PUBLIC INFORMATION MEETING

Vineyard Wind SEIS Public Meeting

Virtual Public Meeting Day 3

July 2, 2020

5:00 p.m.

P-R-O-C-E-E-D-I-N-G-S

OPERATOR: Welcome. And thank you for standing by.

At this time, all participants are in a listen-only mode until the public comment session of today's conference. At that time, you may press Star 1 on your phone; clearly spell your first and last name to get in the queue for public comments.

I would like to inform any parties that today's conference is being recorded. If you have any objections, you may disconnect at this time.

I would like to now turn the conference over to our host, Christine Davis.

Christine, you may begin.

CHRISTINE DAVIS: Hello, everyone.

Thank you so much for joining us today. I'm with ERM; and we're a third-party contractor working with BOEM staff on the environmental review of the Vineyard Wind Project. I'm here to help facilitate and guide you through this meeting.

Appreciate you taking time to share your thoughts with us.

The purpose of today's meeting is to gather your input on Vineyard Wind's Offshore Wind 1

Project, and more specifically, on the Supplement to the draft Environmental Impact Statement.

Your input will be used to refine and finalize the final Environmental Impact Statement on this project. As such, we are recording and have court reporters documenting the meeting for the public record.

We learned during our first couple of meetings that some might want to ask questions right away. So please note those of you that are on Zoom, there's a Q & A function to address questions; and we use the chat function to address any technical issues. I'll talk more about Zoom in just a few minutes.

Before we go any further, I'd like to welcome Bill Brown. Bill is with the Bureau of Ocean and Energy Management and he is the Chief Environmental Officer.

BILL BROWN: Hello -- hello, everyone.

As Chris said, I'm the Chief Environmental Officer, and I oversee environmental science assessment and regulation for BOEM's activities on the Outer Continental Shelf, generally, including wind energy development off the Atlantic Coast.

I thank you for joining us today at this

public meeting. I'm sorry we can't be together in person, and I hope that you and your families and friends are all safe and healthy. On the other hand, I'm glad we have this technology to help us meet this way.

So who are we? BOEM is a federal agency that oversees development of federal offshore energy and mineral resources subject to environmental safeguards. We cover nearly 2.5 million acres, which is a larger land area than the United States. So it's a big job, and it includes offshore wind and other renewable energy resources.

We have been working over 10 years with states, tribes and diverse stakeholders to identify the best areas for offshore wind development. We have 16 active leases on the Atlantic currently from Cape Cod to Cape Hatteras, and we foresee development of nearly 22 gigawatts of electrical power contributing to state goals of almost 30 gigawatts.

Under these leases, we have approved 10 site assessment plans, and we are currently reviewing seven Construction and Operation Plans, which we call COPS.

We expect up to eight additional COPS will be submitted for our review over the next 12 months. That's a big load, and we've hired new staff, and they're using third-party contractors to help manage that.

The first turbines ever on the OCS were just installed in this past month offshore in Virginia, the Coastal Virginia Offshore Wind Project, and we anticipate a dozen commercial-scale wind farms during the next decade.

We want to make sure these projects are done right with thoughtful consideration of all ocean uses: Wind energy, commercial fishing, maritime navigation and more. There will be impacts, but our goal is for all users to coexist successfully.

Our task requires getting the best information we can, analyzing impacts and alternatives as well, and identifying mitigation. We want to establish a strong foundation for all projects going forward. These public meetings are an opportunity to help us meet this goal and to hear from you about the Vineyard Wind Project in particular.

Vineyard Wind is the first commercial offshore wind project analyzed under the one federal decision

process. We've modified our approach since we've worked through that process, and we believe the way we're doing it now will facilitate future project permitting.

To note, BOEM received over 300 comments from stakeholders and cooperating agencies on the Vineyard Wind draft Environmental Impact Statement; some of these requested more robust analysis of cumulative impacts. As a consequence of these comments, we prepared a supplement to the draft Environmental Impact Statement to the proposed Vineyard Wind 1 offshore energy project and opened the document for public comment on June 12. And that's why where we're here today.

The supplement expands the reasonably foreseeable future offshore wind development scenario in the draft EIS and analyzes the effects for that scenario.

The supplement also analyzes previously unavailable fishing data and transit lane alternative proposed by the fishing community and changes to the Construction and Operation Plans of the Vineyard Wind since the draft EIS was published. This enhanced analysis will support and service

models for reviewing future projects.

That's why your comments on the supplement are vitally important. We are making every effort to hear from everyone concerned. This is one of five virtual public meetings we are holding during the comment period. Your input will help us to get it right. We are committed to a permitting process that minimizes user conflicts and establishes a strong foundation for Wind projects moving forward.

Thank you and stay well.

Now I would like to invite Lisa Engler, director of the Massachusetts Office of Coastal Zone Management to offer her remarks.

LISA ENGLER: Thank you, Bill.

Good evening, everyone.

On behalf of Energy and Environmental Affairs Secretary Kathleen Theoharides, we are pleased to welcome the Bureau of Ocean Energy Management for tonight's public meeting on the supplement to the draft Environmental Impact Statement for the Vineyard Wind 1 project.

Joining me from fellow Massachusetts agencies are Bruce Carlile, from the Massachusetts Clean Energy Center; and Mike Pole (phonetic) from the

Massachusetts Division of Marine Fisheries. We're looking forward to the presentations and the opportunity to hear your comments and input to the federal review process for this project.

Global climate change presents a serious threat to the commonwealth environment, residents, community and economy. Governor Baker has expressed the need for action, stating, "The magnitude of the impacts from climate change requires all of us to put politics aside and act together quickly and decisively. We still have the opportunity to check the severity of future impacts by aggressively reducing greenhouse gas emissions and adapting to the changes that are ongoing."

With the 2008 Global Warming Solutions Act, Massachusetts became one of the first states in the nation to require a carbon emission reduction of at least 80% below 1990 levels by 2050 with interim targets every decade. We are on track to meet our 2020 goal of a 25% reduction from 1990. In addition, in December of last year, Governor Baker committed the Commonwealth to net zero emissions by 2050.

Meeting these targets will include efforts and

commitments by the public and private sectors and will require changes to business as usual. Responsibly sited, developed and operated offshore winds will be key to meeting new carbon emission reduction targets.

For more than a decade, we have worked closely with our federal, state, local and tribal partners through BOEM's intergovernmental task force on offshore energy in the planning, siting, leasing and review of potential offshore wind projects on the Outer Continental Shelf.

We have also worked closely with stakeholders through state-formed fisheries and habitat working groups on offshore wind and in community-based meetings and discussions.

The fishing industry is a critical partner in the development of offshore wind, and we value the opportunity to use these forums for important dialogue and feedback in the responsible development of offshore wind.

Under Governor Baker's leadership, the Energy Diversity Act was passed in 2016 to allow for the solicitation of 1600 megawatts of offshore wind. This led to the successful procurement of the

Vineyard Wind 1 Project in 2018, which will result in significant greenhouse gas emissions at a highly competitive price.

Massachusetts has continued to lead the development of the offshore wind market in the U.S., and in 2018, passed additional legislation that doubled the amount of offshore wind energy solicitation to 3200 megawatts.

The development of the offshore wind market will lead to substantial economic development in the Commonwealth and the region bringing necessary clean energy that will provide significant greenhouse gas emissions reduction.

The Federal National Environmental Policy Act review process led by BOEM is a critically important component in our collective responsibility to avoid, minimize and mitigate potential adverse effects. And in the case of the Vineyard Wind Project, the SEIS has provided a broader substantive basis for reviewing the project within the context of other offshore wind development. The cumulative analysis included in the SEIS ensures that potential impacts beyond this individual project are evaluated.

In parallel to the BOEM review, the Vineyard

Wind Project was also reviewed by state agencies, including the Massachusetts Department of Environmental Protection, the Energy Facility Siting Board, the Massachusetts Environmental Policy Act Office, The Department of Public Utilities, and the Massachusetts Office of Coastal Zone Management. This Massachusetts State review is now complete.

Thank you all for joining us virtually tonight. Your participation is so important as we continue to work with agencies, stakeholders and local communities in the review of the BOEM commercial leasing construction and operations process.

Thank you. And I'll turn it back over to Christine.

CHRISTINE DAVIS: Thank you, Lisa.

Looking at the agenda now, BOEM will provide a project overview, discuss the environmental review process and next steps.

We'll open the meeting for public testimony, and then we'll close by answering your questions. As a reminder, the focus of the meeting today is to provide public comments. So let's spend the bulk of our time together on that agenda item.

Everyone who would like to provide comments today will need to press Star 1 and speak with a live operator to get in the queue. Even if you're pre-registered, you'll need to the press Star 1. Please note that it may take the operator a little bit of time to get to you, so please be patient.

Again, the steps for everyone who wants to speak, including pre-registered people, is to press Star 1, wait to speak to the live operator. So if you've not already done so, please do so now or anytime before we begin public comments.

So we can provide as many interested parties as possible the opportunity to provide public comments, we ask that you keep your comments to approximately five minutes.

As an attendee, you're not going to be on camera today but your voice will come through on phone. Those of you that are on phone only, that -- you know, we'll be able to hear you too, so thank you.

Only the BOEM in ERM presenters and I will be on video today. Please note that oral comments will be provided, are going to be on the record, and the entire meeting is being recorded.

So welcome to Zoom, for those of you that are on the Zoom.

You've heard me refer to the Q & A and chat functions. You should be able to see the icons at the bottom of your screen. If you click on the Q & A icon, you'll see a box pop up for you to type in a question. We'll answer the bulk of the questions at the end of public testimony so that we can maximize our time to public comments.

Some questions with short answers may be addressed right away, but for others, we will have subject matter experts ready to respond in person later in the meeting. Do not be alarmed if you don't see your question right away. The questions will show up as we answer them verbally during that Q & A session.

As briefly noted, please only use the Zoom chat function to alert us to a technical issue. Like me, I lost power for just a little bit, but I'm back. So if you have any kind of technical issues, please do use that chat function. Later on, we'll use Zoom and we will use that for the public comment.

Attendees will only use the raise-hand

function if we call on you.

If at any time you have technical challenges using Zoom, you can continue to participate in this call by using the number 1-888 -- 1-888, three eights, good grief -- 606-7043, and a participant code 6516733#.

If you want to give public testimony and have not already done, so please press Star 1 and speak to our live operator to get in that queue.

Does anyone have any questions right now about Zoom or the phone line that you'd like to ask at this time? So type a Q & A, or press Star 1, and, Isis, I will defer to you. Any questions that we need to address?

ISIS FARMER: Hi, Christine. I think we have one question. And I think the question is: If someone presses Star 1, and they get the automated operator, not a live operator, whether or not they're in the queue?

So I think, you know, you should -- once you press that Star 1 key, I just want to note that the operator -- you know, we only have two operators for all of the attendees who are on our line. So it may take a little while for that live operator to get to

you.

But if you have any questions about where you are in the queue, feel free to, you know, send us a chat and we'll check your name and get back to you in the chat.

CHRISTINE DAVIS: You know, that's a great point, Isis. We will be using the chat function later on to provide a list of about five names at a time in the queue, so be patient with us. I do believe we've got a number of people that have already pressed Star 1, so we'll be putting those names in about five at a time, but you'll have enough time to prepare and know where you are in that queue.

All right. So at this time, I'm going to turn it over to Jennifer Bucatari from the Bureau of Ocean Energy Management. She'll explain the environmental review process and then provide an overview of the supplements of the draft EIS. After her presentation, we'll begin that public testimony period.

As a reminder to sign up for comments later on, please make sure you press that Star 1 and wait for that operator, give them enough time.

With that, I'm going to turn it over to Jenn.

Jenn, are you on?

JENNIFER BUCATARI: Yep, I'm here.

CHRISTINE DAVIS: All right, great.

JENNIFER BUCATARI: Great. Thanks, Christine.

Hello, everyone and welcome to the Vineyard Winds Supplement to the draft Environmental Impact Statement, also known as the SEIS Virtual -- Virtual Public Meeting.

As Bill previously mentioned, BOEM is the Federal Bureau within the Department of Interior that oversees the development of our energy and mineral resources subject to environmental safeguards. We cover the nearly 2.5 billion acres of the nation's Outer Continental Shelf, or as we call it, the OCS, including the development of marine minerals, oil and gas, and renewable energy resources.

We appreciate your participation in this meeting and look forward to hearing your comments following that summary presentation.

As mentioned, my name is Jennifer Bucatari, and I'm one of the environmental coordinators in

this project.

To the greatest extent possible, we are working to maintain services to the American people and our stakeholders consistent with evolving guidance provided by the CDC and state and local health authorities. As such, we're moving forward with our public meeting in a virtual environment in order to provide information to our public in the safest and most efficient way possible and to receive feedback from our stakeholders.

These public meetings, while virtual, are still an opportunity for public involvement and an opportunity to provide comments on the supplemental EIS.

BOEM has developed a virtual meeting room web page. You can see the address here at the top of the slide. You likely probably visited this page already to register, but either way, we encourage you to explore this page and the additional content that we have here.

The content on this slide shows the poster stations that we have on a virtual meeting web page.

The posters and the presentations that are on the next slide are meant to mimic the stations that

we normally have at an in-person meeting.

The posters seen here relay a brief summary of important topics to our stakeholders.

On the slide, we have the presentations that are listed on the virtual meeting web page. These are summaries of important -- of impacts in several key topics or resource areas.

The presentations were developed and recorded by the BOEM subject matter expert who also developed the supplemental EIS impact analysis for that resource.

The National Environmental Policy Act, or NEPA, is a law requiring federal agencies to assess the environmental effects of the proposed action and reasonable alternative. The NEPA process collects relevant information for the decision-maker to either approve, approve with conditions or disapprove the plan.

Through the NEPA process, an Environmental Impact Statement, or EIS, must be prepared if the agency is proposing a major federal action that may significantly affect the quality of the human environment.

The purpose of the analysis is to outline the

impact of a proposed project on its surrounding environment. The process also includes public scoping, public comment period, and an analysis of reasonable alternatives and cumulative effects.

