New York Bight Draft PEIS Virtual Public Meeting II

February 13, 2024

Transcript

Hanna Khalil, Facilitator, Kearns & West: Alright. Good afternoon. Thank you for joining us today. You are at the virtual public meeting on the New York Bight Draft programmatic environmental impact statement or the Draft PEIS. This meeting is being hosted by the Bureau of Ocean Energy Management or BOEM, and today's meeting is the last of a series of 5 public meetings.

Hanna Khalil, Facilitator, Kearns & West: My name is Hannah Khalil, and I'll be the lead facilitator for today's meeting. I'm also joined by a team of folks from Kearns and West, including Lee, Osterhus, Jack Hughes, Tom Fisher, and Sam Levy.

Hanna Khalil, Facilitator, Kearns & West: Sam, in particular, is here to manage all of the back-end technology and address any issues that you might have along the way. And her email is posted on the screen and is provided in the chat box should you need to reach out.

Hanna Khalil, Facilitator, Kearns & West: So a bit of housekeeping to start first, I'd like to just note that this meeting is being recorded t o ensure the completion of our notes. And all public comments shared during this meeting will be included in the public record and available on regulations.gov. And your participation today assumes that you consent to have your comment included in the public record.

Hanna Khalil, Facilitator, Kearns & West: For those whose primary language is Spanish or American Sign Language. We have interpreters available today.

Hanna Khalil, Facilitator, Kearns & West: Asl interpreters will be pinned to the top of the screen for the duration of the meeting, as you should be able to see right here, and to access the Spanish interpretation, you can simply select the globe icon at the bottom of your screen and select the Spanish audio channel, and this will allow you to hear the Spanish interpretation for the duration of the meeting.

Hanna Khalil, Facilitator, Kearns & West: Para escuchar la reunión en español, por favor oprima el botón del globo en la barra de herramientas en la parte inferior de la pantalla de Zoom.

Si tiene dificultad con la traducción o con Zoom, por favor envíe un email o un mensaje de texto a Sam Levy, slevy@kearnswest.com.

Hanna Khalil, Facilitator, Kearns & West: We also have closed captioning available today. And if you click the CC icon at the bottom of your screen, you have the ability to turn closed captioning on or off at any time throughout the meeting.

Hanna Khalil, Facilitator, Kearns & West: If you're a member of the media who has inquiries, you can contact Brian Walsh. He's here with us today, and his contact information is on the screen. And please consider that the information provided by members of the public today is not for attribution unless the person speaking gives permission to be quoted.

Hanna Khalil, Facilitator, Kearns & West: Okay.

Hanna Khalil, Facilitator, Kearns & West: That's it for housekeeping. So now, before we dive into our agenda for today, I'd like to turn it over to David Diamond. For some opening remarks. David is BOEM's deputy chief of operations for the Atlantic Outer Continental Shelf region in the office of renewable energy programs. So, David, over to you.

Dave Diamond, BOEM: Thank you, Hannah. Hello! My name is David Diamond, and I am the deputy chief of Atlantic operations for the office of renewable energy programs at the Bureau of Ocean Energy Management or BOEM.

Dave Diamond, BOEM: Thank you for joining us today in our final meeting to discuss the New York Bight draft programmatic environmental impact statement offshore New York and New Jersey.

Dave Diamond, BOEM: In addition to today's virtual meeting, we hosted another virtual meeting on January 31st, and in-person public meetings on Tuesday, February fifth, in North Dartmouth, Massachusetts, February Seventh, in Stony Brook, New York, in February, eighth in Toms River, New Jersey.

Dave Diamond, BOEM: For those of you who aren't familiar with BOEM. We are a Federal Bureau within the Department of the Interior that oversees the development of our energy and mineral resources in the nation's outer continental shelf, or OCS.

Dave Diamond, BOEM: The OCS extends in most areas from about 3 miles offshore to the full extent of the exclusive economic zone approximately, 200 miles offshore.

Dave Diamond, BOEM: BOEM is responsible for the expeditious and orderly development of the energy resources of the OCS, including renewables like offshore wind.

Dave Diamond, BOEM: It's our job to ensure this development is done in an environmentally and economically responsible way. This process starts with public input, data gathering, analysis, and leasing.

Dave Diamond, BOEM: For many years

Dave Diamond, BOEM: After. I'm sorry, after many years, we now have 28 active commercial leases for offshore wind in the Atlantic.

Dave Diamond, BOEM: As we've mentioned, we're here today to discuss the New York Bight draft programmatic environmental impact statement.

Dave Diamond, BOEM: Your participation and feedback today are essential to BOEM, renewable energy program and play a vital role in our environmental analysis and compliance with the national Environmental Policy Act, or NEPA.

Dave Diamond, BOEM: Thank you all for joining.

Dave Diamond, BOEM: There are about a dozen or so subject matter experts from the BOEM staff who are participating in today's meeting to help provide information as needed.

Dave Diamond, BOEM: We look forward to hearing your comments and answering any questions you may have. Now I will turn it back over to Hannah.

Hanna Khalil, Facilitator, Kearns & West: Thank you, David.

Hanna Khalil, Facilitator, Kearns & West: Okay, we'll now turn over to review our agenda for today, and a few logistical items. So as you can see on our screen, we've done our welcome and webinar guidance, and we just heard our opening remarks.

Hanna Khalil, Facilitator, Kearns & West: So now we'll review the agenda and meeting objectives, and that will be followed by 2 presentations. One focus on the environmental review process and one on the overview of the New York Bight drop Programmatic EIS.

Hanna Khalil, Facilitator, Kearns & West: We'll follow that with our public comment session. We'll be hearing your comments today, and then we will also facilitate a question-and-answer session. And we'll close with some closing remarks.

Hanna Khalil, Facilitator, Kearns & West: And then, just to review our meeting objectives. Today, we'll be providing information on the New York Bight programmatic environmental review process. We will also have an opportunity for the public to provide comment and ask any questions on the analysis in the New York Bight draft programmatic EIS.

Hanna Khalil, Facilitator, Kearns & West: And we'll also provide information on how you can comment during this public comment period.

Hanna Khalil, Facilitator, Kearns & West: Okay? And like, I mentioned. So after the presentations by BOEM, participants will have the opportunity to provide oral comments. To do this you can use the raise hand feature or dial star 9 to indicate that you'd like to provide public comment.

Hanna Khalil, Facilitator, Kearns & West: And if you already know that you'd like to provide comment. I encourage you at this time to raise your hand and to get in the queue, so we can get a sense of how many folks would like to provide their comment today.

Hanna Khalil, Facilitator, Kearns & West: and to ensure that we get to everybody and that we can hear everyone's comments, we're asking that you limit your comments to 3 minutes. When you provide your comment, there'll be a timer off on the screen showing you how much time you have left.

Hanna Khalil, Facilitator, Kearns & West: and if you do go over that 3 min mark, I'll kindly intervene to let you know, so we're able to keep the line moving and ensure that everyone has an opportunity to provide their comment today.

Hanna Khalil, Facilitator, Kearns & West: And if you feel like you require more than that allotted time for comments just wanted to know that there are several other ways to submit additional comments beyond this meeting, which include via mail to the address that's on your screen and also online at Regulations.gov.

Hanna Khalil, Facilitator, Kearns & West: and we'll add a link in the chat that will take you to the to BOEM's website for more information about how to submit your comments

Hanna Khalil, Facilitator, Kearns & West: and just noting we do have a lot of participants here. So we will be working to make sure that we hear everybody's comments today. But that might mean that we go beyond the initial timeline for this meeting. So I just want to reemphasize those alternative ways in case you have to drop off early or anything like that.

Hanna Khalil, Facilitator, Kearns & West: After the public comment period, we will also, with the public comment session, we will also have a Q&A process. BOEM is receiving and responding to your questions today and starting now throughout the presentation portion of the meeting, you can submit any questions that you might have about the draft PEIS analysis through the Q&A pod at the bottom of your screen.

Hanna Khalil, Facilitator, Kearns & West: BOEM subject matter experts will provide responses at the end of the meeting, following the public comment session.

Hanna Khalil, Facilitator, Kearns & West: And just so that BOEM has time to prepare thoughtful responses to your questions. We're asking that you please submit your questions before the start of the public comment session. Once that public comment session begins, we will no longer accept questions, and I'll indicate a reminder as well at that time.

Hanna Khalil, Facilitator, Kearns & West: Okay.

Hanna Khalil, Facilitator, Kearns & West: With that we'll now move on to the presentation portion of the meeting. So I'd like to introduce 2 members of BOEM Project management team who led the development of the draft PEIS, Megan Davidson and Courtney Strain. And they'll be providing information about the New York Bight environmental review process and an overview of the draft PEIS document. So Megan and Courtney over to you.

Courtney Strain (BOEM): Thanks, Hannah, and good afternoon. Everyone. Thank you for joining us. My name is Courtney Strain, and I'm an oceanographer within the office of environmental programs at the Bureau of Ocean Energy Management or BOEM, and I am serving as the project manager for the New York Bight programmatic environmental impact statement.

Megan Davidson, BOEM: Hello, everyone. My name is Megan Davidson, and I'm a marine biologist within BOEM office of environmental programs. I am the Deputy Project manager for the New York Bight Programmatic Environmental impact statement.

Megan Davidson, BOEM: Courtney and I are leading this programmatic EIS effort on behalf of the office of renewable energy programs. We appreciate you joining us for today's meeting next slide, please.

Megan Davidson, BOEM: I'm going to start the presentation by going over the environmental review process. Next slide, please.

Megan Davidson, BOEM: Okay. NEPA or N E P A stands for the National Environmental Policy Act. NEPA requires federal agencies to assess the environmental effects of the proposed actions and any reasonable alternatives prior to making any decisions.

Megan Davidson, BOEM: This process is often referred to as an environmental review.

Megan Davidson, BOEM: For actions that may significantly affect the quality of the human environment. An environmental impact statement or EIS must be prepared.

Megan Davidson, BOEM: It will include the proposed action and no action and reasonable alternatives that could reduce impacts.

Megan Davidson, BOEM: The analysis addresses both beneficial and adverse effects, describes the affected environment for each resource, and includes reasonably foreseeable environmental trends and planned actions other than the proposed action.

Megan Davidson, BOEM: Next slide, please.

Megan Davidson, BOEM: You'll hear us talk today about programmatic and project-specific NEPA documents so programmatic NEPA documents include an analysis of impacts across a broad geographic region.

Megan Davidson, BOEM: mitigation measures that could be applied across multiple projects and a robust cumulative analysis where project-specific NEPA documents can tier to programmatic NEPA documents.

Megan Davidson, BOEM: This means that they incorporate the programmatic analysis by reference, and then further analyze additional impacts and mitigation measures that are unique to that specific project.

Megan Davidson, BOEM: next slide, please.

Megan Davidson, BOEM: Today, we're here to discuss the New York Bight draft programmatic environmental impact statement which was prepared in accordance with the requirements of NEPA. This slide shows the overall timeline for offshore wind leasing and development.

Megan Davidson, BOEM: Starting from the planning stages all the way through, decommissioning. Typically, after leases are executed and site assessment sur and surveys are completed,

Megan Davidson, BOEM: construction and operation plans or COPs would be submitted before any additional NEPA analysis is complete

Megan Davidson, BOEM: which is noted by the orange box in the center of the diagram.

Megan Davidson, BOEM: however, for the New York Bight we are inserting an additional level of NEPA analysis into the typical process in the form of a programmatic EIS. This is identified by the blue box on the left and occurs before any COPs are submitted.

Megan Davidson, BOEM: Courtney will elaborate on BOEM’s decision to develop a programmatic EIS later. in the presentation. Next slide, please.

Megan Davidson, BOEM: A Federal agency must publish its notice of Intent or NOI to prepare an environmental impact statement.

The NOI for this programmatic EIS was published in the Federal Register on July fifteenth, 2022, which initiated a 45-day public comment period.

Megan Davidson, BOEM: 3 virtual public scoping meetings were held.

Megan Davidson, BOEM: We received 43 comment submissions during the scoping period, and the scoping report is included as appendix O in the draft programmatic EIS.

Megan Davidson, BOEM: next slide, please.

Megan Davidson, BOEM: The 43 unique submissions were received by a variety of commenters and outlined here on the slide, such as federal, State and local agencies, public interest, groups, industry, and individuals. All comments were received through regulations.gov.

Megan Davidson, BOEM: Next slide, please. Within the 43 submissions, 362 distinct comments were received. The graph here shows the number of individual comments by topic. Most comments received were regarding socio-economic and cultural resources with 77

Megan Davidson, BOEM: biological resources, with 49, and scope proposed action, and alternatives with 48.

Megan Davidson, BOEM: Many proposed alternatives were submitted, however, they were determined to be more appropriate for the project-specific stage, or were incorporated as avoidance, minimization, mitigation and monitoring measures or AMMMS in the programmatic EIS

Megan Davidson, BOEM: next slide, please.

Megan Davidson, BOEM: In addition to public scoping prior to developing the programmatic EIS, BOEM must also seek public comment on the draft programmatic EIS.

Megan Davidson, BOEM: The notice of availability was published in the Federal Register on January twelfth, 2024, which opened a 45-day public comment period.

Megan Davidson, BOEM: You can provide comment until February 26th, through regulations.gov. by searching for docket number BOEM-2024-0001.

