sites be affected by the proposal?
8. How will navigation by vessels (large and small) and airplanes be affected? Include specific details regarding changes in aviation flight patterns and the land-based human communities/neighborhoods these adjustments may affect.
9. Should economic viability wane, how will the responsible parties ensure the maintenance and environmentally sound removal of the complete facility?
10. What contingencies exist that protect

the public from becoming responsible for a failed project given unforeseen events?

11. Do economics dictate the necessity for such a large project? If so, why?
12. What is the profitability of an alternative project that phases in the entire project over tens of years such that environmental and economic (E&E) impacts could be studied and better understood prior to subsequent installations? For example, construct 25 turbines, and monitor their E&E impacts for 10 years. Given success of the initial installation, construct and monitor 50 more with similar monitoring constraints, et cetera.

Thank you for your time and consideration. All aforementioned comments and requests are meant for constructive dialogue and discovery. Should proponents gather any information regarding the above which suggest that an environmental impact may occur, it is hereby requested that specific alternatives and/or

mitigation measures be presented and evaluated accordingly. In closing, I would like to receive any and all documents prepared as part of this review and permitting process including the DEIS and FEIS.

Respectfully submitted,
Thomas R. Hoppensteadt
344 Lake Elizabeth Drive
Craigville, MA 02632

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Written Statement of Timothy O'Keefe

March 7, 2002

U.S. Corps of Engineers, N.E. District
696 Virginia Road
Concord, MA 01742-2751

Dear Sirs:

The Hyannis Port Yacht Club, an organization of over 300 adult members, wishes to go on record as being firmly opposed to the Cape Wind's proposed project for Nantucket Sound. We view this site clearly from our homes and daily use these

waters for work and recreation and feel our interests here are second to none.

The question before you is not about this region's energy needs or the proper sources or mix of sources for the generation of this energy. The issue is one of the appropriate uses for this particular body of water. It is a treasured place that is constantly used and enjoyed by countless thousands of people in its natural, unspoiled, and unaltered state. The appearance and the use we make of these waters is virtually the same today as it was in the time of our earliest ancestors. This is not just a matter of good luck, but of caring and thoughtful stewardship by generations of determined Cape Codders. Hard work has ensured that regulations have been put into place governing such things as sewage outflows, fuel discharges, and sustainable fishing.

If Horseshoe Shoals falls under the aegis of the Federal Government than there needs to be a national set of guidelines as to appropriate locations for various uses. Just as in Europe, where federal governments have established zones where development is permissible, a first step in

the U.S. must be to determine on a national scale a plan for the best utilization of our various waters. Under such guidelines and given the vast waters and lands under your jurisdiction, Nantucket Sound should never be considered as an eligible location for a large-scale industrial project. It is in the heart of one of the East Coast's most heavily visited and long established recreation and tourist destinations. It is the pure ocean and ocean vistas that have lured people to these shores and onto these waters for over a century.

You've heard ample testimony over the past several months, both objective and subjective, stating the incompatibility of a wind farm with the safe, unimpeded use of this valuable public resource. You've also heard of the environmental, visual, and aural impact this project (the largest in the Cape's history) will have. Whether or not you accept each and every fact or argument, there can be no doubt that you've heard a large negative response from concerned local citizens. We don't want the sight and sound of this wind farm to spoil our appreciation of our surroundings by day or by night. Nor do we want our activities on these

waters to be restricted and made more dangerous by its presence. We're opposed to exposing this fragile place to the necessary degradations caused by its construction, maintenance, and removal not to mention the potential for environmental disaster by unforeseen accidents and acts of God.