BOEM's renewable energy leasing and development process occurs in four phases. For the Vineyard Wind 1 Project, we are in the fourth phase, as you can see here on the right. This includes conducting an environmental review of the lessees' Construction and Operations Plan, or COP.

The draft EIS was published for public review in December of 2018, and a supplement to the draft EIS, the SEIS, was published on June 12, 2020.

The Vineyard Wind 1 Project proposed project location, as seen here in this 12 nautical miles at its nearest point to land. The project is situated southeast of Martha's Vineyard. The proposed cable landfalls are in two locations on Cape Cod, Lewis Bay or New Hampshire Avenue.

A brief background on the project is presented here.

The development of the supplemental EIS began following public hearings that were held in February 2019. Comments from the public and stakeholders

requested and expanded cumulative analysis and analysis efficient data previously unavailable to BOEM. In addition to this, there were updates to the Construction and Operations Plan that were submitted by Vineyard Wind on January 31st and March 9th, 2020.

BOEM developed the supplemental EIS to address comments from the public and stakeholders, expand the cumulative analysis, analyzed previously unavailable fishing data, analyze the new alternative and project changes.

As mentioned in January and March 2020, Vineyard Wind submitted -- submitted updates to the Construction and Operations Plan which included changes to the project envelope and onshore substation. The updates included an expansion of the turbine capacity to include up to 14 megawatt turbines. The total project capacity still remains at 800 megawatt, and a change to the turbine capacity does not result in a change to the footprint or to the minimum turbine capacity, which is eight megawatts.

The proposed project includes up to 106 wind turbine locations with up to 100 wind turbines. Up

to -- up to 12 jacket foundations may be used, 10 for the turbine foundations and up to two for the electrical service platform. Any remaining foundations would be monopile.

Vineyard Wind also submitted changes to the onshore substation. For the expanded substation, the total approximate area of ground disturbance would be 7.7 acres, which is 1.8 acres greater than the area analyzed in the DEIS, or the draft EIS.

The notice of availability for the SEIS, or supplemental EIS, was published on June 12th, 2020, in the Federal Register. We are holding a series of five virtual public meeting, as seen here. We're on the third public meeting right now. The comment period will close after 45 days on July 27th, 2020. For additional project related info, please see the project website here.

To be most helpful, comments should be as specific as possible. A substantive comment discusses the accuracy of the information; suggests alternate methodologies and the reason or reasons why they should be used; provides new information relevant to the analysis; identifies a different source of credible research, which, if used in the

analysis, could result in different effects; or provides clarification when needed.

The table on this slide outlines some notable sections of the supplemental EIS, including where you can find more information about the environmental analysis, the cumulative impact scenario, the project envelope, and the status of environmental consultation. All the supplemental EIS includes analysis of the direct and indirect impacts of the proposed action.

The focus of the supplement is on the expanded cumulative impact scenario, the new alternatives, and information that has changed or become available the issuance of the draft EIS.

This inverted triangle represents the different levels of reasonably foreseeable development we considered in the cumulative scenario. A bar usually encompasses the bar below it, but the lower bars will often be duplicative rather than additive.

For example, Vineyard Wind 1 is already included in the 5.4 gigawatts of the Construction and Operations Plan submitted or approved, which is that second bar from the bottom.

The previous standard for the scope of reasonably foreseeable offshore wind development was based on projects permitted, and then added to this, projects entering the construction permitting process. This time we began by examining the greatest number of possible projects and then eliminated offshore development that would be unreasonable to consider based on the lack of state demand or technical inability.

The top bar is the total Atlantic offshore wind technical resource potential. This bar represents how much wind energy is available on the Atlantic Outer Continental Shelf with present technology. Such a build-out is not only materially and physically impossible, but also the amount of energy exceeds the demand of the entire eastern United States; thus, this level was not determined to be reasonably foreseeable.

The second bar down is the technical resource potential of the Atlantic call, wind energy and lease areas. Call areas are areas that have not been leased and are still being evaluated for whether they are suitable to be offered for lease. There's no guarantee that such areas will make it to

the leasing stage; therefore, evaluating construction on them is premature. And this level of development was not considered reasonably foreseeable at this time.

The third bar down is state capacity commitments. While the tier system and the draft EIS looked at development from a regulatory and projects perspective, in this scenario, we examined future projects from a state demand perspective.

This number has grown over the last several months and it's currently at about 29 gigawatt with the recent additional commitments from New Jersey. This exceeds the technical resource potential of existing Atlantic leases with existing technology and includes New York commitments that have been made in anticipation of future leasing; therefore, this doubled development was deemed not reasonably foreseeable at this time.

The fourth bar from the top is the technical resource potential of the existing Atlantic leases. State capacity commitments are not evenly distributed along the coast and, perhaps surprisingly, are not tied to the existing available leased capacity within transmission range. For

example, the state capacity commitments of New York and New Jersey exceed the technical resource potential of leases in transmission range for those days.

Also, there are going to be conflicts such as with cultural resource sites, historical sites, essential fish habitat and navigation that will make developing the entire technical resource potential of existing Atlantic leases impossible; therefore, this level of development is not considered reasonably foreseeable.

This fifth bar from the top and all of those that follow below it make up our reasonably foreseeable cumulative scenario. This includes any projects with awarded offtake and any projects that have entered or announced their intention to enter the permitting process and, of course, any approved projects. Basically, if a project has a name, it is included in the reasonably foreseeable scenario.

After considering all projects with awards, Construction and Operation Plans, or that have been announced, there's still some state capacity leftover that has not been awarded. This potential for additional future development beyond named

project is also accounted for and analyzed in the scenario.

If you would like additional information on the cumulative scope, or to hear this presented again, please visit the virtual meeting web page to listen to a presentation on the subject.

Alternative A, the proposed action alternative, is a construction, operation, maintenance and eventual decommissioning of an up to 800 megawatt wind energy facility on the Outer -- Outer Continental Shelf. Offshore Massachusetts within the proposed projects area and associated export cables would occur within the range of design parameters outlined in the Vineyard Wind Construction and Operations Plan subject to available mitigation measures.

The additional action alternatives and the no-action alternative are presented here.

Alternative B, the Covell Beach landfall alternative, excludes the New Hampshire Avenue landfall location to potentially reduce impact on environmental and socioeconomic resources.

On June 26th, 2020, Vineyard Wind informed BOEM that they are no longer pursuing the New

Hampshire Avenue landing site. While the New Hampshire Avenue site was included in the Construction and Operations Plan, Vineyard Wind has obtained all of the state and local permits necessary to bring the cable on shore at the Covell Beach landing site.

Alternative C excludes surface occupancy in the northernmost portion of the proposed project area to potentially reduce impacts from the proposed project and to reduce potential conflicts to existing ocean users such as marine navigation and commercial fishing.

Alternative D-1 would require a minimum of one-nautical-mile-by-one-nautical-mile spacing between wind turbine generators and the lanes between them. This alternative would potentially reduce conflicts with existing ocean uses such as commercial fishing and marine navigation.

Alternatives D-2 would require a layout and an east-west orientation. And all of the turbines in the east-west direction would have a minimum spacing of one nautical mile between them to allow for vessels to travel between turbines and to reduce conflicts with existing ocean users such as

commercial fishing.

Alternative E reduces the project size no more than 84 turbines. This alternative would potentially reduce impacts on existing ocean users and on environmental resources due to the fewer number of foundations.

Alternative F is the new alternative, which would include a vessel transiting through the wind development area in which no surface occupancy would occur. Any turbine presently planned for this area would be moved further south in the wind development area. This alternative could potentially facilitate transit of vessels through the project area from Southern New England Port to fishing areas on Georges Bank.

Alternative G is the no-action alternative. In this alternative, the proposed project would not be approved in any potential action economic -- socioeconomic and environmental benefits associated with the proposed project -- sorry -- socioeconomic costs and benefits associated with the project would not occur. However, impacts from reasonably foreseeable future offshore winds and non-wind related activities would still occur. This

alternative is required to be analyzed under NEPA.

Since the draft EIS was published, a new alternative has been added and analyzed in the supplemental EIS. Alternative F, the vessel transit lane alternatives, include the new vessel transit lane in response to the January 3rd, 2020, Responsible Offshore Development Alliance, known as RODA, layout proposal. The RODA proposal includes six total designated transit lanes, each at least four nautical miles wide, as seen in the figure here.

Although the proposal includes six total transit lanes, only one of those lanes intersects the Vineyard Wind Projects, as shown in this figure. As mentioned, the purpose of the proposed northwest-southeast transit corridor would be mainly to facilitate -- facilitate vessel transit from Southern New England ports, primarily New Bedford, to fishing areas on Georges Bank. The transit lane would have no occupancy, and therefore, the turbines that could have occurred in these areas would not be eliminated but instead a displaced turbine would be shifted south within the Vineyard Wind lease area.

The layout shown in this figure, this is in

Appendix A, and it's Figure A.7-17, is for illustrative purposes only and does not guarantee that the positions identified by the black dots are buildable. The layout is based on the all developer agreement for east-west orientation and one-nautical-mile-by-one-nautical-mile spacing.

The positions -- the positions shown do not necessarily represent future turbine location, but the intent of the figure is to show the potential displacement of turbines if all six transit lanes were to occur. The turbine locations within the pale yellow lane would not be utilized.

Under the current cumulative scenario, displacement of all these turbine locations is not feasible, and, therefore, the addition of all six transit lanes would lead to the elimination of some of the turbines that could have occurred within these lanes.

Our impacts analysis included biological, physical and socioeconomic resources as seen here. The subject matter experts to analyze impacts to these resources are also on this webinar and will be here to answer questions later in the meeting.

These same resources are also seen in the

summary table that you can find in the executive summary in the front of the SEIS. This table summarizes the overall direct and indirect and the cumulative impact level for each resource.

The following five slides have the summaries for additional resources that are not seen on this slide.

I will discuss the impact levels for specific resources in more detail in a few slides. But I wanted to orient you to the table and some key elements to the analyses here. More detailed analyses and impact levels for future offshore wind activities may be found for each resource in Chapter 3 and in the table and Appendices A, as in an apple, and B, as in boy, of the supplemental EIS.

The color coding in the table indicates if the highest impact level is minor, moderate or major; with green being minor, yellow moderate and orange major. You can find the definition of impact levels in Table 1.2-3 in Appendix B, as in boy, of the supplemental EIS.

In addition, there is a poster on the project web page -- the virtual meeting web page, I should specify -- which details the impact level

definition.

For resources with an indirect and direct impact level of negligible or minor, the impacts analysis have been moved to Appendix A, as in apple. This was done to meet the page limit goals outlined in the Department of Interior's Secretarial Order 3355.

To understand the cumulative impact for each resource, BOEM analyzed the effects of the no-action alternative, which includes baseline conditions, ongoing activities of all types and future offshore activities other than wind. We then follow this with an analysis of future offshore wind activity and the potential cumulative effects of the proposed action and action alternatives.

Resource impact levels seen here on this slide include terrestrial and coastal fauna, coastal habitat, benthic resources, and fin fish, invertebrates and essential fish habitat. Additional resource impact levels, as seen here, include marine mammals, sea turtles, demographics, employment and economic and environmental justice. Again, we'll speak about notable differences between alternatives in future slides.

Resource impact levels seen here on this slide include cultural, historical and archaeological resources, recreation and tourism, and commercial fisheries and for-hire recreational fishing.

The overall resource impact levels seen on this slide include land use and coastal infrastructure and navigation and vessel traffic.

The resource that you see here on this slide is other uses. Other uses encompasses research and surveys, military and national security, aviation and air traffic, cable and pipeline and radar system.

And, finally, on this slide, the resources you see include air quality, water quality, bird and bat. All of these resources are included in Appendix A, as an apple.

Excuse me.

Here we will discuss the direct and indirect impacts of the proposed action. As summarized in the executive summary table and assessed in detail in Chapter 3 of the supplemental EIS, BOEM determined for most resources, direct and indirect impacts were negligible to moderate with some major short-term and long-term impacts. The proposed

action or certain action alternatives could have major direct or indirect impact on environmental justice communities and other uses.

The following major impacts of these resources are anticipated:

Major direct impacts on environmental justice communities could occur from the proposed action and alternatives other than Alternative B, which is the Covell Beach landfall alternative; Alternative F, which is the vessel transit lane alternative; and the no-action alternative, which is G.

The placement of cable and maintenance within Lewis Bay, associated with the New Hampshire Avenue landfall site, would lead to potential effects on vessel traffic and to environmental justice populations that rely on subsistence fishing or employment and income from marine businesses. This impact would lessen to moderate under Alternative B the Covell Beach landfall alternative, which would exclude the use of the New Hampshire landfall location.

As mentioned on the alternative slide, Slide 18, Vineyard Wind is no longer pursuing the New Hampshire Avenue landfall location.

Alternative F, the vessel transit lane alternatives, leads to lower direct and indirect impacts for environmental justice due to reduce impacts related to allusions and collisions from the presence of the transit lane. The reduced risk of collision or allisions would lessen the impact on marine businesses and also on the low-income workers employed in these industries.

By reducing impacts on these businesses, Alternative F would have a smaller incremental impact an environmental justice population, although those impacts would remain negligible to moderate.

The direct and indirect impacts for other uses was determined to be major for scientific research and surveys for the proposed action and all action alternatives. The placement of structures within the wind development area pose a navigational hazard to survey aircraft and vessels and restrict access to survey location. This would impact the statistical design of surveys and cause a loss of information leading to major impact.

Analysis of the other resource areas listed here found that there could be direct and indirect impacts that were minor to moderate beneficial from

the proposed action and action alternatives.

Now, here we will discuss the cumulative impacts of the proposed action we found in the SEI. So this would be the proposed action in addition to ongoing activities, future offshore nonwind activities, and future offshore wind activities, so the cumulative impacts.

For most resources, cumulative impacts were minor to moderate with some major short- and long-term impacts. Major cumulative impacts could occur to commercial fisheries and for-hire recreational fishing for the proposed action and all action alternatives.