Megan Davidson, BOEM: next slide, please.

Megan Davidson, BOEM: Public comments are very important part of the NEPA process. Providing your local expertise and perspective helps guide our environmental analysis and helps BOEM make more informed decisions.

Megan Davidson, BOEM: The types of comments we are looking for include significant issues to analyze in the programmatic EIS, additional sources of information, identification of data gaps and information needs, and feedback on proposed mitigation measures. Next slide please.

Megan Davidson, BOEM: In addition to collecting comments on regulations.gov. and at the meeting this afternoon, we held 4 other public meetings, one virtual and 3 in person, as an opportunity for you to provide comments.

Megan Davidson, BOEM: The previous virtual meeting was held on January 31st and in persons were held, in person meetings were held on February 5th, in Dartmouth, Massachusetts, on February 7th in Stony Brook, New York, and on February 8th in Tom's River, New Jersey.

Megan Davidson, BOEM: You can find additional meeting information fact sheets and instructions on how to comment on the virtual meeting room website.

Megan Davidson, BOEM: next slide, please.

Megan Davidson, BOEM: if you go to the Virtual meeting room website and click on the resources tab, there is a lot of information available for you to browse, and a recording of this presentation will be added.

Megan Davidson, BOEM: There are fact sheets that discuss BOEM and renewable energy on the outer continental shelf including a map of the wind energy leases in the Atlantic, provide an overview of the New York Bight leasing and programmatic EIS processes,

Megan Davidson, BOEM: provide more information about the public meetings and how to comment,

Megan Davidson, BOEM: and present resource-specific topics, like the national Historic Preservation Act electromagnetic fields, underwater sound and environmental justice.

Megan Davidson, BOEM: Next slide, please. I will now hand it over Courtney for the next portion of our presentation.

Courtney Strain (BOEM): Thanks, Megan.

Courtney Strain (BOEM): I will now provide an overview of the New York Bight draft programmatic EIS. Next slide, please.

Courtney Strain (BOEM): The New York Bight lease area history began back in December 2016 with an unsolicited lease request from PNE Wind for over 40,000 acres offshore New York

Courtney Strain (BOEM): In addition to other milestones, BOEM completed an Environmental Assessment in 2021,

Courtney Strain (BOEM): and in 2022, held the offshore wind auction for the six lease areas shown on the screen. The slide also identifies which lessees had the winning bids for each area.

Courtney Strain (BOEM): If you are interested in learning about the full leasing history of the New York Bight lease areas, it is available on the New York Bight Programmatic EIS website.

Courtney Strain (BOEM): Next slide, please.

Courtney Strain (BOEM): The overall goal of this Programmatic EIS is to analyze the New York Bight region such that project-specific environmental analyses at the Construction and Operations Plan, or COP, phase will be able to tier to, or incorporate the analysis done in this Programmatic EIS, by reference.
Courtney Strain (BOEM): In doing this for the New York Bight demonstrates the connection between programmatic and project-specific NEPA that Megan described previously. BOEM decided to take this approach for the New York Bight due to the number and proximity of the lease areas

Courtney Strain (BOEM): as well as the anticipated timing of COP submissions for these lease areas.

Courtney Strain (BOEM): Additionally, there are similar habitats and species across this region, which will allow for streamlining at the project specific NEPA stage.

Courtney Strain (BOEM): next slide, please.

Courtney Strain (BOEM): Through this Programmatic EIS, BOEM analyzes the regional, affected environment and environmental consequences to allow for site-specific reviews to focus on what's truly unique for each lease area;

Courtney Strain (BOEM): conducts a focused, regional cumulative analysis;

Courtney Strain (BOEM): establishes a framework for tiering of the project, specific environmental analyses which helps support streamlining of that environmental review by incorporating the programmatic analysis by reference;

Courtney Strain (BOEM): identifies, analyzes, and adopts, if appropriate, programmatic avoidance, minimization, mitigation, and monitoring measures or AMMM measures that can be applied across the six New York Bight lease areas;

Courtney Strain (BOEM): And finally, it provides predictability and consistency to our cooperating agencies partners and developers. Next slide, please.

Courtney Strain (BOEM): Expanding on the tiering approach a bit more: The programmatic EIS includes analysis upon which the COP- specific NEPA can build.

Courtney Strain (BOEM): and also details for each resource whether the programmatic analysis may need to be refined at the COP-specific NEPA stage.

Courtney Strain (BOEM): The intention is that BOEM and agencies with associated decision points can use the programmatic EIS to support subsequent analyses.

Courtney Strain (BOEM): Now, generally. If a COP purposes activities captured by the programmatic EIS design envelope, the COP-specific NEPA will focus on what is different or site-specific analysis that could not be conducted in the programmatic EIS.

Courtney Strain (BOEM): Appendix C of the draft programmatic EIS provides guidance for each resource on how the programmatic analysis may need to be refined at the COP-specific NEPA stage.

Courtney Strain (BOEM): The application of the AMMM measures identified in the record of decision will be reviewed again for applicability at the COP- specific NEPA stage. Next slide, please

Courtney Strain (BOEM): to highlight some notable sections of the draft programmatic EIS chapters 1, 2, and 3 contain the purpose and need

Courtney Strain (BOEM): alternatives and an assessment of the environmental consequences. For each alternative.

Courtney Strain (BOEM): Appendix C provides clarification on how BOEM anticipates using this Programmatic EIS for incorporation by reference at the COP NEPA stage. The cumulative impact scenario, also referred to as the Planned Activities Scenario in the Programmatic EIS, is provided in Appendix D.

Courtney Strain (BOEM): Appendix G contains the complete description of the AMMM measures analyzed under alternative C.

Courtney Strain (BOEM): We also developed a Seascape, Landscape, Visual Impact Assessment, or SLVIA for the New York Bight, which is Appendix H in the document.

Courtney Strain (BOEM): And we also have visual simulations available on our website.

Courtney Strain (BOEM): And Appendix J includes a risk assessment analysis that is typically not in COP EISs, which can be used to assess the relative risk to marine mammals from acoustic disturbances.

Courtney Strain (BOEM): Next slide, please.

Courtney Strain (BOEM): Now let's dive into the alternatives. BOEM has developed a three Alternative approach for analyzing potential impacts on the affected environment. We will discuss each draft Alternative over the next three slides.

Courtney Strain (BOEM): First, Alternative A is the No Action Alternative. For the No Action Alternative, no development would occur on any of the six New York Bight Lease Areas.

Courtney Strain (BOEM): Any potential impacts, including benefits associated with offshore wind development in the New York Byte would not occur.

Courtney Strain (BOEM): Although the impacts of development in the New York Bight Lease Areas would not occur, the impacts of all ongoing and planned offshore wind as well as non-offshore wind activities would still occur and are analyzed under Alternative A

Courtney Strain (BOEM): In short, the analysis identifies the overall impacts of ongoing and planned activities without the six New York Bight Lease Areas.

Courtney Strain (BOEM): This handling of the No Action Alternative is consistent with the COP EISs. Next slide, please.

Courtney Strain (BOEM): Alternative B discusses the potential impacts of future offshore wind development in the New York Bight without the application of any AMMM measures that could avoid, reduce or mitigate those impacts.

Courtney Strain (BOEM): Instead, mitigation measures would be applied at the project-specific NEPA stage. The development of one representative project and six representative projects was analyzed in this Draft Programmatic EIS.

Courtney Strain (BOEM): Analysis of one representative project will be utilized for future tiering at the COP-specific NEPA stage.

Courtney Strain (BOEM): The one project is not associated with any particular lease area but is representative of development that could occur in any of the six New York Bight lease areas.

Courtney Strain (BOEM): The analysis of six projects, on the other hand, allows BOEM to evaluate the overall impacts of a full offshore wind buildout in the New York Bight.

Courtney Strain (BOEM): BOEM also analyzed the cumulative impacts under Alternative B which includes impacts from ongoing and planned activities in addition to the impacts of six New York Bight projects with deferral of AMMM measures.

Courtney Strain (BOEM): Next slide, please.

Courtney Strain (BOEM): Finally, Alternative C, analyzes the development of the New York Bight Lease Areas with the application of AMMM measures. And this represents BOEM's Proposed Action.

Courtney Strain (BOEM): As part of this Programmatic EIS process, BOEM will evaluate and ultimately select programmatic mitigation measures that may be applied to the six New York Bight projects.

Courtney Strain (BOEM): Analysis of BOEM's Proposed Action describes how the adoption of AMMM measures may avoid or reduce the potential impacts of Alternative B and I will expand on the AMMM measures that BOEM is proposing under this alternative in a later slide.

Courtney Strain (BOEM): Now, other than the adoption of the AMMM measures, all other design parameters for this alternative would be the same as described under Alternative B.

Courtney Strain (BOEM): BOEM also analyzed the cumulative impacts under Alternative C which includes impacts from ongoing and planned activities

Courtney Strain (BOEM): as well as the impacts of six New York Bight projects with application of AMMM measures. Next slide, please.

Courtney Strain (BOEM): Because the analysis in this Draft Programmatic EIS occurred before any New York Bight COPs were submitted, BOEM built a Representative Project Design Envelope, or RPDE, to use for environmental analysis of one project.

Courtney Strain (BOEM): The RPDE is a range of technical parameters that describe a hypothetical wind energy project that could occur within the six New York Bight lease areas.

Courtney Strain (BOEM): To develop an RPDE that reflects realistic project technical details specific to the NY Bight, BOEM mined existing COPs and solicited input from the six NY Bight lessees:

Courtney Strain (BOEM): American Clean Power,

Courtney Strain (BOEM): the States of New York and New Jersey, and the national Renewable Energy Laboratory.

Courtney Strain (BOEM): The RPDE is an informed range of parameters intended to describe a hypothetical project for purposes of analysis in the Programmatic EIS. I will also note that this range of parameters represents the maximum case scenario to capture what the greatest potential for impacts could be.

Courtney Strain (BOEM): The RPDE contains basic parameters for wind turbine generators, offshore substations, array cables, and export cables.

Courtney Strain (BOEM): I won't go over all of the parameters, but wanted to provide a few examples of the parameters to give you a sense of what is included.

Courtney Strain (BOEM): As you can see, the RPDE includes parameters such as number and height of the turbines, the number of offshore substations, and length of cables

Courtney Strain (BOEM): Now, notably because locations for cable landfalls, points of interconnection and ports are not known at this time. These are not defined in RPDE. Detailed site-specific analysis of

these components will be deferred and evaluated at the COP-specific stage for all New York Bight lease areas.

Courtney Strain (BOEM): Next slide, please.

Courtney Strain (BOEM): Similar to the COP EISs, the Draft Programmatic EIS presents analysis by the following resources for each alternative.

Courtney Strain (BOEM): There are 19 total resources that are analyzed in this document and they are broken down into 8 biological resources,

Courtney Strain (BOEM): 2 physical resources, and 9 socioeconomic conditions and cultural resources. Due to the lack of project detail available at this stage, some onshore resources are analyzed at a higher level.

Courtney Strain (BOEM): Next slide. Please

Courtney Strain (BOEM): BOEM analyzes potential impacts to resources that could result from the proposed action and alternative to the proposed action. The Programmatic EIS uses a four-level classification scheme to characterize potential beneficial and adverse impacts of all alternatives,

Courtney Strain (BOEM): and this includes proposed action and the no action alternative. The categories include negligible, minor, moderate and major, and they take into account the duration and type of impact.

Courtney Strain (BOEM): Under the Proposed Action, most of the expected impacts from six projects on the resources were up to moderate.

Courtney Strain (BOEM): However, there were a few resources where the analysis acknowledged the potential for up to major impacts

Courtney Strain (BOEM): which include those resources in bold on the screen, including marine mammals,

Courtney Strain (BOEM): fin fish, invertebrates and essential fish habitat,

Courtney Strain (BOEM): scenic and visual resources (although I will note that the major impact rating is only for a small portion of the coastline)

Courtney Strain (BOEM): cultural resources and the scientific research and surveys component of the other uses resource. Additionally, you may notice some plus signs next to resources for potential beneficial impacts are expected.

Courtney Strain (BOEM): This is mostly due to the artificial reef effect or additional jobs. Next slide, please.

Courtney Strain (BOEM): BOEM has developed a working list of AMMM measures that were analyzed under Alternative C in the Programmatic EIS.

Courtney Strain (BOEM): The development of AMMM measures has been a multi-level approach, with input gathered through several resources, including existing wind energy development COPs and COP EISs,

Courtney Strain (BOEM): cooperating agencies,

Courtney Strain (BOEM): external and internal input, as well as a focused working group convened by BOEM.

Courtney Strain (BOEM): The current AMMM measures may be modified or added to as the Programmatic EIS progresses. The AMMMs included in this Programmatic EIS will only be applicable to the six New York Bight lease areas.

Courtney Strain (BOEM): The site-specific NEPA analyses and consultations for each proposed wind energy project in the New York Bight lease area will confirm if the programmatic AMMM measures are applicable, and should be included as conditions of approval.

Courtney Strain (BOEM): Next slide, please.

Courtney Strain (BOEM): In the interest of time, I won't go through each AMMM measure on this call, however, on the screen is a summary of some of the proposed AMMM measures. You can see AMMM measures, including monitoring standards and requirements,

Courtney Strain (BOEM): mitigation of radar system interference, gear handling procedures and monitoring,

Courtney Strain (BOEM): pile driving, vessel, and cable requirements and restrictions, and monitoring and mitigation for listed species.