In yesterday's Cape Cod Times (06/03/02) your Christine Godfrey was quoted as saying, "We're charting new territory." Who can doubt that? But this is not the place for such an experiment (one that is of a type and scale never before seen.) The developers have chosen this location because they believe it is beyond the administration of the Commonwealth and local government agencies whose environmental regulations would prohibit this project. Why should your level of protection here be any less stringent? The same newspaper article stated that the Corps of Engineers' purpose tonight is to find out what areas the public would like to see receive environmental review. In fact, you appear to be the only federal agency with responsibility for determining what uses can be made of these waters. Therefore, it is to you we must turn for aid in preserving the public's interests

and for the protection of the natural environment. We urge you to prohibit all industrial projects and Cape Wind's wind farm specifically, in Nantucket Sound. The consequences and risks are too serious to allow them to proceed in this sensitive place of irreplaceable beauty.

Sincerely,
Timothy O'Keefe,
Commodore

* * * * *

Written Statement of Yarmouth Area
Chamber of Commerce

On Tuesday, February 19, 2002, the Board of Directors met and unanimously approved the following position statement:

Although Cape Wind Associates' plan to establish a clean alternative source of power is laudable, the Yarmouth Area Chamber of Commerce cannot support the current plan which would, in our estimation, be more costly than beneficial. An environmentally sound source of electricity, which

offsets a "significant amount of greenhouse gas", prevents millions of tons of pollutant emissions, and which reduces the need for nuclear power and the use of fossil fuels is without a doubt a goal worth pursuing. The potential for becoming a leader in "green energy" in the United States, and for reducing our reliance on foreign sources of fuel are tempting, but at what cost to Cape Cod?

After having reviewed the many aspects of the project, having interviewed Cape Wind Associates, having heard from the opponents of the project, and having spoken to the Chamber's members and listened to their concerns, our position is obvious at this time. Many questions still remain. The true direct and indirect economic impacts of the wind farm/power plant are unknown, and in our view, even to its proponents. The proposed location and the scarcity of information regarding what alternative sites were reviewed are problematic. Also puzzling is the ongoing uncertainty of how the windmills will appear on the horizon, and Cape Wind's either inability or unwillingness to satisfy the public's curiosity in this regard, when there are readily available and reliable methods of

establishing this fact. Also troubling is the use of a public expanse such as Nantucket Sound for a permanent private venture. The Chamber recognizes the importance of private business in Yarmouth and on Cape Cod. We also recognize the importance of the need for private business to further the public good. In this case, the benefit to the public is not so great to warrant the Chamber's support.

However, because of the number of questions, which we feel, are still unanswered, and because we recognize that projects of this magnitude may be altered to address issues recited above, the Chamber is amenable to revisit its position should significant alterations to Cape Wind's plans become evident.

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Written Statement of Robert DuBois

March 6, 2002

Mr. Brian Valiton

Senior Project Engineer

U.S. Army Corps of Engineers

New England District

696 Virginia Road
Concord, MA 01742

RE: Cape Wind Associates

Dear Mr. Valiton:

The Yarmouth Area Chamber of Commerce represents over 350 area employers. Our organization's mission is to achieve a healthy economic climate so that we may enhance and protect our quality of life. Yarmouth's economy is almost exclusively tied to the tourism industry with more than half of the businesses directly in the tourism industry. Tourism based economies are fragile, relying on increasing discretionary income and national trends. Our community's primary tourism asset is our shoreline and its scenic vistas, beaches, boating, and lodging. This is one of the reasons why our organization is concerned about the prospect of industrializing 25 square miles of our pristine waterways.

As the Army Corps of Engineers reviews this project, we request that you consider studying the following items:

- 1) Effects on fish stocks both during construction and operation phases
- 2) Sound and vibrations during construction and operation
- 3) Effects of construction on water clarity, silting, and water depths
- 4) Commitment by proponents to mitigate all negative impacts
- 5) Decommissioning plan
- 6) Environmental effects of the transmission cable both at sea and on land
- 7) Visual impacts from all Yarmouth south facing shorelines
- 8) Effects on flight paths, shipping lanes, recreational boaters, and commercial fishermen.
- 9) Economic impacts to the County of Barnstable and specifically Yarmouth
- 10) Compensation to impacted communities
- 11) Potential impact of additional offshore developments along the

Cape Cod Shoreline.