Here the impact risk rating is driven mostly by changes due to fish distribution and an availability associated with climate change, reduced stock levels due to fishing mortality, and permanent impacts due to the presence of structures, such as cable protection measures and foundations from offshore wind activity.

Major cumulative impacts on navigation could occur as a result of the presence of structures which increase the risk of collision and allisions under the proposed action and all the alternatives,

with the exception of D-2, which is the east-west and one-nautical-mile turbine layout alternative; with -- and F, the vessel transit lane alternative, when paired with D2; and the no-action alternative, which is G.

That impact level becomes moderate under D-2 with a one-by-one-nautical-mile uniform grid layout; and under F, when paired with D-2, due to the large spacing between structures and the regular layout.

Major cumulative impacts on scientific research and surveys, as I mentioned on the previous slide, is included under other uses, could occur as a result of the proposed action and all-action alternatives due to the presence of structures which could hinder surveys within the project area. This is similar to the direct and indirect impacts but greater in magnitude due to the cumulative scenario.

In addition, there would be major cumulative impact on military and national security uses as a result of the proposed action and action alternatives other than D-2, which again, is the east-west and one-nautical-mile turbine layout; and Alternative F, the vessel transit lane alternatives with D-2, due to the navigational complexity from

structure presence, which could increase the difficulty to conduct search-and-rescue operations.

The major impact goes down to moderate for search-and-rescue operations under D-2; or Alternative F paired with D-2, due to the uniform grid of D-2; or the vessel transit lane with a uniform grid, which would be Alternative F with Alternative D-2.

There are also some minor beneficial cumulative impacts primarily in recreation and tourism, land use and coastal infrastructure, and demographics, employment and economic.

This is a proposed schedule that is on our permanent dashboard. However, that schedule could change based on comments received, for example, if someone identifies a significant issue that we did not consider in the draft or supplemental EIS that requires new analysis.

There are also ongoing consultations including the Endangered Species Act, the Marine Mammal Protection Act, the National Historic Preservation Act, and the Magnuson-Stevens Fishery -- Fishery and Conservation and Management Act that need to be completed prior to the signing of the record of the

decision.

BOEM is working with agencies to incorporate new project changes into the existing consultation. Additional details about ongoing and completed consultations may be found in Appendix D on the Vineyard Wind web page, includes a variety of informative documents including Vineyard Winds' Construction and Operations Plan, copies of the draft EIS, copies of the supplemental EIS, a large-print copy of the supplemental EIS, and a link to the virtual meeting room web page.

Within the web page -- the virtual meeting room web page, you will find the aforementioned posters and presentations, along with additional posters and presentations highlighting key topics in resource areas, like our how-to-comment poster.

And with that, we want to thank you for your attendance and participation today. We look forward to your comments and to your questions.

And with that, I'll hand it back over to Christine.

CHRISTINE DAVIS: Thanks, Jenn.

Okay. So you'll be able to provide comments a number of ways, as is demonstrated on this slide by

using regulations.gov, providing oral testimony during any of our meetings, and also by mailing comments to the Office of Renewable Energy Programs at the address provided on the slides and on the Vineyard Wind virtual meeting page. I'll provide that address later on in this presentation.

If you haven't done so already, I'd like to provide comments -- and would like to provide comments, please press Star 1 now and speak to our operator. And I know we've got a number of questions that are coming up in that Q & A box. So as a reminder, we will address those after the public comment period.

If, when you're pressing Star 1, again, be patient. I know that we have operators that are trying to get people into the queue as quickly as possible. So thank you for your patience with us.

If you'd prefer to submit your comments electronically, visit at http://www.regulations.gov and search for the docket BOEM-2020-0005, and next click on "comment now."

Comments may also be submitted by mail with the envelope labeled Vineyard Wind Supplement to the draft EIS, addressed to the Program Manager at the

Office of Renewable Energy, Bureau of Ocean Energy Management. The address is 45600 Woodland Road, VAM-OREP, or V, as in Victor, A, as in Alpha, M, as in Mary, dash O-R-E, as in Echo, and P, as in Paul, in Sterling, Virginia 20166. Comments must be postmarked no later than July 27th, 2020.

BOEM does not consider anonymous comments, so please include your name and address as part of your submittal.

All the comments will be made part of the public record and may be publicly posted without -- without any changes.

You can also submit your comments online at regulations.gov.

So please take a few minutes to submit your questions either about the presentation, SEIS, in general, to BOEM through the Q & A box in Zoom. I will respond to those after the public comments.

So, with that, I'd like to open it for public comments in just a minute. If you're providing comments, your remarks will be recorded, transcribed and entered into the administrative record.

So even though you may not see your name in the chat box, which we'll start putting those there,

on the bottom of your screen, please state your name slowly and spell it. That'll help a number of things. It'll help the court reporters, who are listening in, and anyone who is also joining us by phone. So please state and spell your name. If you'd like, you can include any organization that you're affiliated with too, if applicable.

All the comments today will be taken into consideration by BOEM to update the final EIS. The comments you make today will be recorded and also publicly posted.

Please be mindful of time so that everybody has an opportunity to speak. I'll ask you to wrap things up at the five-minute mark. However, if you need more time, put your name at the end of the queue. This will allow everyone the opportunity to speak at least once, and if time allows, we'll give you another chance.

Please note if your comments are lengthy, you can also submit them in writing in the methods I just described, as both written and oral comments are being considered equally.

So I'll take repeat speakers but only after everyone who is interested has had a chance to

provide comments at least once.

After identifying the first couple of speakers, we will know who to speak next. In addition to putting names in the speakers' box, I will call them out for those on the phone.

Typically, I like to greet people when we're meeting in person, so I can hear how you pronounce your name, but we don't have that luxury today. So I sincerely apologize for any mispronunciations I make this evening. I realize that everybody likes to hear our names properly pronounced, so I ask you for your patience and understanding.

We'll commit to getting all the questions and comments from today and the other meetings and responding to them as appropriate in the final EIS.

So with that, I'm going to read off a couple of names to get our first speakers lined up. We've got David H., Joe M., Kai F., Michael F., and Eileen M. Those will be our first speakers. If there's anyone else who would like to make comments, please do press that Star 1, and we will get you into the queue.

So with that, I will ask that, David, you will be available to provide your comments and we'll get

started. David H.?

DAVID HARDY: Okay, can you hear me?

CHRISTINE DAVIS: I can hear you just fine.

DAVID HARDY: Thank you.

Acting Director Cruickshank and other members of the Bureau of Ocean Energy Management, thank you for allowing me to offer this brief statement this evening on the Vineyard Wind supplemental Environmental Impact Statement, the SEIS.

My name is David Hardy, H-a-r-d-y, and I'm the President and Chief Operating Officer for Orsted North America Offshore.

Orsted is the world's leading developer of offshore wind with 26 operating wind farms globally, compromising -- comprising 6.8 gigawatts of clean and renewable generation.

Here in the U.S., we have been awarded over 2900 megawatts of offtake rights. The states of Rhode Island, Connecticut, New York, New Jersey, Maryland, and Virginia have all entrusted Orsted to build their first offshore wind projects in the U.S. And as the leaseholder of multiple wind energy areas in the Mid Atlantic and New England regions, we are poised to deliver from 8 to 10 gigawatts of

additional capacity and bring the economic, environmental and energy benefits of offshore into these markets.

I'd like to start by commending BOEM for its work on the supplemental EIS. It is no small feat to forecast the myriad impacts that the development of a new ocean-based renewable resource will have on the human and natural environment, both positive and negative. But BOEM has largely presented a comprehensive, thoughtful and data driven analysis of the reasonably foreseeable impacts of project development along the Eastern Seaboard. Just as importantly, BOEM has honored its commitment to deliver the SEIS in a timely fashion.

It's hard to overemphasize this point. As a nascent industry, market participants are looking to BOEM and other state and federal agencies to create stable, predictable and transparent permitting processes and timelines that are paramount to unlocking the billions of dollars in private sector investment that will be required to stand up this new industry here in the U.S. and meet state energy targets. The release of the SEIS is, therefore, a critical milestone.

With the completion of the cumulative impact analysis, and establishment of a methodology that can be broadly replicated across all planned offshore wind projects, we urge Secretary Bernhardt to now lift the Department's hold on the formal environmental review projects in the queue.

But the remainder of my time, I'd like to briefly touch on a few substantive points regarding the SEIS. These points will be amplified in public hearing statements by Orsted subject matter experts and in our written comments.

First, we strongly support the adoption of Alternative D-2 as the preferred alternative for project layout in the Rhode Island/Massachusetts contiguous lease area.

As one of the participating developers to the consensus proposal for a uniform one-nautical-mile-by-one-nautical-mile east-west grid configuration for these specific lease areas, we were heartened to see the solid evidence presented in the SEIS demonstrating the superiority of this approach from a navigational safety perspective while still respecting the ability of commercial fishermen and other navigators to transit

in and through our lease area.

We encourage BOEM to defer to judgment of the U.S. Coast Guard, which in the context of the recently released final Massachusetts Rhode Island Port Access Route Study, the MARIPARS, determined that the grid layout pattern, and I quote, will result in the functional equivalent of numerous navigational corridors that can safely accommodate both transits through and fishing within the wind -- the WEAs, and declined to recommend further formal or informal vessel routing measures. Diversely, we take issue with the SEIS finding that Alternative F contemplating a dedicated four-mile-wide transit corridor could, quote, technically and economically meet the purpose and need.

As an example, the Responsible Offshore Development Alliance wrote a proposal for a four-nautical-mile-wide transit lane, the basis for Alternative F, if -- if adopted and extended to other projects would result in the loss of over 50 -- 50 wind turbine locations from our current three projects, South Fork, Revolution and Sunrise Wind, that have current existing PPA obligations. This equates to nearly 25% loss in the total wind

turbine locations needed to support our state power purchase agreements.

In light of this significant constraint on our development -- developable footprint and attendance production loss, we believe the SEIS conclusion of technical and economic feasibility with respect to Alternative F is misplaced.

Second, it's hard to reconcile the SEIS qualitative assessment that future offshore wind development will result in only minor net economic benefits to the region with the study's recognition of significant new investment in ports and harbors, manufacturing and other supply chain activities and workforce development.

Our company alone is on its way to investing 15 billion over the next decade in the U.S. The SEIS should reflect a more favorable rating of offshore wind as a domestic economic development engine consistent with ongoing and planned investments.

Third, for many of the cumulative impact parameters considered in the SEIS, BOEM chose not to incorporate widely accepted or legally mandated mitigation strategies. Thus, the bottom-line impact

of the 22 gigawatt build-out must be considered a worst case scenario and not a representative -- representative as -- representative of as-constructed project impacts. The SEIS should place the impact assessment in proper context.

Fourth, since the SEIS acknowledges that ongoing climate change, which contributes to cumulative impact, it's important to reemphasize the positive climate impact that renewable energy projects will provide to terrestrial and marine fauna and local communities.

For example, Orsted's ocean wind project is expected to avoid emissions of over 100 million tons of carbon dioxide, almost 200,000 tons of sulfur dioxide, and over 80,000 tons of NOx over the life of the project. Offshore wind thereby results in a net reduction of regional air pollution.

In conclusion, we applaud BOEM for an instrumental role in encouraging America's offshore wind energy to continue to advance. This SEIS an important step in this journey. We remain confident that our offshore wind farms can coexist with all other ocean users including the Northeast commercial fishing industry. As noted, we've already taken

steps to support that coexistence.

At the same time, we stand ready to help the Northeast recover long term from this unprecedent -- unprecedented economic crisis by creating thousands of good local jobs and investing hundreds of millions of dollars in local ports to develop homegrown clean energy that will combat climate change and power our communities for decades to come.

Thank you.

CHRISTINE DAVIS: Thank you, David.

Up next, we'll have Joe M., Kai S., Michael S., Michael S. and Eileen M.

So, Joe, are you available? And please state and spell your name?

JOE MARTENS: Yes, Christine. Can you hear me?

CHRISTINE DAVIS: I can hear you just fine.

Thank you very much.

JOE MARTENS: Great. Thank you.

Good evening. My name is Joe Martens, J-o-e M-a-r-t-e-n-s, and I'm the director of the New York Offshore Wind Alliance, or NYOWA, which is a project of the Alliance for Clean Energy New York.

I'm also the former commissioner of the New York State Department of Environmental Conservation where I served Governor Cuomo from 2011 to 2015.

NYOWA is unique coalition of offshore wind developers, environmental NGOs, labor organization, and a variety of businesses all dedicated to promoting the responsible development of offshore wind in federal waters off of New York State's coastline. Vineyard Wind is a NYOWA member.

Let me start by thanking BOEM and its staff for completing and releasing the supplemental EIS in the midst of a national health emergency. This was no small task.

It is critical work moving forward on this project. And it's important not only to Massachusetts, as many have testified in the previous hearings, but for states up and down the Eastern Seaboard in the nation. It's critical on many levels in the fight against climate change, in our effort to reduce criteria pollutants, improve public health, address long standing environmental justice issues, and to help restart the economy in the wake of the COVID pandemic.

I plan to submit written comments on behalf of

NYOWA, but I wanted to emphasize a few points in my oral testimony this evening.

First, the supplemental EIS is, by design, focused on the cumulative impacts of the Vineyard Wind Project and other offshore wind projects that are reasonably foreseeable. But a plain reading of the SEIS could lead to the conclusion that if the Vineyard Wind 1 Project is not advanced, other projects in various stages in the pipeline inevitably will. I don't think this will be the case, and I'm going to explain why further in my testimony.

Then Vineyard Wind team of Copenhagen Investment Partners and Avangrid Renewables, as developers of the first commercial scale offshore wind proposal to advance since Cape Wind, have gone above and beyond the extensive federal, state and local requirements for offshore wind. They've done extensive due diligence, worked closely with BOEM and state and local regulators, and reached out to a wide variety of stakeholders, including commercial fishermen and environmental NGOs.

They've modified the project in response to concerns and objections, and they've collaborated

with other Massachusetts leaseholders. Collectively, they have voluntarily agreed to a one-by-one nautical mile spacing to address concerns raised by both commercial fishermen and the Coast Guard.