Courtney Strain (BOEM): Many of the AMMM measures have been included in previous COP EISs and more recently, COP terms and conditions and are included here in an effort to streamline their analysis and application.

Courtney Strain (BOEM): Next slide, please.

Courtney Strain (BOEM): Here's an example of how you will see an AMMM measures presented in the document. The AMMM measures are analyzed in Alternative C and have been presented as a summary for the reader.

Courtney Strain (BOEM): However, the full AMMM measure language appears in Appendix G.

Courtney Strain (BOEM): You may note that each AMMM measure includes a Measure ID, which is a series of letters and numbers that are used to identify which resource, or resources, it applies to.

Courtney Strain (BOEM): So, for example, here is the language for MMST-6 which is aimed at reducing impacts to marine mammals and sea turtles

Courtney Strain (BOEM): As you can see, the language in Alternative C briefly describes the measure while Appendix G includes all of the detail.

Courtney Strain (BOEM): As a reminder, the Proposed Action analyzes how the AMMM measures may reduce potential impacts to resources.

Courtney Strain (BOEM): And BOEM encourages the public to review and provide comments on the AMMM measures and the associated analysis

Courtney Strain (BOEM): Next slide, please.

Courtney Strain (BOEM): So what's next?

Courtney Strain (BOEM): Once the comment period closes, BOEM assesses all comments received and makes any necessary changes in response to comments or new information in preparation of the Final Programmatic EIS.

Courtney Strain (BOEM): The response to comments will also be available as an appendix to the Final Programmatic EIS

Courtney Strain (BOEM): Tentatively, BOEM expects to publish a Final Programmatic EIS in October 2024 and issue a Record of Decision in December 2024.

Courtney Strain (BOEM): Next slide, please.

Courtney Strain (BOEM): Just as a reminder, the public comment period is open until February 26th. You can provide a comment by going to www.regulations.gov

Courtney Strain (BOEM): and searching for Docket Number BOEM-2024-0001.

Courtney Strain (BOEM): Next slide. Please

Courtney Strain (BOEM): I want to thank you all again for attending this public meeting for the New York Bight draft programmatic EIS.

Courtney Strain (BOEM): If you have any additional questions. Please feel free to reach out to Megan and I using the contact information provided on the screen.

Courtney Strain (BOEM): I will now pass it back over to Hannah.

Hanna Khalil, Facilitator, Kearns & West: Thank you, Megan, and thank you, Courtney.

Hanna Khalil, Facilitator, Kearns & West: Okay, we will now move to the public comment portion of our agenda. But before we do as a reminder, if you have any questions for so for BOEM subject matter experts that you would like answer today, please do submit your questions now, via the Q&A pod at the bottom of your screen. We will accept comments for a few more minutes as I review the instructions for public comment period. And yeah, for the public comment period of the meeting.

Okay.

Hanna Khalil, Facilitator, Kearns & West: So now we will move to the public comment portion of our agenda. At this time, BOEM would like to hear comments on the Draft PEIS for the New York Bight lease areas. We have many BOEM staff on the call today, including leadership, subject matter experts, and the lead writers of the draft of the draft programmatic EIS who are listening and eager to hear thoughts.

Hanna Khalil, Facilitator, Kearns & West: As a kind reminder, please be mindful of our guides for an effective meeting.

Hanna Khalil, Facilitator, Kearns & West: First, we just ask that you honor the agenda, and that all participants participate actively and respectfully. We appreciate your participation during this meeting we really do, and at the same time we also reserve the right to mute individuals who do not participate respectfully, who use derogatory, insulting, threatening, or any other inappropriate language.

Hanna Khalil, Facilitator, Kearns & West: Notably no disrespectable language targeted toward other people or participants will be tolerated at the meeting.

Hanna Khalil, Facilitator, Kearns & West: When you speak, please provide your name and affiliation. Please speak clearly into the mic. Kindly focus your comments and speak concisely, and please try to speak within the allotted time out of respect to your fellow participants. Please adhere to the time for making comments that we can make sure we hear from everybody today.

Hanna Khalil, Facilitator, Kearns & West: After that I'll do my best to call on people in the order in which I see their hands raised. Starting with the list of people who have preregistered to provide comments, and I'll do my best to mind the queue.

Hanna Khalil, Facilitator, Kearns & West: And when not speaking, do select the mute button to silence your audio.

Hanna Khalil, Facilitator, Kearns & West: As a reminder, in addition to orally providing your comments today, you have other options for providing your comments which include sending in written comments by mail and online at regulations.gov.

Hanna Khalil, Facilitator, Kearns & West: If you'd like to speak today, please select the raise hand icon at the bottom of your screen and you'll be added to the queue, and for those joining us by phone, you can press Star 9 to raise your hand.

Hanna Khalil, Facilitator, Kearns & West: I'll be minding the queue and indicating whose turn it is to speak, and who is up next.

Hanna Khalil, Facilitator, Kearns & West: When it is your turn to speak, you'll be given permission to unmute yourself, so just please unmute yourself, share your name and affiliation, and then share your comment. And as a reminder, you're not able to unmute yourself until you are invited to do so. So, once it's your turn, I'll do that, and you'll get a pop up on your screen inviting you to unmute.

Hanna Khalil, Facilitator, Kearns & West: A clock will be provided on the screen, so you know how much time you have remaining to speak, and to ensure that as many participants as possible have the opportunity to provide comment, we're going to allow up to 3 minutes per person.

Hanna Khalil, Facilitator, Kearns & West: As time elapses, I'll gently remind you to wrap up and add a few seconds over the allotted time,

Hanna Khalil, Facilitator, Kearns & West: I'll thank you for your comment, and I'll mute your microphone. And this is just essential, so that we can ensure that as many people as possible have the opportunity to provide comment.

Hanna Khalil, Facilitator, Kearns & West: If you have not finished at the 3 min mark, you can still submit additional comments into the Federal Register.

Hanna Khalil, Facilitator, Kearns & West: And if you'd like to submit your comment in Spanish, you may do so. For common spoken in Spanish, we have a Spanish interpreter interpreter with us today, and simultaneous interpretation into English can be heard by participants in the English channel which can be accessed using the globe icon at the bottom of your screen.

Hanna Khalil, Facilitator, Kearns & West: I would like to now invite interested participants to provide oral public comments, BOEM and will now collect comments on the New York Bight drop programmatic environmental impact statement.

Hanna Khalil, Facilitator, Kearns & West: And to start we're going to begin with folks who pre-registered and indicated that they would like to share their comments. And I'll have those names up on the screen. If your name is on the screen, please, and you still want to provide comment today, please raise your hand, and I will look to unmute you shortly.

Hanna Khalil, Facilitator, Kearns & West: And we'll make our way down the list that way. Okay.

Hanna Khalil, Facilitator, Kearns & West: So we first have Ross. Ross, if you are

Hanna Khalil, Facilitator, Kearns & West: online today and would like to provide a comment, please raise your hand.

Hanna Khalil, Facilitator, Kearns & West: Okay, I'm not seeing any hand raised. So I'm going to keep moving down the list. And if you decide later that you do want to provide your comment. Feel free to raise your hand, we will make our way through everyone who raises their hand today.

Hanna Khalil, Facilitator, Kearns & West: Okay, next, we have Casey, and I see that you are here with us, so I'm going to invite you to unmute, and then you can provide your comment.

Casey Petrashek: Great! Can you hear me.

Hanna Khalil, Facilitator, Kearns & West: Yes. thanks, Casey. Alright.

Casey Petrashek: Hello! My name is Casey Petrashek and I am here today representing the New York League of Conservation Voters or NYOCV for short.

Casey Petrashek: NYOVC is a New York State-wide advocacy organization committed to renewable energy and a clean energy future. Thank you for providing this opportunity to come today. Offshore wind is critical to meet New York's and the country's renewable energy goals, reduce our reliance on fossil fuels and rebuild around a green energy economy. It is a top priority for NYLCV and its statewide membership.

Casey Petrashek: New York has committed to 70% renewable energy by 2030 and 100% clean energy by 2040, including 9,000 megawatts of offshore wind by 2035. Development of offshore wind in the New York Bight is critical to meeting these goals. Once completed, this project will generate up to 7 gigawatts of clean energy or enough power to to power approximately 2 million homes, and thus play a significant role in displacing polluting fossil fuel power.

Casey Petrashek: A shift to renewables is necessary to protect the millions of New York residents vulnerable to sea level rise and extreme weather made worse by climate change. Acting now will reduce the cost of disaster recovery.

Casey Petrashek: These projects won't spoil the scenic beauty of New York beaches either, as turbines in the proposed lease areas, the closest of which is 20 nautical miles from New York, will be virtually invisible and inaudible from the shore.

By reducing fossil fuels usage and greenhouse gas emissions overall offer when will also benefit marine and bird life.

Casey Petrashek: One of the most concerning misconceptions is the belief that offshore wind turbine construction harms marine life, particularly whales. However, the reality is more complex. Global climate change is shifting the distribution of prey that marine species rely on, leading whales to alter their migration routes, sometimes closer to shore. This change increases their vulnerability to ship strikes and fishing gear entanglement. But to mitigate potential risk, strict regulations and mandate

Casey Petrashek: mandate developers to monitor marine life and follow established methods to minimize environmental impact.

Casey Petrashek: Turbines also contribute to less than .01% of annual bird deaths. It's crucial to keep in mind that other human activities, including fossil fuel extraction and oil spills, pose far greater threats to bird populations, while climate change will continue to negatively affect countless bird species if ignored.

Casey Petrashek: Beyond the environmental benefits, offshore wind in the New York Bight will provide thousands of new family-supporting jobs and improve public health by reducing air pollution which disproportionately impacts low- income communities and communities of color.

Casey Petrashek: It is clear that New York's offshore wind industry has tremendous potential to contribute to a sustainable and prosperous future for all and why LCV strongly supports the development offshore wind in the New York Bight and encourages, encourages the speedy advancement of the project. Thank you for again, for the opportunity to comment today.

Hanna Khalil, Facilitator, Kearns & West: Thanks, Casey, thanks so much for your comment. Okay, next up we have Trisha. Trisha, if you'd like to provide your comment, please raise your hand.

Hanna Khalil, Facilitator, Kearns & West: If not, we will move on, and if you decide to raise your hand later we can circle back to you. Here we have Douglas Schmid.

Hanna Khalil, Facilitator, Kearns & West: And I see your hands raised, so I will go ahead and unmute you, and you can provide your comment.

Douglas Schmid: Hello! Can you hear me?

Hanna Khalil, Facilitator, Kearns & West: Yes, thanks, Douglas.

Douglas Schmid: Thank you for the opportunity to speak to you today. My name is Douglas Schmid, Professor of Environmental Science and Sierra Long Island Executive Committee member.

Douglas Schmid: As a lifelong Long Islander, I've seen local changes brought about by the biggest threat that we face as a society, climate change.

Douglas Schmid: There's no time to lose in our transition from the burning of dirty, polluting, unsustainable fossil fuels to clean sustainable, renewable energy. This transition is, of course, a win-win-win.

Douglas Schmid: 1: It will spur economic development here on Long Island, and indeed in other parts of New York State. 2: It will cut climate, destabilizing greenhouse gases, and 3: It will eventually decrease and stabilize energy costs to consumers.

Douglas Schmid: The well-funded misinformation campaign of the fossil fuel companies should not be allowed to derail offshore wind here in New York State. For one example,

Douglas Schmid: my experience with the study of marine mammals, including necropsies, enables me to echo the NOAA determination that there is no evidence that offshore wind activity causes whale mortality.

Douglas Schmid: Yet we see considerable misinformation that offshore wind causes

Douglas Schmid: the deaths of whales and other marine species. In fact, it is the heavy ship traffic in the New York Bight leading to ship strikes on whales that is a major cause of mortality. The offshore oil drilling activities of the fossil fuel companies cause significantly, significantly greater acoustic disturbance.

Douglas Schmid: And the mitigation requirements for offshore wind activities to reduce its impact on wildlife are robust and effective.

Douglas Schmid: So, the misinformation about offshore wind should not be allowed to delay this vital transition to renewable energy, and the will of the majority of Americans who favor the expansion of offshore wind.

Douglas Schmid: Thank you for your time today.

Hanna Khalil, Facilitator, Kearns & West: Thank you so much for your comment.

Right

Hanna Khalil, Facilitator, Kearns & West: Next up we have Cindy and I will go ahead and unmute you, and you can provide your comments, Cindy.

Cindy Zipf: Thank you. My name is Cindy Ziff, executive director of Clean Ocean Action, and this part is a public statement that can be quoted.

Cindy Zipf: For over 40 years we have successfully blocked offshore fossil fuel facilities and eliminated sources of ocean pollution, restoring this ocean realm off the New York and New Jersey coast into a vibrant, thriving ecosystem. It is one of the most productive in the nation, and one of the most biologically diverse, including with marine mammals.

Cindy Zipf: There is no doubt climate change impacts require immediate actions to reduce greenhouse gas emissions. Chief among these is reducing energy use and waste.