12) Effects on Yarmouth's utility costs

We understand that perhaps some of these areas are traditional outside the scope of the Army Corps of Engineers. However, with this project breaking new ground and your agency acting as the permit-granting authority, we believe you must consider all the impacts on our local community prior to issuing any permits. We request to be kept informed of any and all proceedings regarding this project, and we thank you for the opportunity to comment.

Sincerely,

Robert DuBois

Executive Director,

Yarmouth Area Chamber of Commerce

cc: Lou Nickinello, YACC Public Policy Chair

* * * * *

Written Statement of Bryant Palmer

March 7, 2002

To: U.S. Army Corps of Engineers
From: Bryant Palmer
66 Traders Lane
West Yarmouth
capesailor@aol.com

Buried High Voltage Cables on Lewis Bay a Potential hazard.

The proposed buried dual transmission lines running down the center of Lewis Bay to be used in conjunction with the windmill farm on Horseshoe Shoals is a potential hazard.

Lewis Bay is too fragile to stand the added stress of the required destruction of the ocean bottom to properly bury the cables.

The proposed transmission line cables will carry 115,000 volts from a platform at Horseshoe Shoals to the electric grid (NSTAR) in Yarmouth. It will be placed under the bottom of the bay quite shallowly and as many areas of Lewis Bay has less than 2 feet of water at low tide, a serious hazard and health threat to all will exist. We do not want our children swimming and boating closely above this high voltage transmission line.

Does this buried transmission line mean

we cannot anchor our boats or shellfish in the cable area? Will the cable area have to be marked with warning buoys to protect us all and thereby adding to further despoilment of the bay?

We must not let Yarmouth's Lewis Bay, a most beautiful recreation area, become industrialized and pose a potential health threat to all of us who use it. Stop the transmission lines from being placed in Lewis Bay.

Bryant Palmer.

Let me say further that during the second World War, I learned to swim and sail in Lewis Bay and fish on the shoals and have continued to enjoy the magnificent and spectacular beauty of the area to this day. Further, with local clubs, since the late '60s, I have helped to teach hundreds (perhaps thousands) of children to sail in this unique area called "Lewis Bay" and nothing must be allowed to change this.

* * * * *

Written Statement of David E. Acker

A Statement Relative to a Wind Farm Proposal for Nantucket Sound.

I support the installation of wind generators in the waters between Nantucket and Cape Cod, provided they meet all the environmental requirements of our regulatory agencies. My basic reason for this support is the importance of reducing air pollution in the United States and worldwide as well as reducing the need for a diminishing natural resource.

I heard a statement made on the Cape Cod Chamber of Commerce and have found it unconvincing. The Chamber has given the potential impact upon tourism and the fishing industry on the Cape for opposing the proposal. I am not aware that there are any substantiating facts on which to base this opposition.

I find the amount of power expected to be produced to be significant even though it may be small in comparison with the total amount required by New England.

As for the allegation that the structures would create a negative impact upon the beauty of Nantucket Sound is also unconvincing. I

have seen modern generators in person and the photographs of others and find them to be as graceful as sailboats.

David E. Acker
4 Gray Birch Road
East Sandwich, MA 02537
508-888-6363

* * * * *

Written Statement of Dr. Alan Donheiser

To: US Army Corps of Engineers
From: Dr. Alan Donheiser
Subject: Wind Farm Economics: A Note on Their
Evaluation
Date: March 7, 2002

Why Investigate the Economics --- Stakes of inestimable value rest on the long-term viability of the proposed wind farm at Horseshoe Shoals. The specter of a financially-unsuccessful project hangs over this proposal. The risk to the Cape stemming from potential abandonment of many massive windmills at the proposed location is a subject worthy of

detailed study. Wind energy does not yet have a strong financial track record and leans heavily on tax breaks for the stockholders and subsidies from traditional utilities. Notwithstanding the private nature of the financing of the project, a pro forma understanding of the underlying economics would allow a better understanding of the risk the Cape faces in respect to possible stranded windmills at the Shoal. At present, the proposal is no more than an idea and hardly presents itself as a viable system.