Further, Vineyard Wind has voluntarily entered into an agreement with the National Wildlife Society and RDC and the Conservation Law Foundation to adhere to a host of measures that will help ensure protection of endangered right whales and other marine mammals.

The project has significant environmental and public health benefits. It would reduce carbon emissions by almost 1.7 million tons per year would cut NOx emissions by over 1000 tons per year and SO2 emissions by 860 tons per year. It has significant economic benefits.

The project would generate 2.8 billion in direct private investment and provide some 3600 family-sustaining jobs, and it would have a significant ratepayer benefit generating 1.4 billion in savings over the life of the project.

And that's just the Vineyard Wind Project and doesn't nearly speak to the magnitude of the benefits for the remaining 22 gigawatts that BOEM

analyzed.

It's important to remember that BOEM already went through an extensive process, when it established the Massachusetts Wind Energy area, to minimize conflicts and environmental impacts. And then, as noted above, Vineyard Wind also went through an extensive process -- process to develop a project that addressed concerns raised by stakeholders.

As this project is the first anticipated large scale wind project in the United States, it is, in many respects, a litmus test for offshore wind development in this country. Where BOEM comes out on this project will send a message to the entire offshore wind industry and will likely determine its fate in the U.S. All eyes are on this project.

It's clear that BOEM's decision here will have ramifications well beyond the Massachusetts border. New York, for example, has three offshore wind projects in the pipeline totaling more than 1800 megawatts and has a state mandate to achieve 9000 megawatts of offshore wind energy generation by 2035.

If those projects do not advance or are

subject to onerous conditions, such as a four-mile-wide transit lane, New York -- New York will not achieve its statutory clean energy standards. It's that simple.

So I urge BOEM to reject the Alternative F.

As noted earlier, Vineyard Wind, along with other New England wind energy area leaseholders, have agreed to advance future projects in their lease with a uniform one-by-one nautical mile layout. The U.S. Coast Guard has since determined that this type of standard and uniform grid pattern would maximize safe navigation in the wind energy area.

Alternative F is completely unnecessary and would severely constrain clean energy production in the Massachusetts wind energy areas and not meaningfully improve navigation or safety.

In short, it threatens the viability of all offshore wind projects in the region and the state's ability to meet their renewable energy goals, and in some cases, like New York's, its mandates. If it is imposed, we would lose -- lose the substantial benefits of these offshore wind projects, including emission reductions, improved human health, billions

in economic investment, and thousands of family-sustaining jobs.

So I urge BOEM to stick to its public schedule, issue -- issue a final EIS in November, and a record or position approving the project as proposed and modified by the applicant in December.

Thanks again to BOEM for all his hard work, and thanks for the opportunity to testify.

CHRISTINE DAVIS: Thank you, Joe.

Next, we'll have Kyle -- Kai, and then after that, Michael and Eileen.

So Kai, are you with us?

KAI SALEM: Yes. This is Kai Salem, that's K-a-i S-a-l-e-m, and I'm a policy advocate for Green Energy Consumers Alliance.

So thank you to the Bureau of Ocean Energy Management for the opportunity to comment this evening.

My name is Kai Salem. Green Energy Consumers Alliance is a nonprofit founded in 1982. Our mission is to harness our power as energy consumers to speed the transition to a low-carbon future.

As such, we manage programs to connect our members with green energy choices, whether that

means we're helping them get electric vehicles or access renewable energy. Further, we advocate for practical but ambitious policy solutions to reducing greenhouse gas emissions in Massachusetts and Rhode Island.

Our over 10,000 members, well over 10,000 members, across Rhode Island and Massachusetts, who are involved in our energy program, demonstrate that New Englanders want clean energy, and they want clean energy that is affordable and reliable in building a local green energy economy in our states.

Most of our members, like the staff and board here, at Green Energy Consumers Alliance are deeply concerned about the climate crisis and about our state's own role in addressing the climate crisis. We are working together to urgently develop an energy system that is affordable, reliable, and most importantly, free of fossil fuels which create local and global air pollution problem.

As such, Green Energy Consumers supports the Vineyard Wind Project. We believe this SEIS demonstrates that offshore wind can be constructed at minimal environmental impact and that this project will lead to affordable and reliable clean

energy for New England ratepayers. Moreover, this project is an essential step in the larger grid decarbonization that needs to happen in New England over the coming decades.

The development of offshore wind in the region is essential for the achievement of our clean energy goals. We strongly support this project. It's the first large-scale project in the region.

Most states in the region, including Rhode Island, which doesn't have binding targets, and Massachusetts, are behind on the targets including the 2030 and 2050 climate targets. The task of meeting these targets is daunting. It is even more daunting or perhaps impossible without offshore wind.

New England, according to a recent analysis by Brattle Group for the Massachusetts State Government, needs 43 gigawatts, or significantly more than one gigawatt per year over the next 30 years, to decarbonize our energy system. That daunting task grows even more daunting the longer we wait. And it's time to move on this project.

The recent Massachusetts power purchase agreements create savings to ratepayers as offshore

wind prices have come in lower than the other resources in the wholesale market. That means that offshore wind can contribute not just to the clean aspect of our energy market in our energy system goals, but also the affordability aspect.

Significant alterations to the project, such as the incorporation of extra-wide vessel transit lanes, or reducing the overall size of the project would reduce the region's ability to meet its decarbonization targets. It would also affect the viability and cost efficiency of the project.

However, proposed Alternative D-1, the one-nautical-mile-wind-turbine spacing, does allow for both project viability and least amount of obstruction to the commercial fishing industry. As this project will be a boon to the local economy, we certainly support minimizing the amount of obstruction to the commercial fishing industry.

The development of these large-scale projects fosters economic activity and job creation. Massachusetts and Rhode Island and other states throughout New England have repeatedly committed to the development of the clean energy economy as the future of these states. And moving ahead with this

project will allow the economic benefits to result from the clean energy industry that we want to see.

So thank you, again, for the opportunity to comment. We see offshore wind broadly as essential to the future of our region and our members. And our staff and board here at Green Energy Consumers strongly support this project.

Thank you again for the opportunity to comment.

CHRISTINE DAVIS: Thank you, Kai.

Next, we have Michael S. and then Eileen. After that, we'll have Fred H., Bradley L., and Janice K. So you folks are new names to the queue. So again, after Eileen will be Fred, Bradley and Janice.

And with that, I'll turn it to Michael.

Michael, are you with us? Michael, I don't know if --

OPERATOR: Michael retracted his question in the queue.

CHRISTINE DAVIS: Okay. All right.

Can we move forward to Eileen, please?

EILEEN MATHIEU: Okay, can you hear me?

CHRISTINE DAVIS: I can hear just fine,

Eileen. Thank you.

EILEEN MATHIEU: Okay, good. Thank you.

So my name is Eileen Haley Mathieu, 44 Longview Drive, Marblehead, Mass. I'm the chair of Clean Energy and Public Policy Group of a Sustainable Marblehead. I'm also a member of Massachusetts Climate Action Network, Mass Audubon, and I'm an avid birder and a sailor.

But my reasons for being in favor of Vineyard Wind are three, and I'm going to go back in more detail on number one. But start with number one, we need more renewable energy in Massachusetts and for Massachusetts.

Number two, the Vineyard Wind project has been very thoroughly vetted. It's supported by major environmental groups such as Mass Audubon, Conservation Law Foundation, and Natural Resources Defense Council, which are just topnotch groups. And as long as I've been involved in this for 40 or 50 years, they're groups I look up to.

So secondly, there's been very careful evaluation of the current marine environment in the area preconstruction. And Vineyard Wind has committed to evaluation and assessments during

construction, and after installation of the wind turbines impacts, will be closely monitored. So I think that there's a very scientific, careful, thoughtful approach that should minimize any negative effects on us.

The third issue is that with climate change bearing down on us rapidly, and New England expected to see higher and more rapid temperature rises -- in fact, in The Globe yesterday, they were talking about how Connecticut has already achieved two degrees centigrade higher temperatures than the 1890s.

And then we have more extreme precipitation events predicted for New England; stronger hurricanes, of course, coming at the coast, and we get those intermittently; certainly more extreme wind events; many thunderstorms now result in power outages than they did, and that didn't used to happen, but the winds will be clocked at, you know, 80 or 100 miles an hour.

So obtaining electricity from a carbon-free source such as wind power, which reduces carbon emissions, and, therefore, hopefully will help us get a feeling of emissions and then begin to reduce

how much is in the atmosphere, is terribly important.

So regarding the need for renewable energy in Massachusetts, I'm wearing my Sustainable Marblehead hat and my MCAN, Mass Climate Action Network, hat.

So in Marblehead, our Municipal Light Department, which supplies our electricity, is eager to be able to purchase reasonably priced electricity from renewable sources. And we have constant discussions with them about that.

However, local resources are very constrained so that right now we only have 12% renewable energy in our portfolio and then 26% nuclear. We purchase our power through PSA and PPAs through MMWEC, which is the Mass Municipal Wholesale Electric Corporation. MMWEC needs wind options to provide its 22 Municipal light plant members? And currently it has none.

You know, we have Berkshire Wind. We jointly, with some other munis, own eight turbines in Western Mass. But clearly, there's no future wind on the horizon unless Vineyard Wind gets approved.

And suddenly, there's a real trend happening in Massachusetts and in Marblehead. So starting

with Marblehead, Sustainable Marblehead took the lead and got the town to pass a warrant article at our town meeting in 2018 committing the town to 100% carbon-free energy. And that was in transportation, building use and our electric grid.

Many other towns in the Boston area, including Natick, Arlington, Melrose, Concord, Wellesley, Belmont, are all actively pursuing similar zero-carbon emission goals by 2040. This goal is more aggressive than Governor Baker's 2050 goal for Massachusetts. So there's a real groundswell of communities trying to get this done.

To reach these goals, all these communities will need more renewable energy sources in their portfolios. So we need more sources of renewable energy. And most of the communities in eastern Mass are too densely populated to have the land area for land-based wind or for solar at utility scale; thus the offshore wind project of Vineyard Wind holds a tremendously important potential for Massachusetts.

So, in short, I feel that approving this project without delay is very important. And since it is -- this is not new technology and it's been thoroughly vetted, I urge your approval.

Thank you.

CHRISTINE DAVIS: Thank you, Eileen.

Next we have Fred, Bradley, Janice, then John B. and Mark K.

So with that, I'll turn it to, Fred.

FRED HOPPS: Yes. Hello. My name is Fred Hopps, F-r-e-d H-o-p-p-s. And I live in the coastal city of Beverly, Mass. I'm the founder of the Clean Energy Advisory Committee, duly appointed by the mayor and council, and a local advocate with North Shore 350.

Beverly is the home to the original and still functional commercial-sized 100 kW Photovoltaic Research and Development Project commissioned in 1981 with funds from the Carter administration.

At the time the experimental PV site was constructed, I was living in Copenhagen, Denmark, and I watched the Danes for four years responding to the oil embargo and energy crisis of the 70s.

And up until about 10 years ago, Denmark was the number one world leader in development deployment for wind power. Still today, the Danes are leading the way with technology expertise, and indeed, Orsted and Copenhagen Investment Partners

are major players in the proposed build-out.

(Speaker speaks in foreign language.)

A thousand thanks to the Danes who practically single-handedly kept the wind power industry alive. Compare that to the progress to the Carter administration initiative for energy independence that was dismantled when he left office in 1981.

The old solar field in Beverly is a testimony to both the road not taken and yet a glimmer of hope to the burgeoning solar expansion today.

Committing to a clean energy future is now viable and essential. In 2011, Scotland set a goal for 100% clean energy, and they will reach that target by November. The Scots found a way to supply all their power without exploiting or destroying the surrounding natural world, and much like the Vineyard Wind Project where the utmost care is being provided with consideration for fishing industry, marine life and birds.

Mass Audubon will be monitoring bird migration behavior. National Wildlife Federation stands as the champions for marine life and wholeheartedly supports this project. The Coast Guard has approved adequate spacing of turbines and conclude that

corridors provided will -- will create proper navigational opportunity.

Please reject Option 4 and adopt Option D in that regard.

So if we are responsible as a society, we're going to alleviate the devastating long-term effects of climate crisis, offshore wind is the easiest and lowest energy delivered cost. Let's not forget the tens of thousands of jobs that the wind power industry could generate long term.

I would like to say that Beverly Mass is committing to 100% renewable as well. And our targets are actually 2025 for electricity and 2030 for transportation and heat.

I've been involved with the old solar fields in Beverly since 2004, and there's been steady progress in the solar industry in the last 16 years. It is an economic and environmental tragedy that the solar industry could have been and should have been developed quicker.

Let us not delay this current renaissance for clean energy infrastructure. Let's repair that road not taken 40 years ago. Let wind power help create a new leadership role for the United States. It's not

too late. Indeed, the time has come. Indeed, the time is now to unleash the power of wind for energizing the Clean Energy Future of now.

I'd also like to suggest that we are creating a geopolitical stability as we develop local clean energy. I urge BOEM to approve the Vineyard Wind Project.

And thank you for your listening time.

CHRISTINE DAVIS: Thank you, Fred.

All right, next we have Bradley L., then Janice, John, Mark.

So, Bradley?

BRADLEY LIMA: Can you hear me?

CHRISTINE DAVIS: I can hear you just fine. Thank you.

BRADLEY LIMA: Great.

First name Brad, B-r-a-d, last name Lima, L-i-m-a. Recently retired from Massachusetts Maritime Academy as the Chief Academic Officer. I've been involved with higher education for nearly 40 years, and I'm also a deep sea mariner.

I'd like to first go on record in supporting the one-mile distancing between towers.

And there was one statement in the Coast Guard

report that stood out to me: Anything that can be done to reduce traffic scenarios is a prudent decision. So I'm very supportive of that.

I would like to read a written statement that I have already submitted to the program manager.

Most of my 50-year career had been intricately linked to the field of power generation. As we address the challenges associated with the development of offshore wind, we should also look back into the history of power generation and determine if there are lessons learned from the past.

In the 1940s and '50s, power generation in the west was primarily focused on oil and coal, which were built with 40-year-life expectancies. Coal and oil were abundant, low in cost, and yielded high co2 emissions along with high levels of sulfur dioxide.