Cindy Zipf: The government, however, is focusing on massive indus- industrialization. Beginning with offshore wind, transforming the ocean into a giant power plant. This despite the fact that the industry is

in economic and technological turmoil, as evidenced by the abandonment of many projects by Ørsted and others, as well as technological challenges and failures, such as the inadequate grid to even accept the energy generated.

Cindy Zipf: The magnitude of the plan just in this region is staggering. Millions of acres of ocean habitat, filled with thousands of turbines, as tall as a Chrysler building, and over 10,000 miles of high voltage cables emitting electromagnetic fields. It is a never-before-seen scale of human industrialization of an ecosystem which would never be allowed on the land. The ocean deserves protection. After all, it is the planet's best buffer against climate change.

Cindy Zipf: And yet this PEIS seeks to streamline and expedite the issuance of these industrial scale offshore wind projects

Cindy Zipf: on these 6 lease areas which impact over nearly a half 1 million acres. To be clear, Clean Ocean action is not opposed to the idea of offshore wind, Clean Ocean Action opposes this reckless scope, scale and speed currently underway due to its lack of robust, independent science, transparency, good governance, and due diligence. Our ocean deserves better. A fair pilot project and independent cost benefit analysis, and also public transparency.

Cindy Zipf: Of note is the US. Government accountability office is currently investigating this industry, which may shed light on the fiscal viability, but the report is not yet complete.

Cindy Zipf: In short, there are too many questions and too few answers, and the ocean is at risk.

Cindy Zipf: Some say climate change is the greatest threat to marine life. That may be true, but this massive industrialization of offshore wind will only increase the grave stress and harm to an already overburdened ecosystem which, remember, is our greatest ally in buffering climate change.

Cindy Zipf: In addition, there's no evidence that this industrialization will stop climate change. In fact, by BOEM zone admission, quote, There will be no collective impact on global warming as a result of offshore wind projects.

Cindy Zipf: Indeed, indeed, the question really is, when has industrialize industrialization ever benefited the environment? The real solution here is to reduce energy and waste

Cindy Zipf: energy, waste and use. Thank you.

Hanna Khalil, Facilitator, Kearns & West: Thank you for providing your comments today Cindy.

Hanna Khalil, Facilitator, Kearns & West: Next we have Kari. I will go ahead and unmute you, and you can provide your comment.

Kari Martin: Good afternoon. Thank you for your time today. My comments are public, and I give permission to be quoted. My name is Kari Martin. I speak to you today as a lifelong Jersey shore visitor and resident as well as a mother. Professionally, I speak to you with a Master's degree in environmental studies and policy, and as advocacy campaign manager for Clean Ocean Action, which is a broad-based coalition whose mission is to improve and protect the waters off the New York/New Jersey coast. For 40 years clean ocean has led

Kari Martin: effective grassroots campaigns with bipartisan support to end ocean dumping, reduce pollution and stop, stop harmful industrialization, including fossil fuel development. The ocean is extraordinary, and we know a healthy ocean is essential to reduce climate change impacts.

Kari Martin: The ocean absorbs 90% of the heat humans emit and 30% of the carbon dioxide emissions. Adding stress and impacts with industrialization as presented in the P.EIS to an already stressed ecosystem, may jeopardize the ocean's essential functions. Indeed, the PEIS states that offshore wind will have moderate and major impacts.

Kari Martin: While COA is not opposed to the idea of offshore wind energy, we are concerned and have many questions. Projects and policies are moving swiftly ahead. Meanwhile State and Federal officials have unacceptably used the following words to describe offshore wind development at this time: building the plane as we fly it; learning as we go; and building the ship while sailing it. End quote.

Kari Martin: COA reiterates our request for an extension of the public comment period by at least 90 days. COA is still professionally reviewing the massive document, but today will highlight some problems and questions, some of which pertain to the public engagement in this PEIS review. First, it would be helpful for meaningful public participation to have standards set and communicated in advance for both in person and virtual public meetings, so people know what to expect when they attend.

Kari Martin: Also, regarding the January 31st, first virtual public meeting, COA was dismayed to see that questions asked in the Q & A function were not visible to all participants at the had been as they had been during past BOEM meetings. Also are all questions asked in the Q & A function answered during a meaning publicly? If not, why not?

Kari Martin: Further, are the questions asked in the Q. & A. on the record and entered into the transcript?

Kari Martin: Speaking of the transcript, it was stated that the recording presentation and transcript would be publicly posted in 2 weeks. These resources are not posted yet.

Kari Martin: Regarding the in person meetings, members of the public arrived prepared to provide oral comments with no opportunity available to do so, despite what it says on the BOEM website.

Kari Martin: While virtual and in person public meanings are appreciated, time will be needed to review and verify incorporate information learned into comments. With the comments due on February 26, BOEM gives people 13 days to review and respond to the information shared at today's meeting alone, and, as I said, the other, information has not even been posted yet. Most individuals do not even have the capacity due to proper review, despite their best efforts.

Kari Martin: Overall BOEM, provided the public with a mere 45 days to review a 1,400 page plus technical document. Finally, the area under review in the PIS is enormous and unprecedented: totalling nearly half a million acres, which is about 2 thirds as big - I'm just summing up, thank you. In sum it is essential for the public to thoroughly review the draft PEIS for the protection of the ocean, among other reasons.

Kari Martin: The truth is, offshore wing development is happening too fast, policy decisions are outpacing available science and transparency and due diligence are being overlooked. Thank you.

Hanna Khalil, Facilitator, Kearns & West: Thank you for providing your comment. We're now going to move ahead in the queue, Annie. I see your hand is raised. I'm going to invite you to unmute.

ANNIE LICATA: Hello! My name is Annie, and I'm a writer by trade. My life and my work depend on the natural world, and I've spent the past 4 years living with and learning from Native American elders, Indigenous scholars, medicine people and healers who are really working to restore earth and sustain life. What follows is a letter to the silent stakeholders who have no voice here. The millions of different beings who live in the 488,000 acres of ocean that our species is discussing today.

Dear ocean people, I'm so sorry. Due to the justified panic to address global warming that humans have accelerated with our unethical ways of life,

ANNIE LICATA: we have become susceptible to seductive technological promises. Once again, we are putting you in harm's way, extracting, harvesting, dominating, conquering, and destroying. Some of us are willing to admit what is at stake. The Lakota people say “Mitakuye Oyasin”. It translates to “all my relations.” It means that everything on the planet is connected. Some of us are willing to admit that if the creatures of the ocean are endangered, then so is the ocean, and then so are we.

My people are saying that offshore wind is a panacea. The reality is that this political circus, driven by powerful white men in suits, flying around the globe in private jets, is just another war, something our species is so good at. Where our communities are torn apart, we create enemies of our friends, and there is no peaceful way forward. Shall BP, Equinor, the same fossil fuel companies who have spilled billions of gallons of oil into your homes have used stealthy marketing techniques, political prowess, and insurmountable power to manipulate my species into thinking that offshore wind is some act of valor. Instead of engaging in an ethical reciprocal relationship with you, where we all share and take only what we need, we will continue to destroy you, your friends and family, and everything that you depend on. Eventually, when enough of your people have washed ashore

ANNIE LICATA: and we have destroyed what little is left, we will see what you have been trying to tell us all along. The humans got it wrong. We really don't know how you live and how you communicate. We don't understand your intelligence. We don't know you. We've become disconnected from you, and instead of seeing your mystery as a magical gift of life. We use it against you to advance our position in the world. You should not have to die for us, not like this.

ANNIE LICATA: No governments, despite the great alarm and dire emergency, are doing the right thing for you and for the environment, no contemporary governments, including and especially ours, are prioritizing the survival of the natural world over self, interest, money, and power. We are so sure that what we know that we know what to do when everything we do endangers the natural world upon which all of our lives depend.

ANNIE LICATA: Offshore wind development in the New York New Jersey Bight is an issue of secret special interests and is being politicized accordingly. No elected Democrats or Republicans are reflecting my values. I wish my people had the answer to climate change, but we don't. On behalf of all humans, I apologize to every single being in the ocean for our stupidity, our greed are hubris and our human centeredness. Yes.

ANNIE LICATA: I pray that on one day my people will stop doing the things that kill us, and that kill everything we depend on and everything we love again. I'm so sorry. I don't dare ask for your

forgiveness. Some of us are wise enough to know this ancient truth. Everything is connected. Mitakuye Oyasin. Signed, a human.

Hanna Khalil, Facilitator, Kearns & West: Thank you for providing your comment today. We are going to move on. Toni. Toni, I see that your hand is ready, so I'm going to go ahead and invite you to come off mute. Thank you.

Toni Groet: Hello! Thank you for the option you to comment today.

Toni Groet: My name is Tony Groat. After obtaining my master's in marine conservation and resource management, I became a transplant here in New Jersey. I'm now an Atlanta County Resident and the South Jersey coordinator for Clean Ocean Action. On behalf of COA, these comments today are public and can be quoted.

Toni Groet: As others have stated, COA is not opposed to offshore wind. We simply want to see the ocean, our greatest resource protected. Despite a growing demand for energy, the scale, scope, and speed of these offshore wind projects has continued to be a concern, but with this PES, it seems, the intent is to move even faster.

Toni Groet: However, there are tradeoffs between speed and quality. It seems we are leading towards fast science and not necessarily good science. Science takes time, and we should be conducting thorough baseline research, taking time to analyze data and planning for adequate mitigation efforts prior to proceeding with projects like those planned in the PEIS.

Toni Groet: By BOEM's own admission at the in person meetings last week, it would have been ideal to have much more baseline data, but with expedited project timelines, one year is all they can realistically allot to pan monitoring prior to construction.

Toni Groet: With varying project timelines and increased potential for obstacles such as supply chain issues, funding, weather, and seasonal variability, the potential to get sound baseline data in just one year is not realistic.

Toni Groet: What kinds of sound decisions can be made if this monitoring cannot be completed prior to construction of one of the many projects along our coast?

Toni Groet: In this document BOEM listed potential for negligible to major impacts to whales. That is the full possible range of impact, confirming that the impact of our mammals is not in a fully known.

Toni Groet: So how do you gauge and plan monitoring and mitigation efforts when you don't know what to expect?

Toni Groet: As a former marine mammal stranding technician myself, I understand the many complexities that go into these studies in conducting the necropsies over the past 14 months. A 100 cetaceans, including 38 whales and 62 dolphins or porpoise, have died just here in the New York New Jersey Bight that we know of. This does not include the countless others outside the Bight, or the ones we either could not locate records for, or that never washed ashore.

Toni Groet: Agencies that claim there’s no evidence leaking these deaths to offshore wind have not provided evidence otherwise, or any scientific support for such a statement.

Toni Groet: The lack of due diligence in investigating cetacean deaths and transparency is alarming, to say the least. Without this long-term baseline data we cannot begin to determine causality from marine mammal deaths or other environmental impacts we are bound to see.

Toni Groet: We owe it to the many vulnerable and endangered species of marine mammals, sea turtles, fish, and benthic species, to understand the inevitable repercussions of building an obstacle course with varying impacts in their home.

Toni Groet: The ocean is without boundaries and the increased noise, vessel traffic, potential, chemical and electromagnetic magnetic field exposure that will come with offshore wind infrastructure need to be investigated cumulatively to understand the total impact to a species.

Toni Groet: Further fast tracking these projects as the PEIS does, will not help to create sustainable and safe approaches to reducing climate change. Thank you.

Hanna Khalil, Facilitator, Kearns & West: Thank you so much for your comment. Next up get Amy, Amy. I'm not sure that I'm seeing that you're on the call, but if you are, please raise your hand, and I'll take you off mute.

Hanna Khalil, Facilitator, Kearns & West: We're not seeing Amy, so I will move on to Walter. I see your hand is raised, and I'll invite you to come off here.

Walter Korfmacher: Thank you. My name is Walter Korfmacher. I'm a Ph. D. in chemistry, and I live in Westfield, New Jersey. I am a scientist, and I'm very concerned about climate change.

Walter Korfmacher: I want to voice my support in favor of offshore wind power projects in general, including those off the New Jersey coast as well as the New York Bight projects.

Walter Korfmacher: As a scientist, I'm keenly aware of the short timeframe we have to reduce the effects of climate change on our planet. By 2030 we should reduce the use of fossil fuels by at least 50%, and by 2050 we should eliminate all use of fossil fuels.

Walter Korfmacher: Offshore wind power is an important part of the solution, and the US. Atlantic coast is a well-qualified to be the best location for most of the US. offshore wind power.

Walter Korfmacher: The Atlanta course region has the potential to produce at least 4 times as much electric power via offshore wind power

Walter Korfmacher: as all the States along the Atlantic coast used in 2,019, and at least twice as much as the projected use in 2050.

Walter Korfmacher: That technology already exists to make this work. We have wind turbines that produce 13 megawatts of electricity and even better ones are in development.

Walter Korfmacher: The offshore wind industry is also good for the US. Economy. It could create at least 80,000 new jobs by 2030 and provide 25 billion dollars to the economy in the same year.

Walter Korfmacher: I support the proposed offshore wind power projects in the New York Bight region as well as the New Jersey coast projects. We need to move forward with offshore wind power in New York and along the whole US

Walter Korfmacher: Eastern seaboard as soon as we can do so. Thank you for taking my comments.

Hanna Khalil, Facilitator, Kearns & West: Thanks for providing your comment today.