A Proposed Study Approach --- To evaluate the proposal, the Corp should be prepared to examine both the investment requirements and the electrical market factors in considerable detail. Because energy demand is subject to many influences: seasonal, peak, cost, and availability, it is essential that this plethora of factors be quantified and modeled. On the proposal's supply side, myriad cost-of-production and integration assumptions should be examined. Similarly, capital factors, i.e., debt/equity combinations, interest sinking fund requirements and source and uses of funds need be identified and plugged in to the model

as well.

Study Method --- A substantial quantitative inquiry should be undertaken to understand how changes in each input factor will effect pro forma or bottom line results. Call this a parametric study designed to test project viability thereby providing everyone with a concrete risk assessment. To accomplish this, a thorough inventory of all variable market and system factors must be made along with the development of a quantitative industry model. This proposed approach would draw on utility systems engineers, econometricians and industry experts. This effort would test the project's key operating theories and validate or refute the claims of the project's sponsors.

Who am I? --- An economist and expert witness in Federal public policy issues including long distance transmission of power, solar energy and utility industry anti-trust litigation. A member of IEEE. A resident of Cotuit, MA.

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Written Statement of Earl Krause

Earl Krause
15 Tern Lane
Eastham, MA 02642

In view of the fact that more than one company is looking at the feasibility of installing wind turbines and wave turbines, what is the saturation level if the systems prove to be successful? How many expansion of these farms progress to maximum saturation of the Nantucket Sound and surrounding oceans?

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Written Statement of David Bergeron

January 21, 2002

Dear Sir or Madam:

While the Massachusetts Fisherman's Partnership (MFP), representing more than 3,000 fishermen throughout the state, supports the development of alternative energy sources, we strenuously object to the plan to construct an electricity-generating plant in the heart of Nantucket Sound. Our objections, which also apply

to the proposal to erect a test tower in the Sound, are summarized below.

Elimination of a prime fishing ground

The windmill plant - composed of 170, 40-story towers - would completely block off a 28-square-mile public resource that for generations has served as a prime fishing ground for local fishermen. At the height of the season, as many as 40 boats are daily working these waters. Simply put, the local fishermen would not be able to maneuver their gear around the enormous windmill structures. Furthermore, placement of towers producing vibrations and constant noise on or near Essential Fish Habitat would likely disturb spawning fish and may violate federal law.

Navigation hazards

The placement of 170 gigantic towers in a body of water that routinely sees fog represents a significant hazard to navigation. This hazard applies both to fishermen whose gear cannot be brought up quickly to avoid entanglement and to recreational boaters, many of whom do not use radar.

Economic

Many local fishermen make up to

60 percent of their annual income in this particular part of Nantucket Sound. This project would eliminate that income and bring hardship to hundreds of local fishermen and their families. At a time when fishing grounds throughout the Northeast are being closed and government regulations are restricting catches in local waters, this project would amount to an economically devastating blow. It is unacceptable for a small group of private investors to make millions of dollars by taking over a public resource and, in the process, jeopardize the livelihoods of fishermen who have been working these waters for many, many years.

The MFP supports community-based alternative energy projects to generate electricity, but this project represents a very real threat to an important part of our local culture and economy as well as the ecological health of the sensitive habitat in this productive fishing ground. If we, as a society, are interested in seeing our fishing legacy preserved, we must recognize this threat and reject any attempt to privatize such a valuable public resource.

Sincerely,

David Bergeron,

Coordinator,

Massachusetts Fishermen's Partnership

C E R T I F I C A T E

We, Marianne Kusa-Ryll, Registered Merit Reporter, and Julie Thomson Riley, Registered Merit Reporter, do hereby certify that the foregoing transcript is a true and accurate transcription of our stenographic notes taken on March 7, 2002, and entry of statements included in the record.

Marianne Kusa-Ryll
Registered Merit Reporter
Certified Shorthand Reporter No. 116393

Julie Thomson Riley
Registered Merit Reporter
Certified Shorthand Reporter No. 1444S95