In the 1960s and '70s, focus became on nuclear power generation. These plants were built with a 40-year-life expectancy. Government, understanding there were risks associated with nuclear power, responded with the creation of the Nuclear Regulatory Commission for oversight of this industry.

As the U.S. entered the 1980s and 1990s, there was a change of thought towards building plants for 15 to 20-year-life expectancy, with the understanding that higher overall plant efficiencies must be attained. The concept of combined cycle power generation was adopted were plant efficiencies could achieve 55% or even higher while using natural gas as a fuel source.

As we enter a new century, the power generation industry must now take into consideration of impact items such as climate change, carbon dioxide emissions, capacity of fossil fuels while experiencing an increase in demand for electricity. The direction taken on power generation supports concepts which was adopted with wind power.

It's quite evident, based on the number of companies which have won leases for the Atlantic Coast sites, that offshore wind is where power generation wants to be.

Globally today, there are 600 gigawatts of wind power with approximately 23 gigawatts of wind power coming from offshore. Offshore wind is no longer a new industry. Offshore wind has been around for 20 years predominantly in Northern

Europe.

Many of the concerns addressed in the BOEM report can be answered by communicating with those who have met the challenges associated with offshore wind.

As I reviewed the BOEM report, I took notice of the study on avian fatality. And the model that was created indicated one fatality every 6.25 years. So it's kind of nice to know that a turbine is not a bird Cuisinart.

In reading the BOEM white paper, there was one statement which was continually used, and that statement is, to the degree wind energy development offsets the use of fossil fuel used to generate power, it will reduce carbon emissions and further effects to reduce global warming.

Calculated risks are necessary when adopting a new concept for the first time. Global warming is a subject that must be addressed now, and corrective measures -- measures must be adopted so future generations are not burdened by the lack of decisiveness by regulatory authorities.

As a country who takes great pride in wanting to be a global leader --

CHRISTINE DAVIS: Did we lose Brad or -- I don't know if the operator can help me out, but I'm not hearing Brad.

OPERATOR: We've lost his audio for some reason.

CHRISTINE DAVIS: Okay.

OPERATOR: Give it -- maybe it will come back in just a moment. But, yeah, he's not talking though.

CHRISTINE DAVIS: Okay.

OPERATOR: So his line may have dropped.

CHRISTINE DAVIS: Okay. Well, why don't we do this: If he comes back on, let's put him after Janice. But let's keep moving forward with Janice, and we'll -- we'll bring Brad back, if he comes back on. Does that sound --

OPERATOR: Janice is no longer -- Janice is no longer in the queue either. She must have retracted her question.

CHRISTINE DAVIS: Okay, how about John?

OPERATOR: John is -- well, we've got Mark and then John.

CHRISTINE DAVIS: All right. Let's go for Mark.

OPERATOR: Okay, here's Mark.

CHRISTINE DAVIS: Thank you.

MARK KRESOWIK: Thank you very much. Can you hear me?

CHRISTINE DAVIS: Yes, I can hear you just fine. Thank you, Mark.

MARK KRESOWIK: All right. My name is Mark, M-a-r-k, Kresowik, K-r-e-s-o-w-i-k. I'm a Deputy Regional Director for the Sierra Club.

Sierra Club is a national nonprofit organization founded in 1892 to explore, enjoy and protect the wild places of the earth; to practice and promote the responsible use of the earth's ecosystem and resources; to educate and enlist humanity in the protection and restoration of the quality of the natural and human environments and to use all lawful means to carry out these objectives.

In service of that mission, Sierra Club has committed ourselves to a transition to clean energy that is equitable and affordable for all people. On behalf of our more than 3.8 million members and supporters in the United States, thank you for fully analyzing the environmental and economic impacts of the Vineyard Wind Project and the nearly 22,000

megawatts of offshore wind projects along the entire East Coast.

This comprehensive and detailed analysis that you all have conducted shows that responsibly developing the offshore wind industry will create tens of thousands of quality jobs, pump billions and economic growth into coastal communities, protect wildlife, lower pollution, and safeguard navigation.

The Vineyard Wind Projects' developers have already made landmark commitments to protect the critically endangered North Atlantic Right Whale, negotiate project labor agreements, and create a one-nautical-mile-wide transition lane between their turbines.

The Coast Guard has recommended that layout as the best way to ensure everyone can use the oceans safely and prosperously. And this draft Environmental Impact Analysis verifies that such a layout is the most fair, responsible and protective of all impacted constituencies.

The Bureau and the Coast Guard have appropriately taken significant efforts to consider the perspectives of all stakeholders, especially the parts of the fishing industry that have been most

vocal about their concerns. We thank you for your due diligence and your efforts.

Both the robust Coast Guard study and this incredibly detailed analysis show that establishing wider transit lanes would actually make navigation more difficult for most ocean users, limit the full potential of the offshore wind lease area, and reduce tremendous economic and environmental benefits brought by this new offshore wind industry for families, workers and businesses along the coast.

We urge you to finalize this environmental impact analysis. Approve the Vineyard Wind Project, as agreed to by the developers, by the end of this year. Launch a new offshore wind industry that can create jobs, protect our climate, and launch a thriving clean energy economy from Maine all the way down to Georgia.

Thank you very much for your diligence, your time, your effort to listen to our comments, to conduct this analysis to do what's right for all stakeholders and users of the ocean, the coast and the entire country.

Thank you very much.

CHRISTINE DAVIS: Thank you, Mark.

We're going to go next to John. And I'm thinking is John Rogers, but let's see. And let's get John queued up by chance?

JOHN ROGERS: Yeah, this is John. Can you hear me?

CHRISTINE DAVIS: I can hear you just fine. If you can state and spell your name. Thank you.

JOHN ROGERS: Great. Thank you.

My name is John Rogers; J-o-h-n, R-o-g-e-r-s. And I'm a senior energy analyst with the Union of Concerned Scientists.

UCS puts rigorous independent science to work to solve our planet's most pressing problems, and that includes our work in the power sector. And that's why we appreciate BOEM's efforts and thoroughness and the opportunity to comment tonight on the supplemental GIS.

What brings me here is not a single project but the chance to comment based on the broad scope of the SEIS and all the projects that it encompasses.

As I'm sure is clear, offshore wind offers exciting prospects. It can offer large amounts of

pollution-free generation, which many states, including along the Eastern Seaboard, are demanding. That matters for reducing air pollution from colossal fuel power plants; that affects, in particular, the often marginalized communities that abut those plants; and it matters for reducing climate changes, harmful impacts, including on the marine environment and all that depends on it.

Offshore wind generates at times that make it an excellent compliment to other renewable energy resources, including, because of its strength, in winter. Offshore wind can offer savings to electricity customers thanks to the strong cost reductions that the industry has achieved which are themselves thanks in part to the strong state policies that have prompted larger projects and offered economies of scale.

And offshore wind can offer economic development and jobs with the creation of an entirely new industry with all the projects, study, development, installation, maintenance, manufacturing, finance and more that the industry entails. That job creation potential seems particularly important with the high unemployment

and an economy in need of rebuilding.

All of those benefits depend on having a smooth science-based regulatory process for good decision-making. So it is really encouraging to have the BOEM SEIS out for comment, and we thank you for that. And it's especially encouraging to see that the SEIS found relatively low impacts, even with its consideration of a substantial collection of offshore wind projects, far beyond the one project that had been the focus of this polling process.

One area of consideration that you've heard about from others deserves particular attention and comment, the spacing and layout of the turbines.

When the five other -- when the five New England leaseholders proposed to adopt a uniform one-by-one turbine layout and the same east-west-north-south orientation, that was a solid response to many of the concerns expressed about the prior plans and navigation to the projects.

And as you've heard in this recent MARIPARS study, the U.S. Coast Guard confirmed the appropriateness of that spacing. But spacing the turbines so much farther apart also appreciably reduces the number of turbines and generation

possible in the lease areas. Vineyard Wind itself has estimated a 13,000-megawatt reduction for the New England lease areas with a 30% reduction in potential clean energy.

So we add our voice to the strong opposition to the SEIS Alternative F, which would require additional transit lanes beyond the hundreds provided by the one-by-one fixed orientation layout. Alternative F would lead to a lot more loss potential, fewer megawatts. And less generation would mean more air pollution impacts on the fossil fuel generation that those turbines could have displaced; less savings on electricity bills; fewer opportunities for economic development and jobs; and a heightened impact on marine wildlife, given the worsening impacts of climate change.

None of those should be acceptable outcomes, and we ask you to reject Alternative F in particular.

In my almost three decades of working in the power sector, I have never seen an opportunity like we're seeing now with offshore wind. The lengthy process to date, and now a strongly supportive SEIS, provide a strong basis for moving forward with

appropriate attention to mitigation.

What comes to this process isn't about one project, as you've heard, it's about every project in the queue behind it and about fidelity to science and facts and good decision-making.

After years of consideration of offshore wind in these parts, it's time for us to act and to begin to realize the tremendous benefits of offshore wind.

So thank you for all you have done and for what is yet to come.

CHRISTINE DAVIS: Thank you, John.

Okay. Next, we're gonna go to Moncrieff, then Lee and then Wendy.

So can we have Moncrieff, by chance?

MONCRIEFF COCHRAN: Can you hear me?

CHRISTINE DAVIS: I can you just fine. Thank you so much.

MONCRIEFF COCHRAN: That's great.

My name is Moncrieff Cochran, M-o-n-c-r-i-e-f, as in Frank, F, as in Frank, C-o-c-h-r-a-n. I'm testifying in my roles as Board Member of the Friends of Pleasant Bay on Cape Cod, and Executive Director of the Cape Cod Climate Change Collaborative.

Eighteen months ago, the governing board of the Climate Change Collaborative endorsed the Vineyard Wind offshore wind energy project. We did so because we recognized the threat that global warming poses to commercial fishing, a backbone industry on the Cape and islands and to the overall physical and economic viability of Cape Cod.

The ocean off New England is warming at an alarming rate, much faster even than scientists thought four years ago. This warming water means that cold-water fish species will leave the area in search of cooler ocean. Warmer water also strengthens summer storms and winter gales that are a real danger to -- both to our fishing fleets and to our fragile landmass.

The draft Supplemental Environmental Impact Statement recently published by the Federal Bureau of Ocean Energy Management reinforces our conviction that the Vineyard Wind Project will be a huge net positive not only for the Cape and islands but for the entire northeastern region of the United States.

Electrification must be a primary strategy for mitigating the release of carbon dioxide into the atmosphere, and the Vineyard Wind Project will be in

a position to provide the clean energy, the clean electricity needed to revamp our heating, cooling and transportation systems.

It's important to note that the untapped offshore wind resource along the U.S. Eastern Seaboard is one of the most powerful in the world. It is within reach or dense -- in densely populated areas along the East Coast where energy demands are high and new resource options are few. Estimates indicate that the offshore wind industry could provide as many as 83,000 jobs and deliver $25 billion in annual economic input in this region by 2030.

I commend BOEM and the other federal and state agencies and entities that have worked hard to bring together a full range of stakeholders. I'm particularly impressed by the way that the states of Massachusetts and Rhode Island have surveyed, monitored and sought to minimize impacts to natural resources, fish, birds and other sea life, as documented in the draft SEIS, including robust agreements to protect endangered species like the North Atlantic Right Whale.

Within the draft SEIS, I have several specific

recommendations.

I support the east-west one-nautical-mile-wind-turbine spacing without transit lanes -- that's Alternative D-2 -- which will give fishermen and other ocean vessel captains plenty of room to maneuver as they pass through the wind turbine -- the wind farm, sorry.

This alternative would require that the wind turbine generators be oriented in the east-west direction and have a minimum spacing of one nautical mile between them. That's allowing for continued coexistence between a new industry and existing marine users.

I also support the Covell Beach landfall alternative, Alternative B, which will limit the cable landfall to only that location. This location would reduce impacts on environmental and socioeconomic resources, and especially on Lewis Bay.

I'm delighted to see the SEIS provides the information needed to proceed with the development of the offshore wind industry more broadly along the East Coast of the United States, and more specifically, the Vineyard Wind Project.

This much needed clean renewable energy resource must be -- must proceed with all deliberate speed and no delays. The very future of the planet depends on the responsible development of offshore wind power in the United States and abroad. The Bureau of Ocean Energy Management Supplemental EIS points the way to this vital resource -- this vital source of clean energy.

Thank you very much.

CHRISTINE DAVIS: Thank you, Moncrieff.

Looking ahead, we've got about five more speakers left, and I'll read the names. And then as you can see on the screen, if you haven't already done so, and you'd like to get into the queue, please press Star 1 now and wait to speak to the operator. Just want to make sure that folks know we still have an opportunity to be added to the queue.

But what I have left are Lee, Wendy, William Janice and Susan.

So with that, I will turn it to Lee.

LEE BURNS: Good afternoon. My name is Dr. Lee Burns, and I currently reside in Sandwich, Massachusetts.

Prior to retiring, I did research in tumor

biology at the NIH. But then in 2009, I returned to Massachusetts and became involved with environmental issues and climate emergency.

I became a member of the Natural Resources Coastal Beach Committee, chaired the Energy Committee, and a town meeting member in Plymouth. Next, I volunteered for the whale and dolphin conservation and learned about some facts and the endangered Right Whales and what this organization and the Center for Coastal Studies in Providence were doing to support them.

Clearly, safe marine -- safety of marine mammals and our oceans' wellbeings should be balanced with the needs for producing green energy. These are just a couple of the many concerns that stakeholders have brought to the table and have then adequately addressed.

Currently I'm a member of 350 Cape Cod and have introduced petitions -- well, 350 has introduced petitions throughout towns on the Cape to recognize the climate emergency and to support net zero.

Also a member of the State Legislative team for 350 Mass to work for the pass -- passage of net

zero bills in the House while supporting EJ inclusion. I feel that the BOEM, along with other governmental agencies, have worked to mediate dangers to our ocean while fostering support to the important fisheries in the area.