Hanna Khalil, Facilitator, Kearns & West: Okay, next up we have Barbara Hertel, Barbara. If you'd like to provide comment today. Please raise your hand, and I'll invite you to come off mute.

Hanna Khalil, Facilitator, Kearns & West: If not, I will move along the list. Donna. If you are here today, please raise your hand.

Hanna Khalil, Facilitator, Kearns & West: Not seeing Donna. And and if anyone raises their hand later we will get to everyone who raises their hand today. I'm going to keep moving through the list.

Hanna Khalil, Facilitator, Kearns & West: Sean Mohen, if you are here, please raise your hand.

Hanna Khalil, Facilitator, Kearns & West: Okay. Matthew Simmons.

Hanna Khalil, Facilitator, Kearns & West: If you'd like to provide comment, please raise your hand.

Hanna Khalil, Facilitator, Kearns & West: Rusty Eidmann-Hicks

Hanna Khalil, Facilitator, Kearns & West: if you are online, and would like to provide comment, please raise your hand.

Hanna Khalil, Facilitator, Kearns & West: Great. Michelle Leo.

Hanna Khalil, Facilitator, Kearns & West: I'm not seeing anyone here with that name.

Hanna Khalil, Facilitator, Kearns & West: Michael Skelly, if you'd like to provide comment, please raise your hand at this time.

Hanna Khalil, Facilitator, Kearns & West: Right. Meghan Lapp, if you'd like to provide comment. I see you're online, but if you'd like to provide comment, please raise your hand.

Hanna Khalil, Facilitator, Kearns & West: I will invite you to come off mute now.

Meghan Lapp: Thanks. Can you hear me?

Meghan Lapp: okay, great. My name is Megan Lap, and I represent Seafreeze. Our commercial fishing vessels fish in and around the New York Bight area.

Meghan Lapp: BOEM did not have any public meeting in the State of Rhode Island. I was unable to attend other public meetings that were out of state, and the only other virtual meeting held on this topic

Meghan Lapp: was actually scheduled during the only US. Coast Guard meeting on its Fairways PEIS which was actually

Meghan Lapp: in part necessitated by these leases. So the only other

Meghan Lapp: public virtual hearing that I could have attended was scheduled at the same time. BOEM is scheduling this at the time that the Coast Guard Fairways PEIS is open at the same time that its Central Atlantic comments period was open. It was scheduling meetings during Fisheries Management Council

meetings, and it's simply impossible for small businesses that are directly impacted by this action to be everywhere every at every time, and to engage in the process. And that's a real problem. So,

Meghan Lapp: I am requesting that BOEM extend the public comment period for this action by at least another 30 days

Meghan Lapp: so that those of us who are expected to digest and comment on thousands of pages concurrently are able to do so, because otherwise that is really precluding public participation in the process.

Meghan Lapp: I will also note that BOEM's PEIS design envelope is completely ridiculous. You know, 50 turbines to 200 something turbines is is not a project design envelope. That's that precludes any meaningful analysis. And from what I can see so far, the PEIS does preclude any meaningful analysis. And that is a huge problem. You can't conduct a NEPA analysis on something that's 50 or 250. That's that's not realistic.

Meghan Lapp: I will also say that there are no beneficial impacts to commercial fisheries in the area. The primary means of commercial fishing in that area is mobile tending bottom gear, which will be precluded from fishing in these areas. The fact that the spacing

Meghan Lapp: is about half a mile wide

Meghan Lapp: is completely ludicrous. It actually violates all of the other - I know coastguard recommendations in other areas. I would like to see an analysis on vessel transit through this lease area on a diagonal. Commercial fishing vessels are told all the time by BOEM that they are, you know, completely allowed to fish in these areas. Well, our trawl cables, which have the net behind the boat can be, you know, a quarter of mile to a half a mile

Meghan Lapp: long. Which would totally preclude any mobile tending bottom gear from fishing in this area. And any transit on a diagonal, that means that the spacing between the turbines and a diagonal is probably going to be about a quarter of a mile wide.

Meghan Lapp: Those types of impacts and complete exclusion of commercial fisheries in the area need to be analyzed.

Meghan Lapp: I will be submitting public comments on this later. But it's unfortunate that that we're limited to such an extent when

Meghan Lapp: BOEM doesn't allow for, you know, more meetings for the public to really be involved. Thank you.

Hanna Khalil, Facilitator, Kearns & West: Thanks, Megan. Thanks for providing a comment.

Hanna Khalil, Facilitator, Kearns & West: Next we have Drew Tompkins. I will invite you to come off mute, and you can provide your comment, Drew.

Drew Tompkins: Hi, thank you so much. My name is Drew Tompkins. I am with the New Jersey Work Environment Council, and also representing the Jersey Renews Coalition today, which is a coalition of community groups, environmental nonprofits and union labor organizations. I do just want to start by thanking BOEM for having these public hearings, and for this proposal.

Drew Tompkins: The Jersey Renews Coalition is extremely supportive of moving forward with offshore wind in the State of New Jersey and in the New York Bight. Offshore wind in our State will help move us towards our goals

Drew Tompkins: of renewable energy, as well as the country more broadly. At the same time investing in offshore wind is an investment for our communities and the economy. It will create thousands of direct. Good paying, often union jobs, while also creating positive economic spillover effects for communities throughout the State that have often been not part of and not seen the benefits of our energy production.

Drew Tompkins: BOEM's proposal, which will help facilitate a faster transition to renewable energy is a win for our environment. It's a win for our communities and it's a win for our State's economy. So, thank you once again for allowing me to speak and for moving this proposal forward.

Hanna Khalil, Facilitator, Kearns & West: Thank you so much. Next up we have Walter, Etter. Walter, I will allow you to come with me now.

Walter Etter: Hello! Good afternoon. My name is Walter Etter. I speak to you as a scientist and a resident of Monmouth County, New Jersey.

Walter Etter: I appreciate the comprehensive analysis that BOEM put forward in this environmental impact statement. I want to start my comments with a global perspective and address the "No Action" Alternative A first.

Walter Etter: According to the International Energy Agency, the U.S. is the second largest emitter of methane just behind Russia. Methane is a greenhouse gas that is 80 times more potent than carbon dioxide over a 20 year period.

Walter Etter: One source of methane emission in the U.S. is from methane leaks throughout the natural gas supply chain starting at the gas well.

Walter Etter: Since the production from a gas well declines rapidly, wells must be drilled at a very high rate, leading to countless abandoned late wells.

Walter Etter: In a study published in the Proceedings of the National Academy of Sciences, it is estimated that in Pennsylvania alone the number of abandoned wells is as high as 750,000.

Walter Etter: The USEIA writes on their website, shale fracking requires large amounts of water

Walter Etter: and may contain hazardous chemicals that could be released through spills and leaks during and after well drilling.

Walter Etter: As satellite measurements now show abundantly, these methane leaks happened widely in the U.S., making the US. the second largest methane emitter in the world.

Walter Etter: The "No Action" Alternative A would increase the use of fracked gas.

Walter Etter: Therefore, the no action alternative should mention the pollution from fracked gas, the greenhouse gas emission from methane and carbon dioxide, the sulfur dioxide pollution and the nitrogen oxide pollution.

Walter Etter: It should refer to an estimate for the negative externalities, such as detrimental the detrimental effect on public health. And it should be linked to Appendix B with sections sections on ocean warming and ocean acidification.

Walter Etter: In New Jersey about 50% of our electric energy is produced from fracked shale gas. The problems of fracked gas are widely recognized, and it is my hope that BOEM moves forward expeditiously with their proposed action, Alternative C.

Walter Etter: One final comment to the positive visual impact.

Walter Etter: The wind turbines will be a symbol for progress, for climate action, for climate, justice for clean air, and a symbol of a society that recognizes the urgent need to protect the planet for the next generation. Thank you.

Hanna Khalil, Facilitator, Kearns & West: Thank you for your comment, Walter.

Hanna Khalil, Facilitator, Kearns & West: Next we have Anjuli I will invite you to come up mute. Now, if you'd like to provide your comment.

Anjuli Ramos: Hi! Can you hear me?

Anjuli Ramos: Good afternoon. My name is Anjuli Ramos, and I'm the New Jersey Sierra Club director as well as an environmental chemist.

Anjuli Ramos: Today I would like to address the argument that our oceans should not be touched in order for them to continue to be our problem solver when it comes to atmospheric carbon absorption and mitigating climate change. It's true that the ocean absorbs about 31% of the carbon dioxide that's emitted into the atmosphere. This absorption, however, is not without consequence. The more carbon in the ocean, the higher the concentration of carbonic acid, a molecule that acidifies the ocean.

Anjuli Ramos: Ocean acidification has been accelerated by human emissions that are wrecking havoc on marine ecosystems, especially shell-bearing organisms. For example, high acid environments are terrible for marine life, life, like corals, clamps and muscles that build shells out of calcium carbonate. A lower Ph in the ocean makes their shells more difficult to grow. We cannot continue to use climate-warming fuels and expect the ocean to continue to absorb this pollution and fix our problem.

Anjuli Ramos: Increasing water temperatures as a result of climate change is also undercutting the ocean's ability to absorb carbon because a warmer ocean is less capable of dissolving carbon dioxide from the atmosphere and storing it.

Anjuli Ramos: The IPCC 6 assessment report estimates an increase in global sea surface temperature of up to about 4°C by the end of the century. With higher temperatures, that carbon will be released more readily back to the atmosphere instead of permanently being sequester in the ocean as blue carbon. When this crucial first step in the process is slowed down, we can actually expect an acceleration of climate change as the ocean is less able to absorb human emissions.

Anjuli Ramos: Unfortunately, NOAA estimates that the ocean's ability to absorb carbon has already been reduced by 4% over the last decade. Some of this due to climate change itself.

Anjuli Ramos: Opponents describe the climate benefits of offshore wind as negligible, negligible, based on intentional misinterpretations of environmental impact statements from individual projects. However, these same documents provide all of the numbers needed to prove that this is not the case with simple math. It takes only a few months to pay back the emissions from construction, or about a year in total, when combined with the manufacturer of materials as calculated by the National Renewable Energy Lab.

Anjuli Ramos: This leaves the remaining 30-plus year lifespan from for the wind farm to generate carbon free energy. Offshore wind power blows all other technologies out of the water, but we need all of them for a diversified and reliable grid of clean, renewable energy.

Anjuli Ramos: If we care about the ocean and preserving its ability to store carbon, the urgent action is needed to address climate change. This is why it is imperative that BOEM adopts these avoidance, minimization, mitigation, and monitoring measures proposed in the PEIS. To facilitate the efficient and responsible development of offshore wind farms in the New York Bight. Thank you.

Hanna Khalil, Facilitator, Kearns & West: Thank you for your comment. Next we are going to go to Jodi Stewart. Jodi, if you are on the line today, if you'd like to raise your hand to provide comment.

Hanna Khalil, Facilitator, Kearns & West: Not seeing any hand raised, so we can circle back if you decide to provide a comment. Philip Pepe will be next.

Hanna Khalil, Facilitator, Kearns & West: Same thing, Philip, if you have a comment and would like to raise your hand.

Hanna Khalil, Facilitator, Kearns & West: Okay. Going to move on to Brian.

Hanna Khalil, Facilitator, Kearns & West: Brian, if you are online and would like to please raise your hand at this time.

Hanna Khalil, Facilitator, Kearns & West: Kristen O’Rourke, I see that your hand is raised, and I will invite you to come off mute.

Kristen O'Rourke: Hi! Thank you for the opportunity to comment. Just a few points I wanted to make. I do echo the same concern about the limited time period for the public comment at 45 days. This is far too short for the public and any interested parties to fully digest and understand the impacts it contained in this PEIS. There's no, it's

Kristen O'Rourke: there's no, it's not a coincidence that this statement period or the public comment period is so short given the 2020 updates to regulations implementing the procedural provisions of the NEPA Act. This is quite clearly, intentionally done to limit public participation and feedback on these projects. In addition

Kristen O'Rourke: those regulations also limit further PEIS or

Kristen O'Rourke: FEIS per project to is it 150 pages, or fewer or 300 pages, or fewer for more complex projects. This is completely unrealistic.

Kristen O'Rourke: the FEIS for Ocean Wind One was 2,300 pages alone. And now we're talking about 6 additional lease areas within the New York Bight that will have a real negligible and not negligible, real and and

Kristen O'Rourke: massive impact to the surrounding communities. Both for industry, national security, energy security,

Kristen O'Rourke: and people's quality of life quite frankly, as well as the environment that it seeks to protect and preserve. Again, please. I echo all of the the pleas from

Kristen O'Rourke: everyone who's commented today. We absolutely need more time to digest this sort of material.

Kristen O'Rourke: Without that time

Kristen O'Rourke: it seems sort of seems silly to even have these comment periods or these public meetings to begin with. So again, please consider extending this comment period. And with that. Thank you.

Hanna Khalil, Facilitator, Kearns & West: Thank you so much for your comment today. Okay, next, we have Mike. Mike, if you're on the line and would like to come off mute, please raise your hand.

Hanna Khalil, Facilitator, Kearns & West: Okay.

Hanna Khalil, Facilitator, Kearns & West: Sally, if you are on the line and would like to find comment, please raise your hand at this time.

Hanna Khalil, Facilitator, Kearns & West: Right. I'm going to keep moving through the list.

Hanna Khalil, Facilitator, Kearns & West: Mike Fife, if you are online and would like to provide your comment,

Hanna Khalil, Facilitator, Kearns & West: you can do so now if you raise your hand.

Hanna Khalil, Facilitator, Kearns & West: Okay, John Godier, if you are online, please raise your hand to indicate you'd like to come off mute to provide comment.

Hanna Khalil, Facilitator, Kearns & West: Next we have Peggy. Peggy, if you were online, would you like to raise your hand?

Hanna Khalil, Facilitator, Kearns & West: Right. Jack Fullmer. Looking for your hand as well.

Hanna Khalil, Facilitator, Kearns & West: Next we have Tiziana.

Hanna Khalil, Facilitator, Kearns & West: Tiziana, if you are online would like to provide a comment, please raise your hand at this time.

Hanna Khalil, Facilitator, Kearns & West: We have Patrick Michael Yanaton. Patrick, if you are online, raise your hand.

Hanna Khalil, Facilitator, Kearns & West: Alright, next, we have Anthony

Hanna Khalil, Facilitator, Kearns & West: Hagen. Anthony Hagen, are you online today?

Hanna Khalil, Facilitator, Kearns & West: Okay.

Hanna Khalil, Facilitator, Kearns & West: Next, we have Captain Steve Bielenda.

Hanna Khalil, Facilitator, Kearns & West: And see if you are, I see that you're online. If you'd like to provide a comment, please raise your hand, and I can invite you to unmute.

Hanna Khalil, Facilitator, Kearns & West: Last call there. If not, we can circle back to you if you'd like to provide comment.

Hanna Khalil, Facilitator, Kearns & West: Okay, I'm going to move forward. Kirk Murdoch, if you are online, who would like to raise your hand to provide comment.

Hanna Khalil, Facilitator, Kearns & West: Okay, none. Sherry Lilienfeld. If you'd like to provide comments today, please raise your hand and I can invite you to come off mute.

Okay.

Hanna Khalil, Facilitator, Kearns & West: I'm not seeing any hand. I'm going to continue. Marianne Clement.

Hanna Khalil, Facilitator, Kearns & West: If you are online and would like to raise your hand.

Hanna Khalil, Facilitator, Kearns & West: Alright.

Hanna Khalil, Facilitator, Kearns & West: Trisha Devoe, I see you're online. If you'd like to provide comment, feel free to raise your hand, and I'll take you off mute.

Okay.

Hanna Khalil, Facilitator, Kearns & West: Sylvia Lockwood. I see that your hand is raised. I will invite you to come with me now. Thank you.

Sylvia Lockwood: Yes, hi. Thank you for the opportunity to speak today. My name is Sylvia Lockwood. In opening comments it was mentioned that this process begins with public input. If that is the case, I like several other commenters, am requesting that the public comment period for this PEIS be extended.

Sylvia Lockwood: The most educated individual would find it difficult to review the 1,429 page document in 45 days, which breaks down to more than 31 pages per day. The actions and effects, should these projects move forward, will alter our environment forever, and although climate change certainly does need to be addressed swiftly there are too many

Sylvia Lockwood: quote major gaps in knowledge quote as indicated in the joint-issued Synthesis of Science Report, which was issued by BOEM, NOAA, and RODA.

Sylvia Lockwood: Lastly, I'd like to commend everyone involved for their passions to protect the environment. Thank you.

Hanna Khalil, Facilitator, Kearns & West: Thanks so much, Sylvia, for providing your comment. Next, we have Teresa Siletti. Theresa, if you'd like to provide comment today, please raise your hand and I can take you off mute.

Okay.

Hanna Khalil, Facilitator, Kearns & West: Then I will move on to Nivo Rovedo. I will invite you to come off mute now, if you'd like to provide your comment.

Nivo Rovedo: Hello. Can you hear me?

Nivo Rovedo: Hello. My name is Nevo Revito. I live in Duchess County, New York, in the mid-Hudson Valley, and I want to lend my voice to support developing off shore wind in the New York Bight.

Nivo Rovedo: These offshore wind projects are critical for the reduction of greenhouse gas emissions from the electrical sector in order to fight the climate crisis we find ourselves in.

Nivo Rovedo: we must stop burning fossil fuels to generate electrical power, because the emissions are wreaking havoc on our global natural systems. The human activity of burning fossil fuels is the cause of the catastrophic weather disasters we have been experiencing so frequently and fiercely. From deadly heat waves, torrential flooding storms, and the wildfires that choked us on the east coast last summer.

Nivo Rovedo: We have an energy source that is free does not pollute, and is safe blowing in the wind off the New York Bight. It is clean, and has no particular or toxic gas emission, nor does it emit noise on the shore.

Nivo Rovedo: It is renewable power to feed the energy-hungry New York northeast. Sorry. New northeast.

Nivo Rovedo: Offshore wind is a golden opportunity to help reverse the catastrophic, cataclysmic path that we are on with climate change.

Nivo Rovedo: And it will generate power close to where it is needed most,

Nivo Rovedo: not requiring extensive augmentation to the grid for some for some far away generation to reach us.

Nivo Rovedo: I want my young grandchildren to inherit a livable world,

Nivo Rovedo: and the offshore wind projects are steps towards that goal. Local air quality will improve as we tap into the wind into the energy wind can deliver.

Nivo Rovedo: And jobs are generated from the introduction, we can see that BOEM has done extensive work, and a lot of planning has gone into where the placement of the towers go and what the impacts will be to offshore wind.

Nivo Rovedo: It is evident that care is being taken to avoid harm to marine life and the fishing industry.

Nivo Rovedo: We have a test case for this in the wind farms off Block Island and in the European offshore wind farms. And if you want to worry about damage to fishing and marine life, then be appalled by the havoc of glor- of warming oceans caused by the fossil fuel burning, just causing bleaching corals and acidification of the ocean, not to mention oil spills from fossil fuel extraction.

Nivo Rovedo: Know that harm to whales has been from discarded fishing nets and collision with large ships, not offshore wind, construction, and operation. It is misinformation if you were told otherwise. We cannot afford to miss the opportunity presented to us by offshore wind energy development.

Nivo Rovedo: It will save us from a terrible distortion- dystopian future of heat, storms, polluted air, and will contribute to the community and our wellbeing. Let's get it done sooner the better. I urge you to support offshore wind development in the New York Bight. Thanks for the opportunity to speak.

Hanna Khalil, Facilitator, Kearns & West: Thanks so much for writing your comment. Next up we have Dan Quinlan. Dan, I will invite you to come off mute now.

Dan Quinlan: Good afternoon. My name is Dan Quinlan, and I co-lead the New Jersey Clinicians for Climate Action. CCANJ consists of hundreds of physicians, nurses, and other health professionals who are speaking out and strong support

Dan Quinlan: of the long overdue build out of offshore wind. In 2019, the World Health Organization declared climate change to be the greatest threat to global health in the 21st century.

Dan Quinlan: Every major professional medical and health organization in the U.S. has since issued similar warnings. In other words, the built out of offshore wind

Dan Quinlan: off the coast of New Jersey and New York is nothing less than a national emergency.

Dan Quinlan: When health professionals talk about the impacts of climate change on our communities, we talk about the direct health impacts like how heat waves and severe storms hospitalized and kill people.

Dan Quinlan: We also talk about the very connected issue of air pollution.

Dan Quinlan: Even without the wildfire smoke, several New Jersey counties ranked among the worst in the nation with respect to air pollution, as reported by the National Lung Association.

Dan Quinlan: Of course, last summer our skies were filled with smoke from out-of-control wildfires. A health threat that is predicted been predicted for more than 40 years by climate health professionals.

Dan Quinlan: Health professionals also talk about the broad conditions required to live a healthy life. These social determinants of health cover simple but critical ideas, like having a home to live in, being able to move around so we get to work, go to school, buy food at the grocery store.

Dan Quinlan: In 2022, the New Jersey Department of Environmental Protection stated that Atlantic City can expect sunny day flooding due to sea level rise to occur 95 days a year by 2050 and a 50% chance the city will experience 355 days a year by 2100.

Dan Quinlan: Underpinning this is a scientific fact that few people are aware of decades of climate change modeling and actual measurement have shown that sciences can very accurately predict sea level rise. Ignoring the DEP warnings about sea level rise would be like any one of us receiving multiple diagnoses of a potential fatal cancer and assuming our doctors were simply wrong.

Dan Quinlan: The full implications of sea level rise alone are staggering. For starters, and this is already happening in Florida and parts of Louisiana, major insurance companies will decide to no longer offer home insurance in coastal areas. Think about what that does to the value of a home.

Dan Quinlan: If we don't have to clean up our energy systems over the coming decade. The land on barrier islands like Long Beach Island, will first become worthless, and then it will be literally underwater. On the flip side, CCANJ

Dan Quinlan: supports offshore wind development because a strong offshore wind industry will create thousands of well paying union jobs. Transitioning to clean energy future isn't just a win for the environment, it's a win for the health of local businesses in New Jersey who will be building and

maintaining our new energy generation systems. Thank you for the opportunity to make these comments.

Hanna Khalil, Facilitator, Kearns & West: Thanks so much for providing your comment today.

Hanna Khalil, Facilitator, Kearns & West: Okay, next, we have Elizabeth. Hi, Elizabeth, if you're on the line, please raise your hand and I'll invite you to come off mute.

Hanna Khalil, Facilitator, Kearns & West: Okay. Next we have Annecia. I apologize if I'm mispronouncing your name. If you'd like to provide a comment, please raise your hand and I'll take you off mute.

Hanna Khalil, Facilitator, Kearns & West: I'm not seeing your hand raised, so we're going to move forward. But again we will be getting through everyone who has their hand raised today. Kimberly Wilkins, if you are online, would like to provide your comment, please raise your hand.

Okay.

Hanna Khalil, Facilitator, Kearns & West: Chris Farchon.

Hanna Khalil, Facilitator, Kearns & West: I see your hand is raised, and I'll invite you to come of mute now. Thank you.

Chris Farschon: All right. Thank you for the opportunity to speak today. Speaking as a 35-year resident of the New Jersey shore, licensed professional engineer, and

Chris Farschon: and a for-hire charter boat captain running recreational fishing trips on the southern New Jersey shore,

Chris Farschon: I echo the comments in support of offshore wind for a real, simple, high-level concept is that we need more power. We need more power all the time, and really the only new sources that make sense are the renewable sources. So, the sooner we can phase out

Chris Farschon: fossil fuels and use viable alternatives the better. But, speaking as someone who is on the ocean and enjoys the ocean and takes customers in the ocean,

Chris Farschon: the impacts to recreational fishing I see as positive overall. We recreational fishermen, we target structure and these are structures that are going to draw the kinds of fish we want to catch.

I understand it's not

Chris Farschon: not a good thing for large mobile fisheries like the commercial dredges and things. But

Chris Farschon: those are quite, frankly, pretty destructive

Chris Farschon: to the bottom of the ocean as we see it now. And it's a very, very large ocean. There's a lot of area out there. I think there's some some reasonable compromises that can be made in how we use it.

Chris Farschon: So there's there's a lot more benefits than

Chris Farschon: the detractors to letting these projects go forward, and I voice my support for them. Thank you.

Hanna Khalil, Facilitator, Kearns & West: Thanks so much for writing your comment.

Next we have Debora Coyle. Debora, I will go ahead and invite you to come off mute.

Debra Coyle: Hi.

Debra Coyle: Thank you for the opportunity to deliver public comment. My name is Deborah Coyle. I'm executive Director of New Jersey Work Environment Council

Debra Coyle: and we are in full support of moving these projects forward in an environmentally responsible way. And I really want to thank BOEM for having both 2 virtual and one in-person hearing.

Debra Coyle: It's nice in the winter time, especially in the northeast, as we're getting snow, being able to participate. Where, if this had been in-person, it may not have been an option, so thank you for having the 3 hearings.

Debra Coyle: And we - our focus is on, you know, combating climate change and at the same time creating good union jobs. And we think moving these projects forward in the New York Bight will do both.

Debra Coyle: They have the potential to create thousands of jobs and generate substantial economic activity in this region. A study from Wood and McKenzie shows that building offshore wind projects and the New York Bight can support up to 25,000 development and construction jobs

Debra Coyle: from 2022 to 2030. That's 25,000 jobs, as well as an additional 7,000 jobs and communities supported by this development.

Debra Coyle: And this study also concludes the lease areas also has the potential to support up to 4,000 operations and maintenance jobs annually,

Debra Coyle: and approximately 2,000 community jobs in the following years.

Debra Coyle: In addition to creating new jobs, leasing sites can create and generate substantial revenue.

Debra Coyle: So we see moving these projects forward important for reducing greenhouse gas emissions, which, has also been detrimental to the temperature of the ocean as that rises.

Debra Coyle: We see this moving forward in a way that can bring about a lot of good jobs in this region. And we, as I said, we're very supportive of of the jobs, and we want to see them to be union jobs. And it's not just the building, it's the operation and the maintenance. So, thank you for the opportunity to leave a public comment.

Hanna Khalil, Facilitator, Kearns & West: Thank you for writing your comment today. Next, we have Heidi, and I will invite you to come off mute now.

Heidi Yeh: Hello!