The one-by-one NM separation distance between the wind turbines in the north-south east-west directions appears wide enough for transit and is actually a width larger than wind turbines, and -- that is standard in the North Sea.

Although offshore wind turbines are more expensive to build and install, their payback time is less than a year and -- to provide critical green energy for consumers.

In addition, by contrast, wind turbines on land are getting substantial pushback. And in one court, a wind turbine has to be dismantled while they're being shut down in other towns. Thus, our need for electricity will be much easier to satisfy with offshore wind turbines like Vineyard Wind.

Thus, I feel that the climate emergency is real and a dire threat to our wellbeing and Vineyard Wind desperately needed. And its placement with the one-by-one nautical mile separation for individual

turbines has been very well planned and needs to be approved.

Thank you.

CHRISTINE DAVIS: Thank you, Dr. Burns. And though your name seems to be pretty straightforward, would you mind stating -- spelling it for the record, please.

LEE BURNS: Yes, Lee, L-e-e, Burns, B-u-r-n-s.

CHRISTINE DAVIS: Thank you so much.

Okay. Well, with that, we'll turn it to Wendy, and then William, Janice, Susan, and then Janet.

So go ahead, Wendy.

WENDY NORTHCROSS: Thank you. I'm Wendy Northcross; W-e-n-d-y N-o-r-t-h-c-r-o-s-s, as in Sally. I'm the CEO of the Cape Cod Chamber of Commerce, who is also a member of the Chambers for Innovation and Clean Energy, which is a nationwide network of Chambers of Commerce that help chambers and member companies navigate and prosper in the clean energy space. And we are proud to be affiliated with one of the largest local chamber organizations in the country.

And on behalf of our 1236-member businesses and organizations, we thank you for the opportunity to comment on the SEIS for Vineyard Wind 1.

We acknowledge that the creation of a major new industry is a significant undertaking and needs to be approached with careful consideration. We feel the federal government has done its due diligence and urge execution of the final permit for Vineyard Wind 1. We agree that is important that the first commercial offshore wind projects are done right, and it's imperative to evaluate the cumulative impacts to existing maritime uses, as well as the environment, and to establish best practices that minimize those.

We're especially sensitive to the concerns of the commercial fishing industry as an important piece of our past, present and future economy, and one that is impacted the greatest by this new emerging industry.

Vineyard Winds has gone through many iterations in an effort to craft a facility that's economically feasible, while at the same time taking its impacts into account.

Vineyard Wind has been a collaborative,

communicative and engaged partner with many stakeholder groups, and has shown genuine interest in the region's environmental and economic health.

While it's clear that there will be impacts to existing uses, and that the emergence of this new industry will require changes in both practice and habit, we feel that the adjustments made to this permitting process and the mitigations put in place will minimize those impacts.

Developers have made a commitment to coordinate a predictable layout that answers marine concerns and comes at the cost of substantial reductions in clean energy potential among the lease areas. We support the proposal, and further dilution beyond this proposal could jeopardize the project's viability, increase the cost to ratepayers, as well as increased environmental impact, rendering the existing lease areas insufficient to meet the region's clean energy mandates. And if this -- all this would occur if additional transit lanes are added to the plan, which the U.S. Coast Guard has asserted will not provide meaningful increases in ease of transits and actually could create increased conflict.

In terms of economic development, Vineyard Wind represents a major opportunity to bring $1.8 billion in direct economic benefits to Massachusetts, including 3600 new jobs. The project has created a $15 million fund to help build a sustainable offshore wind industry in Massachusetts that would bolster development of the supply chain, businesses and infrastructure. This type of economic development will play out up and down the East Coast of the United States if the nation ushers in this new renewable energy industry.

We urge BOEM to arrive at a final decision on the federal permits this year. This is critical not only for the viability of Vineyard Wind but for the entire future of the U.S. offshore wind industry, including shipbuilders, suppliers and other maritime interests. Considering the nation's abrupt economic downturn this year due to COVID-19 impacts, this will help spur immediate economic growth in our nation's economy.

Thank you again for the opportunity to comment on this project. Thank you.

CHRISTINE DAVIS: Thank you, Wendy.

All right. Let's move forward with William,

then Janice, Susan and Janet.

And, again, if you are not in the queue yet, if you haven't heard your name, please press Star 1 and wait to speak to the operator to get added to that.

So with that, I'll turn to William.

WILLIAM JOHNSON: Hello, my name is William Johnson, W-i-l-l-i-a-m J-o-h-n-s-o-n.

As a Danvers, Massachusetts, resident and a current student at Amherst College, I'd like to voice my full support for the Vineyard Wind 1 offshore wind project.

The project will be crucial for fulfilling Massachusetts climate goals and will provide thousands of good paying jobs.

I'm especially interested in voicing my support because Vineyard Wind has made outreach to organized labor a priority, pledging time on project labor agreements ensuring both fair compensation and adherence to the highest construction standards.

Consciously, Vineyard Wind will help launch a dynamic industry with positive effects extending across the region.

As a college student, I'm particularly excited

for the long term benefits regarding both climate and employment that this project and similar ones will provide.

Thank you for your time.

CHRISTINE DAVIS: Thank you.

All right, next, Janice and Susan and Janet.

So Janice?

JANICE KUBIAC: Hello, can you hear me?

CHRISTINE DAVIS: I can hear you just fine, Janice. Thank you.

JANICE KUBIAC: Oh good. Great.

Thank you very much for allowing me to participate in these comments.

I'm a member of Citizens' Climate Lobby. We advocate for carbon fee and dividends, the Federal Bill H.R. 763. And our goal is to incentivize renewable energy.

I'm a full supporter of Vineyard Wind and have appreciated just seeing them go through the process since 2017.

I do worry that not everyone involved in these stakeholder negotiations has a sense of the urgency of launching this wind facility. We are not usually educated via our media about the horrors of climate

change. We don't get a global news report. We rightfully struggle with the tragedies of racial injustice and coronavirus but we can't afford to ignore the reality of climate change.

So I'm hoping we can broaden the education that makes everything run more smoothly on this project and that it gets going.

I was very encouraged that the Coast Guard saw that the distance that they had between the wind turbines now is fine.

So thank you very much. Bye bye.

CHRISTINE DAVIS: Thank you very much, too. So thank you, Janice.

And we've got Susan and Janet. And they -- I believe if I just scroll down here a little bit -- yeah, that looks like that's -- that's in that chat box.

So, Susan, go ahead.

SUSAN STARKEY: Great. So can you hear me?

CHRISTINE DAVIS: I can hear you just fine. Thank you.

SUSAN STARKEY: Oh, terrific.

Susan Starkey, S-t-a-r-k-e-y.

As the co-chair of the Faith Communities

Environmental Network, of which a few other speakers who are also members of our group, I care greatly about sharing our concerns for the cry of the earth and the cry of the marginalized people and all species.

Personally, BOEM is one who's worked on understanding these issues since 2017, when we were working on bringing Vineyard Winds cables into Yarmouth Port.

I fully support Vineyard Wind's offshore wind projects. They have engaged the communities, many stakeholders for years in advance and have dedicated millions of dollars to ensure safe mitigation of all the potential harm that can happen during mitigation.

Regarding the current BOEM report, Vineyard Wind responded to the fisheries' main ask for changing the spacing between lanes as to the other companies. This was and is a dramatic concession that gives up to a third of development, which, frankly, I believe is too much to concede really. And now, I'm -- I'm fearing that we're going to hear from fisheries that potentially apply that they haven't been heard enough and think that that is

unconscionable.

There has been so much community outreach and stakeholder engagement. Further confessions are unnecessary and would call damage moving forward.

I ask you to reject Proposal F, as it further stalls the progress of renewable offshore wind energy. It is time to move forward.

The proposal, as Vineyard Wind presents it, has the best chance of addressing many of the needs of our most marginalized citizens in the northeast. They need affordable renewable energy; they need job creation in a new industry with good paying jobs; and they need us to address climate change before its crisis affects all of us further.

Climate change, not renewable energy, is causing chaos for the fishing industry. We need to all work together to support the safe and effective development of this industry in order to mitigate the climate emergency we face in the next few years.

Pushing through unnecessary changes at this point is of little benefit to the fishing industry and hamstrings a new offshore wind industry is unfortunate, to say the least.

So you might know that Vineyard Wind went

through every permitting process without a significant override compared to Cape Wind years ago. They've gotten their permits fair and square.

We need every offshore wind company to be diligent in these ways. And so I thank BOEM for their diligence and making sure that every company has those.

We need to do what Vineyard Wind has done, which is to ensure that they will do proper mitigation to impacts of marine life and to commit to ongoing monitoring and research that will help perfect the industry here in the U.S. We need every company that proposes offshore wind projects in these protected waters to be similarly diligent and collaborative.

It is well past time to move forward with Vineyard Wind's projects.

Thank you.

CHRISTINE DAVIS: Thank you, Susan.

Next, we have Janet. And at this time, Janet is our last speaker.

I want to remind you of a couple things. If you do want to speak, please press Star 1 right now and ask -- speak to the operator to get you in the

queue.

And then also, I know that there have been quite a few questions and answers -- or questions that have been populated into those folks that are on Zoom, using the Zoom Q & A box. So if you've got questions, we are getting to the last speaker and we're going to turn to the question-and-answer period next. So please enter any questions that you might have.

And with that, Janet, I'll turn it over to you.

JANET WILLIAMS: Yes, thank you.

My name is Janet, J-a-n-e-t, Williams, W-i-l-l-i-a-m-s. I'm a member of the Cape Cod Climate Change Collaborative, but I'm here today representing the Chatham Climate Action Network, a collaboration of organizations, businesses and residents of Chatham, Massachusetts, united in our desire and effort to address and reduce the increasingly negative impact of climate change on our town, our region and the world.

We first would like to thank BOEM for the opportunity to provide comment today on this SEIS on the Vineyard Wind projects. And we also want to

thank and commend BOEM for making the substantial but absolutely necessary effort to thoroughly analyze the environmental and economic impacts of this project and offshore wind development in the northeast U.S. and to develop this comprehensive assessment.

So there are two reasons why the Chatham Climate Action Network is uniquely situated to speak today with respect to the Vineyard Wind Project. First, if you don't know, Chatham is located at the elbow of Cape Cod; and as such, is surrounded on three sides by water.

And secondly, Chatham, as a result of that, has a long and proud tradition and to this day remains heavily dependent on our commercial fishing industry.

These two facts mean that here in Chatham, we're very focused on eliminating or reducing, if we can't eliminate, the damaging aspects of our changing climate as they show up here locally with rising sea levels, increased number of storms, increased intensity and frequency of storms, increasing erosion of our coastline, loss of our saltwater marshes that are so important to protect

our coasts.

And we're also keenly attuned to the impact of our changing climate on our fishing industry, particularly with respect to declining critical fish stocks, as they either move northward in warming waters or simply disappear resulting in the loss of economic opportunities and loss of jobs that are so important to our community.

So we're very concerned that movement toward resolving climate change move as quickly as possible to avoid them and reduce, to me, very damaging impact.

We believe that offshore wind generally, and the Vineyard Wind Project in particular, is a critically important part of the solution to the climate crisis. We believe that the town of Chatham stands to benefit in many ways from this project moving -- moving forward quickly by reducing our continued reliance on fossil fuels, to provide electricity to heat our homes, by creating many new jobs and creating other economic development opportunities for our town.

So here we are today here to speak in support of the Vineyard Wind Project. We specifically want

to support Alternative D-2, the east-west one-nautical-mile turbine spacing without transit lane. This alternative will reduce conflict with commercial fishing and marine navigation. It recognizes and protects existing ocean uses, such as the commercial fishing industry, while protecting the marine environment and setting the path forward in a fair and responsible way to protect all stakeholders, particularly the commercial -- commercial fishing industry.

Requiring additional transit lanes has been deemed unnecessary by the U.S. Coast Guard, and we agree. This would result in more complex -- more delay and damage to our industry and potentially making ocean transit even more complex and dangerous to the fisherman.

So we are therefore opposed to alternative asks requiring additional transit lanes and support Alternative D-2.

The SEIS in front of us today clearly demonstrates that offshore wind energy can be developed in a manner that is completely compatible with commercial fishing and other ocean marine activities. And that projects, such as Vineyard

Wind, should advance as quickly as possible, as quickly as reasonable and responsible development can allow.

We believe that this SEIS provides more than sufficient information and support of the development of the offshore wind industry and the much needed clean, renewable energy resource it will provide including the Vineyard Wind Project.

So we urge BOEM to complete this review in a timely fashion in accordance with the -- with the timeline that was laid out and referred to earlier and provide a pathway for this project to move forward recognizing all the compromise that has been made and avoid any serious consequences that could only further delay and jeopardize our ability to at last move forward beyond reliance on fossil fuel.

We here in Chatham are depending on you to help move this forward and approve the Vineyard Wind Project.

Thank you very much.

CHRISTINE DAVIS: Thank you, Janice.

And thank you to everyone who's provided comments today. I appreciate folks participating in this process and providing your input.

I'll pause just a moment to see if anyone else wants to press Star 1 at this time today to join the queue and potentially provide comment. I'm giving it just a second here to see if we got anyone.

Okay. I'm not seeing anyone else in the queue. So with that, I'm going to officially close the public testimony for today's session at 7:00 Eastern Time, straight up on the hour.

All right. So next we're going to do Q & A. And two-way communication is very much a priority for BOEM. So we're going to answer questions -- we're going to start by answering the questions that participants have already submitted, and then any others that we see in the next 15, 20 minutes or so.

Some of you have already done this, but if you'd like to submit a question, please use the Q & A function on Zoom. We've had several people who've dedicated the time today to watch in the Q & A box. They're preparing answers to the questions.

Additionally, I'd encourage you to visit the Frequently Asked Questions on the virtual meeting web page. There's a bunch of information there.

And so at this time, I'm going to turn it over to Isis Farmer with BOEM to address the questions

that we've received and to open the meeting up to other questions.

As a reminder, you can use the Zoom Q & A function to submit your questions.

So Isis?

ISIS FARMER: Thank you, Christine. I appreciate that introduction.