Heidi Yeh: Thank you for the opportunity to speak today as an oceanographer concerned by the misinformation that I've heard being circulated. There have been claims that the construction of offshore wind farms would somehow break the marine carbon cycle and damage the ocean's ability to buffer the

effects of climate change. But these dire claims are baseless. It's true that the ocean currently observes - absorbs about 31% of the carbon dioxide that is emitted into the atmosphere.

Heidi Yeh: When this carbon gets locked away in marine soils or deep ocean currents, it no longer contributes to global warming. However, most of this is occurring in the much colder regions of the Southern Ocean and northern regions of the Pacific and Atlantic Oceans where thermohaline circulation drives most of the oceans' carbon sequestration.

Heidi Yeh: So, knowing the mechanism for how this carbon gets locked away is important as it varies by ecosystem.

Heidi Yeh: Carbon absorbed at the surface in most of the global ocean has little chance of making it to the ocean floor alone. A middleman is needed. In this case, microscopic plants in the ocean known as phytoplankton. These take up carbon and pass it up the food chain.

Heidi Yeh: So just like dead leaves falling off of a tree and reaching the ground, carbon in these dead creatures and poop fall through the water, and some of this carbon reaches the deep ocean where it is essentially locked away. More biological productivity at the surface typically means more of this blue carbon storage and vice versa.

Heidi Yeh: So how can we expect this offshore wind development to affect marine productivity and the blue carbon storage that results from it?

Heidi Yeh: We know from studies of existing wind farms that both increases and decreases in phytoplankton and other plankton productivity are observed around wind turbines, essentially cancelling each other out over the whole region.

Heidi Yeh: But opponents of offshore wind often cite the 2022 paper by Daewal and colleagues in the North Sea of Europe as reason for concern, but conveniently ignore their finding of a 12% increase in zooplankton biomass in the presence of wind turbines. The PEIS itself cites a 2020 paper by Dannheim and colleagues which found increased primary productivity at local scales around wind turbines.

Heidi Yeh: So, more productivity like this typically means more blue carbon storage.

Heidi Yeh: And a worst-case scenario is really that these farms would have a neutral effect on carbon storage and doesn't come anywhere close to breaking the ocean's ability to store carbon. What would truly hinder the ocean's ability to store carbon is climate change itself, as a warmer ocean is less capable of dissolving carbon dioxide from the atmosphere and storing it.

Heidi Yeh: This is why it is important that BOEM adopt these avoidance, minimization, mitigation, and monitoring measures proposed in this PEIS to facilitate the efficient and responsible development of offshore wind farms. Thank you.

Hanna Khalil, Facilitator, Kearns & West: Thanks so much for your comment. Next, we have Jeanette Myers. Jeanette, if you're online, please raise your hand, and I will take you off mute.

Hanna Khalil, Facilitator, Kearns & West: Okay, Walter it looks like your name is up here twice, but I know you provided your comment earlier. So, thank you so much for doing that. And last of the pre-registered public comment list, we have Denise Brush. Denise, if you're online, please raise your hand.

Hanna Khalil, Facilitator, Kearns & West: Okay. So that takes us through our preregistered list, and I'll be moving forward with the rest of the queue that we have today. If you'd like to provide comment, please raise your hand, and we will get to you shortly.

Hanna Khalil, Facilitator, Kearns & West: Next. Up we have Jackie, and then followed by Erica and Anthony. So, Jackie, I'll invite you to come off mute now.

Jackie Greger: Good afternoon. Thank you for the opportunity to provide comment today. My name's Jackie Gregor, and I'm a lifelong resident of Toms River, New Jersey, and here to testify on behalf of New Jersey Sierra Club.

Jackie Greger: The New Jersey Sierra Club eerily supports the equitable and environmentally responsible build out of offshore wind. New Jersey is on the front lines of the climate crisis, with ever-increasing sea-level rise, heavy rain events, and both coastal and land flooding.

Jackie Greger: I have seen directly the impact of sunny day flooding in coastal communities and experienced extreme weather during Hurricane Sandy that climate change will only exacerbate in future events.

Jackie Greger: To achieve the necessary carbon emission reductions to protect our communities from the climate crisis, we need a major transition in our energy sector now.

Jackie Greger: Offshore wind is the future and one of our greatest clean energy solutions that will benefit the local communities here in our State without the further burning of fossil fuels.

Jackie Greger: This new, clean energy resource will especially benefit the communities in New Jersey who bear the brunt of pollution as it will help to displace the gas and fossil fuel usage in our grid and improve our regional air quality, which suffers greatly from a dense population and overwhelming industry pollution.

Jackie Greger: We need to invest in offshore wind to bring relief to people who suffer from asthma, heart disease, and other medical conditions.

Jackie Greger: New Jersey is downwind from all of the States in our regional grid, particularly Pennsylvania, where we see intense fracking, extraction and electric generation through coal and gas fired power plants. All of this regional pollution lands right here in New Jersey.

Jackie Greger: Offshore wind will directly offset our reliance on this dirty energy, allowing New Jersey communities to breathe easier and take necessary action towards transitioning toward a clean and liveable climate future.

Jackie Greger: When I look at the beaches I've grown up treasuring and spending my summers, seeing offshore wind turbines on the horizon will be a sign of hope.

Jackie Greger: We urge BOEM to move quickly to protect the health of our future generations and our environment, and thank you again for your time and the opportunity to submit my comments today.

Hanna Khalil, Facilitator, Kearns & West: Thanks so much for providing your comment. Next up we have Erica, followed by Anthony, and then our phone caller. So, Erica, I'll invite you to come off mute now.

Hanna Khalil, Facilitator, Kearns & West: Erica, you should be able to be off mute now.

Hanna Khalil, Facilitator, Kearns & West: It doesn't seem like we're able to hear you. But if you need any technical help, please do contact Sam Levy, and we'll circle back to you. Alright.

Hanna Khalil, Facilitator, Kearns & West: Next we have Anthony Taddeo. You'll be able to come off mute now.

Anthony Taddeo: Can you hear me? Okay, perfect. My name is Anthony Tadio, and I'm a resident of Monmouth County and a campaigns organizer at New Jersey League of Conservation Voters. The release of BOEM's

Anthony Taddeo: PEIS is a significant step forward in our collective effort to foster sustainable energy solutions. This is a comprehensive assessment.

Anthony Taddeo: Lays the groundwork for responsible offshore wind development and sharing the environmental protections while harnessing

Anthony Taddeo: renewable energy resources. By carefully evaluating potential environmental impacts and mitigating measures, the PEIS shows that our transition to clean energy aligns with our commitment.

Anthony Taddeo: to the environmental stewardship. I commend BOEM for their dedication to balancing energy needs with

Anthony Taddeo: conservation priorities, and I urge swift actions to implement the recommendations outlined in this pivotal document.

Anthony Taddeo: It is pivotal.

Anthony Taddeo: It is a pivotal movement for New Jersey's journey towards cleaner, more sustainable energy future. W ith roughly 51.3% of our energies currently being sourced from natural gas plants and nuclear power, accounting for much of what remains.

Anthony Taddeo: According to the U.S. Energy information administration. It is evident that we need to accelerate the transition to renewable energy sources like wind and solar. Offshore wind can play a crucial role in diversifying our energy portfolio and reducing our reliance on the fossil fuel industry.

Anthony Taddeo: By harnessing the power of offshore wind, we have a golden opportunity to replace it

Anthony Taddeo: as much natural gas as possible with renewable energy, thereby advancing our State's clean energy goals and mitigating the impacts of climate change. I applaud BOEM for their diligent work in assessing the environmental impacts of offshore wind development and urge swift action to this opportunity to build more sustainable and reliant -

Anthony Taddeo: more sustainable and reliant future for New Jersey. Together we can harness the power of offshore wind to drive economic growth, protect our natural resources, and secure a brighter future for generations to come. Thank you for your time.

Hanna Khalil, Facilitator, Kearns & West: Thanks so much for your comment. Next, we're going to go to our phone caller, and then, just to give a sense of the queue will be followed by Jordan, then Bonnie, and then Trisha

Hanna Khalil, Facilitator, Kearns & West: So if you called in by phone and your phone number ends in 94048, I'll hit or allow you to come off mute, and you can provide your comment that way.

Hanna Khalil, Facilitator, Kearns & West: Again, if you're a phone caller, you should be able to come off mute now.

Hanna Khalil, Facilitator, Kearns & West: if you'd like to. Can you hear me? Yes, we can hear you. Great. Can you hear me?

15035394048: Yes, Carl van Warmerdam. I'm a member of Deep-sea Defenders, an organization dedicated to stopping deep sea mining. And this is what

will be required to obtain the metals, to construct the thousands of massive turbines

15035394048: and the required cables.

15035394048: We also echo the need for a public public comment extension.

15035394048: People who believe that offshore wind turbines can help solve climate change are misinformed because the facts are they will not. The truth

15035394048: based on facts will all always trump belief. I'm not a climate denier, but you don't have to be a climate denier to know that these things are bad and doomed to failure.

15035394048: And you also don't have to be linked to the fossil fuel industry.

Truth be told most of these rebuildable extractive energy companies

15035394048: have ties to fossil fuels companies, the same people who knew fossil fuel emissions would cause

15035394048: climate change, but lied about it and continue to make profits. These extractive energy executives are still lying today for profit. In reality

15035394048: is that the that these boondoggles that you won't hear about in the mainstream corporate media is

15035394048: because they only have disinformation is that after years of rebuildable solar wind

15035394048: energy infrastructure

15035394048: the world world uses more fossil fuels in 2023 than it did in 22, and the year before that year before that.

15035394048: CO2 emissions have doubled in the last 50 years. And after all of that, the percent of U.S. electricity use to fossil fuels has remained the same: 20%.

15035394048: Wind turbines account for 7%, solar, 2% of the total electricity generation. So the dream of a hundred percent electricity power is just that.

15035394048: So why? Because these are energy, intense extractive technologies that require massive amounts of fossil fuels to produce. And those omissions are added onto what is already being used, not subtracting.

The only reason emissions may drop in countries installing rebuildable extractive energy and electric vehicles is because they have outsourced the mining and manufacture of these machines to other countries,

15035394048: Thus increasing CO2 emissions in those countries and on

on and on.

15035394048: Through all of this it's accessibility of resources, which is the energy return on investment, has gone down sharply.

15035394048: So for the foreseeable future we will be approaching what is called energy cap cannibalism. This continues so-called energy transition will, in fact, be an energy correction. Contemplate

complements of Mother Nature. Bigger, more storms, flooding, fire, drought, biodiversity collapse.

15035394048: There's no more natural gas disasters.

15035394048: So we

15035394048: Am I finished with my time now?

Hanna Khalil, Facilitator, Kearns & West: Yeah, if you can, please just wrap up your final sentence or 2.

15035394048: Okay, true resilience and sustainability comes from thinking globally and acting locally.

15035394048: So we recommend an alternate alternative A “No Action” alternative. Money would be better spent to mitigate the already abandoned mines, fossil fuel wells, and habitat degradation. This is where good paying jobs

15035394048: should be working to protect our planet, not our lifestyle.

Hanna Khalil, Facilitator, Kearns & West: Thank you for providing your comment. Thank you. Okay, I'm going to circle back to Erica. I see that your hand is raised again. So let's try taking you off me again. I'll invite you now.

Hanna Khalil, Facilitator, Kearns & West: Erica? You've been invited to come off mute. You should have a pop up on your screen, and then you should be able to speak.

Hanna Khalil, Facilitator, Kearns & West: Okay, we're still not able to hear you. So, I might direct you to email Sam Levy at slevy@kearnswest.com, and she can help troubleshoot and if we're able to we'll circle back to you. Thank you.

Hanna Khalil, Facilitator, Kearns & West: Alright. Next, we have Jordan so I'm going to go ahead and invite you to come off mute now.

Jordan Christensen: Hi, can you hear me?

Hanna Khalil, Facilitator, Kearns & West: Yes, I can.

Jordan Christensen: Okay, great. Thank you. I'm Jordan Christensen. I'm with Citizens Campaign for the Environment, and we wanted to echo all the support today for offshore wind. First off, we would like to

thank BOEM for all your work on this PEIS, helping to streamline the process and move forward these 6 projects in the New York Bight.

Jordan Christensen: We also agree with the other comments today about how important it is to do a thorough assessment of impacts to fish, birds, marine species, and mitigate impacts to the greatest extent possible.

Jordan Christensen: But we also have to note that the most important, the most immediate impact in the greatest impact to these species is climate change. The real danger facing our beaches, fishes, and our coastal community is not wind farms. It's rising sea levels, ocean acidification, warming waters and extreme weather events.

Jordan Christensen: CC believes that offshore wind is the significant part of the antidote in fighting climate change. We cannot and should not put this antidote on pause while allowing the impacts of climate change to intensify.

Jordan Christensen: CC is going to be submitting more extensive comments, but there is just one more point that I wanted to hit on here today.

Jordan Christensen: When moving forward with the assessment, it's important to note that the “No Action” alternative isn't exactly no action. We're not choosing between offshore wind farms and nothing. We're choosing between offshore wind farms and continued alliance on burning polluting fossil fuels. A “No Action” alternative means potential adverse impacts to our fishing industry, to fin fish and vertebrates and essential fish habitat, to marine mammals and sea turtles and to our coastal habitats due to climate change.