My name is Isis Farmer, and I'm an environmental coordinator at BOEM in our office of Renewable Energy Program. I'm also one of the co-leads for the Vineyards Wind 1 Project Supplemental Environmental Impact Statement.

And as Christine noted, we do have several questions that have been submitted throughout this meeting through our Q & A box. And if you do still have questions that you'd like to submit, feel free to open up the Q & A box and submit your question.

Please note that you will not see the questions right away -- Christine mentioned this earlier -- but you will see the questions show up as we answer them live.

And for the first question that we have, I'd like Michelle Morin, would you mind turning on your camera and unmuting your line and introducing

yourself?

MICHELLE MORIN: Yes. Thank you, Isis.

My name is Michelle Morin. I'm the Chief of BOEM's environmental branch for renewable energy.

ISIS FARMER: Thank you, Michelle.

And the first question I have for you is a general question. And the question is: Do you feel that the virtual meetings are reaching a true representation of the stakeholders and the people who have concerns about this project? Or do you feel that you will need to have an in-person meeting to properly meet the regulations?

MICHELLE MORIN: Thank you, Isis.

During the COVID-19 pandemic, federal agencies are required to continue to operate under all the same legal mandates and administrative regulations. And to the greatest extent possible, we need to continue to maintain services to the American people and our stakeholders consistent with the guidance that's coming out from the CDC and state and local health authorities.

As such, we're moving forward with our public meetings in this virtual environment in order to provide information to the public in the safest and

most effective way possible.

These public meetings, while they are virtual, are still a great opportunity for a public involvement and opportunities for you to provide comments on the supplemental EIS.

In fact, I've heard a lot of great positive feedback about our virtual meetings. And we actually have had a much greater turnout to these virtual meetings then we do our in-person meetings.

If it was not for COVID-19, we would be having these meetings in person. But again, these virtual meetings do comply with our public engagement requirements in NEPA.

ISIS FARMER: Thank you, Michelle.

The next question I have for you is: Where in the Supplemental Environmental Impact Statements is the risk of foundation and power collapse due to ship impact or simple fatigue failure discussed? Are the various structural risks discussed? And is the risk of cable failure discussed? And how -- and how that will be repaired, and the environmental impact that fixing the cable will result in.

MICHELLE MORIN: Thank you.

So, in addition to looking at potential

impacts with construction and operations -- I'm sorry construction and decommissioning, the EIS also considers potential impacts from maintenance and operations, which would include repairs.

However, since the focus of this supplemental is really on the expanded cumulative analysis, I would refer people to the draft EIS for more detail, and we'll have additional detail in the final EIS. Offshore wind projects are more structurally -- their design is more complex than land-based wind. And -- and in contrast to onshore turbines, offshore turbines are more dynamic structures because of the loading conditions. Therefore, these facilities are designed to the appropriate standards for those conditions.

And to ensure that, BOEM relies on what we call Certified Verification Agents, or CVAs. And you can find out more about the CVA requirement if you go to our optional renewable regulations, particularly, it's 30 CFR Part 585 Part G that talks about facility design, fabrication installation. And CVAs are independent companies that employ professional engineers with appropriate qualifications and experience to conduct these

third-party reviews.

And CVAs are very common. They're used in the review and approval process for offshore wind in Europe, but also offshore oil and gas in the United States since the 1980s.

ISIS FARMER: Thank you, Michelle.

And so for our next question, I'm going to ask for Bill Brown, our Chief Environmental Officer, to turn on his camera and unmute his line.

BILL BROWN: I'm unmuted. Can you see me?

ISIS FARMER: Give us one second. We got you.

BILL BROWN: All right. Okay.

ISIS FARMER: Thanks, Bill.

BILL BROWN: I got -- my internet has cut out periodically, but I tend to get on fast.

Yeah. So there was questions about does BOEM have climate awareness programs. And I think the best way to answer that is, is principally through our environmental studies program and through assessments that we prepare that are -- the use that information and other information -- and we do have this environmental studies program that -- that spends roughly $30 million a year on -- on

addressing research on the potential environmental impacts of the things we authorize, including offshore wind.

And I would say that we have many studies that address climate change. And I think they collectively demonstrate ongoing changes from climate change that threatened ecosystems and the enterprises and cultures that depend on them.

And then we take the studies that we -- we fund, and when we use them in assessments, like this one, and I think as you will note, in the draft EIS, for example, you know, there's a robust discussion of, you know, the big picture on climate.

And, you know, we have, we have meetings with the public on environmental documents, like this one. So here's -- here's one way to raise awareness.

And then I would like to just note one thing, a little more specific, which is we have now for five years funded a continuing review of our environmental programs by a committee of the National Academy of Science Engineering and Medicine. And those -- there's committees called the Committee on Offshore Science and Assessment,

and its meetings are accessible to anyone who has access to the internet.

The next meeting is next Tuesday and Wednesday, July 7 and 8th.

It focuses on BOEM's study profiles. And one study profile that's up for discussion, for example, concerns potential impacts of air pollution and environmental justice, which is an area that we, like many, are thinking very hard about right now.

And if you search for Committee on Offshore Science and Assessment and National Academies of Science Engineering Medicine on the web, I think you can pretty easily find the page for the meeting. It's preregistration. So I recommend to do that.

Thank you.

ISIS FARMER: Thank you very much, Bill.

And I'll also add that there's additional information and publications on our virtual meeting web page, including our Atlantic Science 2019 Year in Review.

And the next question I have is for Michelle.

Michelle, would you mind turning your camera back on and unmuting your line? Thank you.

So we've received a question that says:

Vineyard Wind has spent on the order of $900 million on lobbying in 2019, or said it spent about 300 million on lobbying in 2019. How can BOEM guarantee that the comments presented for the supplemental EIS are not all tainted by money from the developers? How can all stakeholders be confident they are getting a fair representation in this discussion?

MICHELLE MORIN: Yeah, thank you for that question.

I can't think of lobbying that any one company does, but I can speak to our goals and our requirements.

There's two main purposes of the National Environmental Policy Act, or NEPA, it's along under which we're preparing the supplemental EIS. And the two main purposes are to involve the public and then form the decision.

And one of the ways we're doing this is by holding these five separate public meetings on the supplemental EIS. And we're making efforts also to answer your questions directly, like this one, and allow for public testimony.

BOEM's Chief Environmental Officer is present tonight to listen to the testimony, ensure that

anyone who wishes to can speak and be fairly and equally representative -- represented in the discussion.

As Bill stated in his opening remarks, stakeholder involvement is very important to BOEM. And it is our goal to ensure -- it is our goal that all users can successfully coexist on the Outer Continental Shelf.

And I'll see if Bill wants to add anything to that.

BILL BROWN: Oh, I thought -- I thought that was a great answer.

But let me just say that the -- I don't know how much money anybody's spending on lobbying. That's not something we're aware of. But the people in BOEM are doing what Michelle said, we're reading the law, we're reading the science.

And what we -- what we recommend is, you know, unaffected by influences other than that.

ISIS FARMER: Thank you to you both.

The next question I will take. And the question is: This development seems backwards. We are developing a power plant prior to making a reliable electrical grid. Why is BOEM allowing a

seemingly random walk (2:12:36) approach to development rather than an organized -- than an organized development? Ann Barik in Tufts University presented a plan that would both reduce the costs and allow development to progress for relatively smaller consumers than state. This approach is relying on state PPAs where industry will struggle to purchase green power. In the supplemental Environmental Impact Statement, where does BOEM discuss the pros and cons of developing a grid as opposed -- as proposed by Ann Berik versus the proposed action, and can you summarize the results?

So the submittal of proposals for regional transmissions, such as under the Ann Barik proposal, is allowed under our regulations.

As with most of these assumptions, the choice was made because any shared transmission strategy that developed on the Atlantic Outer Continental Shelf would reduce impact. Ann Barik has submitted an unsolicited -- unsolicited proposal so for a little -- this is just a little bit of background.

Ann Barik has submitted unsolicited proposals to BOEM for development of to open-access offshore

transmission systems; however, neither are considered reasonably foreseeable projects for this analysis.

Utilizing a transmission network may reduce total miles of cables required to connect offshore projects, environmental impacts associated with subsea cabling and onshore interconnections and costs of development and operation. So all of those would be reduced.

These projects are currently under review with BOEM and are not considered -- again, not considered reasonably foreseeable at this time. If you want a more detailed explanation, that can be found in Appendix D of the supplemental EIS.

Okay. And so for our next question, I'm going to go back to Michelle.

Michelle, if you wouldn't mind turning on your camera and unmuting your line.

Okay. And the question is: Did BOEM analyze in the Supplemental Environmental Impact Statement the positive impact that closing this region to commercial fishing as maybe a result as -- as maybe a result due to the -- due to the insurance policies will have on creating a marine protected area? Was

this analyzed? And in particular, with respect to the addition to climate change and the great climate change mitigation these projects will cumulatively bring?

MICHELLE MORIN: Okay. Thank you.

In the EIS, we did not consider the closing of all finishing -- closing of the wind development area to all fishing as something that's reasonably foreseeable.

The EIS does contemplate that some fishing sectors, like mobile gear fishing, may just be disrupted. However, other fishing, such as for higher recreational, fixed gear, which includes trap, pots and gillnets. And private -- private anglers would continue to fish in some capacity in the wind development area and other lease areas.

The EIS also considers the artificial reef effect of foundations, but these effects are likely to be localized to the area surrounding the foundations. The supplemental EISs did analyze impacts of climate change in the area related to commercial fishing as it relates to the baseline for this resource, and also ongoing and future impacts to the commercial fishing resource.

ISIS FARMER: Thank you, Michelle.

And so for our next question, we have: If the cost is presented -- if the cost as presented is denied, what options are on the table for the developer? Or will the opportunity for another developer open up to provide the benefits of offshore wind in this area? And how fast can a transition to another developer take place?

MICHELLE MORIN: Thank you.

So we do consider the disapproval of the project in the supplemental EIS. That's considered under what we call the no-action alternative, and that's a requirement under NEPA, and so that is included in our EIS.

So that does -- the disapproval of the Construction Operation Plans doesn't preclude future development within the lease area. If the project was disapproved, another Construction Operation Plan can be submitted for our review.

The average time for a lessee to develop a Construction Operation Plan does vary, but typically it's about two years. So, for example, for Vineyard Wind, the lease was issued in March of 2015, and their Construction Operation Plan was submitted in

December of 2017. And then, typically, environmental review period be about another two years.

So any future development in this area would follow a similar timeline, additional reviews, additional opportunity for public comment.

ISIS FARMER: Thank you, Michelle.

And I think I have one more question for you. And the question is: The fact that a Supplemental Environmental Impact Statement was required, was this the first time this was requested by the Department of the Interior? And the extreme need of the developer for the tax incentives, which, by the way, were renewed at a greater level, though they actually made out financially by the pause and their greatly competitive price, and the fact that the developers spent so much money and resources on courting Massachusetts entities while not treating this as a regional or global project, indicate a reckless developer. What guarantees can BOEM give that moving forward, this developer will develop this lease as is regionally responsible -- as a regionally responsible partner to the United States?

MICHELLE MORIN: Thank you. So supplemental

EISs do occur. I myself have coordinated on one when I was in our oil and gas program, so they do happen. So that is not unusual.

And CQ regulations do spell out the process for that. And they're typically focused like the supplemental is, and Jenn explained earlier in the presentation.

And so I can't really comment on the tax incentive. But with regard to kind of oversight as the project, we do have ability, under our regulations, you know, to -- to monitor, to correct any actions that would take place that would not -- that are not in the approval.

ISIS FARMER: And, Michelle, if you don't mind, we have one more question that just came in. So what this question says: When will BOEM determine that there has been enough community engagement and it's important to move forward?

MICHELLE MORIN: Okay. I think, you know, part of that are these public meetings. So we're going to, you know, continue this outreach.

In addition to the meetings, we are trying to use every opportunity that's out there to engage the public about what's in this document and about our

offshore wind program.

The comment period is open through July 27th. And immediately after that -- well, actually, during the comment period, as they're coming in, we are assessing the comments and looking at those sort of questions.

ISIS FARMER: Thank you, Michelle.

And now I'm going to go to Jenn.

Jenn, would you mind turning on your camera and unmuting your line?

JENNIFER BUCATARI: Hi.

ISIS FARMER: Thank you.

JENNIFER BUCATARI: Okay.

ISIS FARMER: All right. So I have a couple -- there are a couple of NEPA questions that came in. And the first question is: What is the -- what is the projected impact of F -- I'm assuming they're referring to Alternative F -- on cost, schedule, output and financial performance?

JENNIFER BUCATARI: Okay. Thanks, Isis.

The impacts to various resources from Alternative F are considered under the appropriate resource within the supplemental EIS, such as demographics, employment and economics.

Also, in Chapter 2 of the supplemental EIS -- and we discussed some of the broader implications of Alternative F, which I think this question might be getting to. These implications include things like the delay of the proposed project construction, if significant additional survey work is need -- is required. And also, the assumption that BOEM makes that the addition of all six of the four nautical mile transit lanes proposed by RODA would reduce the technical capability of the Rhode Island and Massachusetts lease areas by approximately 3,300 megawatts, which is 500 megawatts less than the current state demand for offshore wind in that area.

ISIS FARMER: Thank you, Jenn.

And then another question for you: Is it possible to expedite the process and permit Vineyard Wind sooner than December? And may we also expedite the permits on the wind facilities -- actually, I'm sorry, this is a question for Michelle.

Michelle, would you my mind --

JENNIFER BUCATARI: I can respond, if you want. That's okay.

MICHELLE MORIN: Okay. That's fine.

ISIS FARMER: I'm gonna start -- reread the

question. Sorry.

Is it possible to expedite the process and permit Vineyard Wind sooner than December? And may we also expedite the permits on the wind facilities that are scheduled to follow along the East Coast? The news from the Arctic is very troubling. This is clearly a global emergency and deserves immediate action.

JENNIFER BUCATARI: Okay. Thanks, Isis. And thanks for the comment.

As these projects are considered to be major infrastructure projects, the review and approval process for offshore wind projects is already expedited under the one federal decision process. So issuance of a record of decision in December allows us sufficient time to complete all the steps that we need to and get public input on the SEIS and for BOEM and cooperating agencies to address any comments that are submitted in the preparation of the final EIS.

ISIS FARMER: Thank you, Jenn.

Okay. And then there are a couple questions for Ian.

Ian, would you mind turning on your camera,

unmuting your line and introducing yourself? And I think -- are you on mute?

IAN SLAYTON: I am.

Hello, my name is Ian Slayton. I'm a fiscal scientist at BOEM in the Offshore Renewable Energy Program.

ISIS FARMER: Great. Thank you.

So the first question I have for you is on the cumulative scenario. And the question is: On 516, Jennifer states that New York and New Jersey have asked for more offshore wind power than is technically available to them. Are these demands for offshore wind power in state law now? How does BOEM plan to accommodate these requests?

IAN SLAYTON: So it's important to keep in mind that what is technically available changes with technology. So, with technology available off the shelf right now, that full demand would not be met.

The demand from those states is based on the official state goals for offshore wind procurement that each state has announced. And no decisions have been made regarding additional leasing offshore in New York and New Jersey.

BOEM will continue to work with the intergovernmental state task forces and other stakeholders to determine the best approach for any future offshore wind leasing.

ISIS FARMER: Great. And the next -- I have a couple questions for you on air quality, Ian.

So the next question is: Does the Supplemental Environmental Impact Statement take into account the required NOx and other emissions regulations or requirements to do all of the -- all of this construction? Can the number of sites be accommodated while meeting the air pollution regulations?

IAN SLAYTON: So the first project requires and has applied for a clean air -- for Clean Air Act permitting for the associated emissions with building this kind of project. And the Environmental Protection Agency is currently processing that application.

Each project will undergo its own air permitting, just like this proposed project is. And each product -- just like each project is subject to its own NIPA review, as this one is.

And with that, it'll determine how each

project can be built in accordance to the Clean Air Act.

ISIS FARMER: Thank you, Ian.

And so there's another question. The question is: Why was the very significant cumulative greenhouse gas reduction benefit of the project that are in the pipeline not included in the -- I'm assuming they mean the Environmental Impact Statement? After all, this is the -- I think there was -- there's just another statement at the end of the question about excitement for offshore wind, so I'll stop there.

IAN SLAYTON: Okay. So, offshore wind on the scale that's contemplated in this scenario is a -- it's a direct reflection of efforts on a state level to reduce carbon emissions. But there's only one -- that's only one component of those efforts. They have others that are going along with that.

And the contributions of these states are only part of global emissions, right? The contributions of their emission. And the scale of climate change itself is quite large.

So with that said, the SEIS does discuss the

benefits of offshore wind projects on climate change. In Section 8.8 of Appendix A, there's a discussion about the increasing energy production from offshore wind projects and what likely decrease in greenhouse gas emissions -- emissions that would relate to.

ISIS FARMER: Thank you, Ian. I now have a couple questions for Brian Hooker.

Brian, would you mind turning on your camera and unmuting your line?

BRIAN HOOKER: Hi, Isis. My name is Brian Hooker. I'm a biologist in the renewable energy program.

ISIS FARMER: Okay. Brian's going to get your video spotlighted. There we go.

So the first question I have for you is: The developers have said that they want RODA -- and that's the Responsible Offshore Development Alliance -- to represent the collective concerns of the fisherman. However, the developers submitted a preferred spacing to the Coast Guard. RODA also has submitted recommendations in Alternative F. These -- these conflict, but RODA is supposed to make recommendations to or for the developers. How does

BOEM consider these facts in their analysis?

BRIAN HOOKER: Thanks, Isis.

So, I mean, BOEM, our responsibility is to look at comments from whomever they come from, whether they come from developers, whether they come from the commercial fishing industry or other sectors offshore.

So in this particular case, the developer proposed layout is captured in Alternative D2, the one -- one-by-one nautical mile spacing in an east-west grid pattern.

The RODA transit lane proposal is in Alternative F.

And these two alternatives are not mutually exclusive, meaning the decision-maker can choose both Alternative F and D-2; Alternative D-2 by itself; Alternative F, you know, with the proposed action, Alternative A; or other combinations.

BOEM assessed the impacts of these alternatives singularly and in combination with other alternatives, where -- where they were appropriate.

ISIS FARMER: Thank you, Brian.

And the next question for you is: Where in

the Supplemental Environmental Impact Statement does BOEM consider the potential for fisheries and energy to work together? What are the options for the assets to become assets for commercial fishermen and the food industry? Can nets be integrated, or were these conflicts analyzed? What's the encouragement for the commercial fishermen to adapt to the new landscape and the willingness of the offshore wind developers analyzed? If so, what were the major impediments to this collaboration? What were the major benefits of this collaboration?

BRIAN HOOKER: So, BOEM strongly encourages, you know, the -- you know, the commercial fishing industry and the wind -- wind industry to work together to find solutions to coexistence on the Outer Continental Shelf. You know, we participated and facilitated meetings regarding, you know, alternative transit regarding transit lanes, regarding, you know, facility designs.

However, the -- what the EIS -- the purpose of the EIS does, it assesses the impacts to the commercial fishing industry based on past and current practices. So, we can't necessarily predict future behaviors, you know -- you know, further out.

So, it's based on past and current practices.

However, the -- there are several state negotiated mitigation agreements, such as Rhode Island Fishermen's Viability Trust and the Massachusetts Fisheries Foundation -- Massachusetts Fisheries Innovation Fund that should continue to facilitate this ongoing dialogue between these two industries to find a best -- best -- best path for coexistence. But there wasn't enough information there to be able to analyze in the SEIS.

So I strongly encourage you to take a look at table 3.11-5, that's in Appendix B of the SEIS, that describes what the different mitigation packages are that were developed by the State of Rhode Island and the State of Massachusetts.

ISIS FARMER: Thank you, Brian.

And I think we have one question for you on benthic repurpose.

BRIAN HOOKER: Sure.

ISIS FARMER: What did -- what did the Supplemental Environmental Impact Statement conclude as to the destruction of the benthos by trawling and other dredging under fishing pressure versus the destruction that the construction of

all the foreseeable wind farms will cause? The National Academy of Science had to report on the destruction by commercial fishing that I hope was consulted in this analysis.

BRIAN HOOKER: Thanks, Isis. Maybe I'll quickly answer the last part.

First, that there are actually a lot -- a lot of different reports out there that discuss, you know, what the impacts to the benthos are based on -- on different, you know, fishing types. That the National Marine Fishery Service has done one specific to the fishing gear types that are found in the Northeast region, within -- that our project occurs. So those are certainly consulted.

But the cumulative impact analysis does include the baseline conditions that -- in which the Vineyard Wind Project would be occurring. And it includes all bottom disturbing activities, whether it be from commercial fishing, whether it be from, you know, dredging for navigation or dredging for beach renourishment, you know, the impact of other cable placements.

These are all detailed in Table 3.3-1. That's also in Appendix B.

Again, I point there because that's where we really detail all the individual impact producing factors, and sometimes referred to as IPF, in greater detail than the text. The text does a good job of summarizing that information that is in the table, but if you wanted to look at, you know, each of the specific impacts and those baseline conditions, those are in that table.

But it was definitely a part of the consideration and went into, you know, the consideration of the incremental impacts of Vineyard Wind with the understanding of the baseline conditions.

But we didn't -- we didn't do a separate assessment of all those different activities.

That's it.

ISIS FARMER: Thank you, Brian.

We're now going to go to Arianna. Arianna, would you mind turning on your camera and unmuting your line. Okay.

And the question -- first question I have for you is: Will the structure lighting be able to be activated by ships in distress for navigation when the weather is unfavorable? Will the markings be

clear in under an -- will the markings be clear under visual duress? Will they be active above a critical seascape for navigational aid?

ARIANNA BAKER: Thank you, Isis.

So to introduce myself, my name is Arianna Baker, and I'm the navigation analyst at BOEM.

So Vineyard Wind does discuss some of potential aspects of their lighting and marking plan, if you look in Section 5.4 of the Supplemental Navigation Safety Risk Assessment. And that can be found on BOEM's website on the Vineyard Wind web page.

This includes potential marking using things like sound system signals or marking turbines with automatic identification system transponders. But it states that the ultimate plan will be generated with consultation with the Coast Guard and BOEM.

So while the specifics of the lighting and marketing plan have not been solidified yet, BOEM has a draft lighting and making guideline that specified that when leases are required by the Coast Guard, to obtain a permit for private aids navigation, otherwise known as a PATON.

The PATON's regulations will require

individuals or organizations to mark privately-owned marine obstructions or other similar hazards, namely surface structures such as electronic service platforms or wind turbines.

So BOEM will include, as a condition of COP approval, the requirement that lets you submit a copy of any PATON applications that they receive from Coast Guard to the BOEM.

The U.S. Coast Guard Aids to Navigation Manual establishes the requirements for offshore wind facilities in Chapter 4 in Section G. And again, that's the U.S. Coast Guard Aids to Navigation Manual, Chapter 4, Section G.

Thank you, Isis.

ISIS FARMER: Thank you, Arianna.

Okay. And I believe our last question is about other uses. And I'm gonna go back to Michelle.

Michelle, would you mind turning on your camera and unmuting your line?

Okay. And again, this question is about other uses. And the question is: How will the Atlantic wind farm impact the defense objectives of the United States? Are we opening up vulnerabilities to observation and threats from foreign countries?

Where was this discovered in the Supplemental Environmental Impact Statement? And these reports that the West Coast Federal Defense forces oppose the offshore wind farm. What was the reaction for the East Coast offshore wind development?

MICHELLE MORIN: Thank you.

So BOEM does coordinate very closely with the Department of Defense for activities both on the West Coast and East Coast. Our coordination process occurs prior to leasing, also when we get site assessment plans, and then when we get Construction and Operation Plans, like the one we're discussing today. And service occurs at multiple stages in our process.

So before we even issue a lease area, the area's reviewed by DOD. Before we approve anything to be constructive, DOD reviews again, including the instrumentation that's proposed to be installed on these facilities in the seafloor to see -- you know, it looks for things that interfere.

So in particular, for the Vineyard Wind Construction Operation Plan, DOD did an assessment in 2018. And they stated, after their close review, that they said the proposed project would result in

minor but acceptable impact to the Northern Command, North America Air -- Airbase Defense, or NORAD mission.

And so then we recently reconfirmed that 2018 assessment that is still valid after the change in turbine style, and so DOD did confirm that.

I just wanted to remind everybody, if you want to look at that in more detail, you can see Section 3.14 of the supplemental EIS. And it talks about military and national security uses.

ISIS FARMER: Thank you, Michelle.

And with that, those are all of our questions. And so I will hand things back over to Christine.

CHRISTINE DAVIS: Thank you, Isis.

I believe that we'll just pass to see if anyone has any questions specific to the SEIS that you want to get in? We'll give that just a moment to see if there any, like I said, specific to the SEIS questions that we can add to the mix.

And I want to thank everybody who's participated today who have provided comments and participated in this process.

So, you know, just a minute.

Isis, I think we're good? Yes.

ISIS FARMER: Yes, I think we're good. Oh.

CHRISTINE DAVIS: Okay. Great.

So, if you look at the slide -- this is the next slide, please, Isis, was the one on where you can provide comments -- the comment period is open until July 27th.

We've completed three of the five public meetings. There are a couple more next week with more information available on the website and a number of ways that you can provide comments in addition to writing and online and whatnot. So just be aware that there are other opportunities.

So please have those comments postmarked by the 27th to get them in.

In a moment. I'll turn it over to Bill for his closing remarks, but I want to thank you for participating tonight on behalf of myself.

And also, have a great weekend, Fourth of July. Stay -- stay safe and be well.

So back to Jim.

BILL BROWN: Hi. Back to Bill?

CHRISTINE DAVIS: Oh, I'm sorry, Bill. Sorry, Bill. It's been a long week, right? Back to Bill.

BILL BROWN: That's okay, Christine. Thank

you.

CHRISTINE DAVIS: Sorry.

BILL BROWN: And for those that weren't at the beginning, let me just renote that BOEM is a federal agency charged with managing development of energy resources, including offshore wind and nonenergy minerals on the Outer Continental Shelf. It includes, for examples, sand from two separate hurricanes.

And the Outer Continental is the area beyond state waters but subject to the jurisdiction of the United States. And that includes nearly 2.5 billion acres, more than the land area of the nation.

We thank you for joining us today. This has been a great meeting with great comments and questions, and we look forward to hearing more from you.

BOEM is committed to protecting our oceans and coasts and the communities that depend on them, and to the future of offshore wind, also.

Please remember that the comment period on the supplement to the draft EIS is open through July 27th.

Thank you, again, and stay well and good

evening.

(The meeting was adjourned at 7:27 p.m.)

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C E R T I F I C A T E

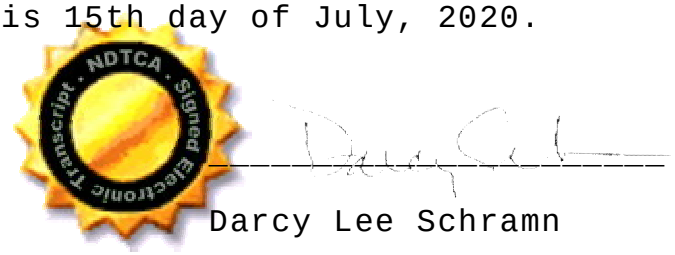
Commonwealth of Massachusetts

County of Norfolk, SS

I, Darcy Lee Schramn, a Professional Court Reporter and Notary Public in and for the Commonwealth of Massachusetts, do hereby certify that the foregoing Public Information Meeting was taken before me on July 2, 2020. The said testimony was taken digitally and transcribed under my direction. To the best of my knowledge, the within transcript is a complete, true and accurate record of said Meeting.

I am not connected by blood or marriage with any of the said parties, nor interested directly or indirectly in the matter in controversy.

In witness whereof, I have hereunto set my hand and Notary Seal this 15th day of July, 2020.



Darcy Lee Schramn

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