Jordan Christensen: It also means significant impacts on air quality, particularly on our disadvantaged communities due to increased greenhouse gas emissions, especially in New York City and Long Island, which regularly receive an F for air quality already from the American Lung Association.

Jordan Christensen: In New York, our climate change law assessment found that the first 2,400 megawatts of offshore wind which the projects in the New York Bight will help us achieve when they move forward

Jordan Christensen: would be valued at roughly a billion dollars in health costs and avoid an estimated 100 premature deaths each year. It only makes ecologic and economic sense, as well as a huge public health boon to be moving forward with these 6 projects as quickly as possible. So thank you again for your work on this PEIS, and thank you for the ability to comment.

Hanna Khalil, Facilitator, Kearns & West: Thanks so much for providing your comment. Next up we have - I see that Erica's try - going to try one more time, and then, if not, maybe a call in will work. So let me try with Erica, and then we'll continue with the queue. Okay, Erica, you should be able to come off mute now.

It's still not working.

Hanna Khalil, Facilitator, Kearns & West: Erica, are you speaking? You should be able to come up mute.

Hanna Khalil, Facilitator, Kearns & West: Okay, we will circle back again. And you might want to try calling in by phone. It might be a mic issue. But I'm going to continue with the queue. Next up we have Bonnie, and then, followed by Tricia, Rose and Mark.

Hanna Khalil, Facilitator, Kearns & West: I'm seeing from my team that some people can hear you really faintly, Erica, can you try speaking up?

Hanna Khalil, Facilitator, Kearns & West: Otherwise I think there might be a volume - just barely

Erika Bosack: Okay. That's strange.

Erika Bosack: yeah.

Hanna Khalil, Facilitator, Kearns & West: Could you try again?

Erika Bosack: Can you hear me better now?

Hanna Khalil, Facilitator, Kearns & West: Yes, now I can. That's perfect. Thank you.

Erika Bosack: Goodness, sorry about all that.

Erika Bosack: Okay, sorry. Good afternoon. Thank you for the opportunity to speak today. At long last. My name is Erica Bosack, and I'm the policy attorney for Clean Ocean Action. As I'm still reviewing the PEIS, my comments are based on my review of the document as of today, and other issues may arise as Clean Ocean Action continues to review and drafts our written comments.

Erika Bosack: This illustrates why COA has submitted our written request for a 90-day extension in the comment period on the first day that it opened. There is a high degree of misinformation circulating, and unfortunately it tends to get lumped together with legitimate concerns about offshore wind energy development in the New York Bight.

Erika Bosack: The fact is, there is a great deal that no one, including the agencies, knows about how building up this industry at this scale in this region will affect marine life.

Erika Bosack: Faced with multiple forms of uncertainty, we should not be using a wait and see approach to the environmental impacts of offshore wind development or expediting the permitting processes that are the foundation of environmental governance.

Erika Bosack: In the required appendix on incomplete and and unavailable information, the P.EIS shows multiple concerning data gaps.

Erika Bosack: Data on the distribution of multiple species of whales and dolphins is lacking. The effects of electromagnet magnetic fields on benefit communities, sea turtles, and marine mammals are not well understood.

Erika Bosack: For baleen whales, BOEM is extrapolating the effect of the effect of pile driving noise from studies on responses to air guns, and little research at all has been conducted on sea turtle hearing.

Erika Bosack: Scientists do not know how marine mammals will will respond to the presence of artificial structures in their environment. A pilot project would have been the only way to determine this beforehand, which is why COA has long advocated for a pilot project before full scale development.

Erika Bosack: The environmental impacts of the individual projects will vary greatly, depending on which design elements they choose. Yet the PEIS would allow them to use, depending on the resource, the same characterization of the affected environment and or qualitative impacts estimated in the PEIS for the environmental reviews of the individual projects. This will expedite the environmental review process and threaten the quality of the analysis.

Erika Bosack: At the in-person meeting in New Jersey we learned that BOEM made compromises on the amount of baseline, passive, acoustic monitoring it would require to accommodate the expeditious timeframe of offshore wind development.

Erika Bosack: BOEM's general approach is to see what happens when the projects are constructed and use it to inform future mitigation. But focusing on developing industry instead of preserving the environment is exactly how we got ourselves into the climate crisis.

Erika Bosack: Outside of the PEIS, scientific researches has

Erika Bosack: outlined multiple ways in which offshore wind poses risk to marine life. Increased vessel activity, noise, and in this particular geographic area, potentially changing the patterns of the North Atlantic Cold Pool, a unique seasonal temperature cycle that allows cold water creatures thrive here.

Erika Bosack: BOEM argues that filling these data gaps would have exorbitant costs or research methods aren't available. But our priority should be on developing science, not developing industry.

Erika Bosack: Thank you again for giving us all the chance to speak today.

Hanna Khalil, Facilitator, Kearns & West: Thanks so much for your comment. Next up we have, Bonnie, and then, just to give a sense of the next few people on the list. It's going to be followed by Tricia, Mark and Angel and then we will continue to get through everybody who has their hand raised. That's just the next few people on our list. So next up we have Bonnie. I'll invite you to come off me now.

Bonnie Brady: Hi! Can you hear me?

Hanna Khalil, Facilitator, Kearns & West: Yes. I can.

Bonnie Brady: Okay. Great. My name is Bonnie Brady. I represent the Long Island Commercial Fishing Association. These comments are just a bit based on what I've been hearing so far for today's meeting. I will submit written comments. But first I'd like to request a 45-day extension in the comment period for the sheer scope of the document. As Ms. Lappi mentioned in her comments, stakeholders have not had the time to effectively comment under these guidelines.

Bonnie Brady: There are 3 hi - articles I'd like to highlight for those that say we must do something for must do offshore when to stop ocean warming.

Bonnie Brady: The first article is "Offshore Wind Farms Are Projected to Impact Primary Production and Bottom Water Deoxygenation in the North Sea", which is from *Communications, Earth and Environment*. Volume 3. Article number 292 by Ute Daewel, Naveed Akhtar, Nils Christiansen, and Corinna Schrum.

Bonnie Brady: where they determine that associated wind wakes in the North Sea provoke large scale changes in annual primary production with local changes of up to plus or minus 10%. Not only at the offshore wind farm clusters, but also distributed over a wider region. The model also projects an increase

in sediment, carbon, and deepen areas of the sor - of the Southern North Sea, due to reduced current velocities and decreased, dissolved oxygen inside area with already low oxygen concentration.

Bonnie Brady: Their results provide evidence that ongoing offshore wind farm developments can have a substantial impact on the structuring of coastal marines ecosystems on basin scales, and as one of the other previous speakers, it said, yes, there is an increase in some areas, however, the response quote the response in phytoplankton biomass is relatively small on average, but below 1%, both inside and outshore offshore wind farm cluster

Bonnie Brady: but can reach up to 10% locally, and that annual net, prime primary production changes in response to offshore wind wake effects in the southern North Sea areas both show areas with a decrease in areas with an increase

Bonnie Brady: for annual net primary production of up to 10 percent. Most obvious is the decrease in the center of the large offshore wind clusters in the inner German Bight, and at Dogger bank, which are both clearly situated in highly productive frontal areas and an increase in areas around these clusters in shallow near-coastal areas of the German Bight and at Dogger Bank. The second article is from *Frontiers in Marine Science*, February 2022. "The Emergence of Large-Scale Hydrodynamic Structures

Bonnie Brady: Due to Atmospheric Offshore Wind Farm Wakes" again by Christiansen and Daewel with Bughsin, Djath and Corrina Schrum. It talks about the large-scale surface heating up of up to .1 Celsius, imitating the effects of climate change in which an increase in sea surface temperature is also to be expected as a result of warming of the earth's atmosphere.

Bonnie Brady: Then ArcVera had recent study - ArcVera Renewables in August, 16 20, 16th 2022, which confirmed that severe under-prediction of long range wake losses by engineering wake loss models in common use and investigated long range wake loss potentials at the New York Bight offshore development sites, velocity deficits has high as

Bonnie Brady: Velocity deficits as high as one meter per second or 10% persist for up to persists for up to, or greater than 60 miles downwind of large or offshore arrays leading to long range energy deficits much greater than expected by most subjects experts using the weather research forecasting model, a firmly established high fidelity, numerical prediction model along with the Wind Farm parameters. Sorry, hard to sell this parameterization which was added to the model to account for the effects. We do feel the PEIS should be analyzing this ArcVera methodology as it relates the wind lease areas, cumulative wind lease areas and COPs and records of decision that have been submitted to the Atlantic Ocean to date. So I have one paragraph left.

Hanna Khalil, Facilitator, Kearns & West: Sorry we have to continue and be fair to give everyone the same amount of time. You can continue to submit your comments online or through mail. Sorry to cut you off.

Hanna Khalil, Facilitator, Kearns & West: Thank you very much. Alright. Next up we are going to have Tricia, followed by Rose, and then Mark, and then, Angel.

Hanna Khalil, Facilitator, Kearns & West: Trisha, I will take you off mute now. Thank you.

Tricia Jedele: Hi, thanks. My name is Tricia Jadele. I'm the offshore wind policy manager for the Nature Conservancy.

Tricia Jedele: The Nature Conservancy's work in the ocean has been focused on conserving habitats and marine species, improving and sharing science that enables solution-oriented decision making and mitigating climate impacts and biodiversity loss in the marine environment.

Tricia Jedele: We are committed to using a scienc- based and pragmatic approach to working collaboratively, collaboratively with Federal and State agencies,

Tricia Jedele: natural resource users, communities, and the offshore wind sector to find expedient solutions to climate change that avoid, minimize, and mitigate impacts, and which are beneficial to people in nature.

Tricia Jedele: We know that carbon emissions are exacerbating ground level ozone and health issues associated with the exposure to fossil fuel pollution in our urban areas.

Tricia Jedele: We also know that carbon emissions seriously impact our oceans.

Tricia Jedele: For example, the Gulf of Maine is warming 2 to 3 times faster than global oceans and is already losing some of its subarctic characteristics.

Tricia Jedele: At the same time, this area and other areas in the Atlantic are beginning to experience species decline throughout the food web. Ecosystem resilience is projected to decrease with every tenth of a degree

Tricia Jedele: increase in average global temperatures. And the damage and degradation of ecosystems exacerbate the projected impacts of climate change on biodiversity.

Tricia Jedele: For this reason, the health and resilience of our ocean and coastal coastal ecosystems are critical to the ocean's ability to adapt to the changing climate and contribute to climate change mitigation itself.

Tricia Jedele: TNC is encouraged by BOEM’s programmatic approach to identifying mitigation measures that apply across these 6 lease areas, as opposed to doing that project by project

Tricia Jedele: With respect to the AMMM measures proposed in Appendix G, we're very happy to see the inclusion of a number of proposed voluntary mitigation measures that have never been required before. For example, the AMMM measures that encourage facility planning to use nature-inclusive design

Tricia Jedele: and favor the selection of low-noise foundation types. But it's not entirely clear how the project design envelope approach, which considers the maximum potential impacts, squares up with BOEM's encouragement of quiet foundations. So, we encourage BOEM to include approaches that incentivize the use of quiet foundations and designs that benefit biodiversity.

Tricia Jedele: We'd also really like to understand better how the proposed voluntary mitigation measures are intended to apply or inform construction operation plans. We will be submitting formal comments by the February 26th deadline and appreciate the opportunity to comment here today.

Hanna Khalil, Facilitator, Kearns & West: Thank you. I appreciate your providing your comment today.

Hanna Khalil, Facilitator, Kearns & West: Okay, next, we're going to go to Rose, followed by Mark, and then Angel, and then S Muthukrishnan. I apologize if I'm mispronouncing your name.

Hanna Khalil, Facilitator, Kearns & West: And then, George, just giving a sense of the list. But, like I said, we will be calling on everybody who has their hand raised today.

Hanna Khalil, Facilitator, Kearns & West: Okay, up next we have Rose Willis, and I'll invite you to come off mute now.

Hanna Khalil, Facilitator, Kearns & West: You should be able to come off mute.

Hanna Khalil, Facilitator, Kearns & West: There you are.

Rose Willis: Can you hear me now?

Hanna Khalil, Facilitator, Kearns & West: Yes, I can. Thank you.

Rose Willis: Okay. Hi, I'm Rose. I'm in Ocean County an New Jersey resident. For all those stating that we need to do this, as other commenters mentioned, according to BOEM's Vineyard Wind, FEIS. Page 76, quote overall, it is anticipated that there would be no collective impact on global warming as a result of offshore wind projects end quote. It seems like cumulative sum cumulative impacts, equal cumulative assumptions.

Rose Willis: The negligible effects on the most productive lucrative fishing grounds, are extremely concerning, not only within these lease sites, but also the placement of thousands of miles of VMF-laden cables that will be trenched through the ocean floor, plowing through plowing through these ledges and ridges that provide habitat is unthinkable.

Rose Willis: Placement of converter stations and the use of cooling systems like the open loop cooling system mentioned on page 59, volume one of the PEIS. The cumulative impacts of these cooling systems are extremely concerning, especially if they're anything like those mentioned in sunrise wind documents which take in cool ocean water to dissipate heat produced through the A/C to D/C conversion of electricity. Each offshore cooling system will discharge up to 8,100,000 gallons of seawater daily

Rose Willis: with chlorine residuals and the temperature report per document is between 86 to 90°F per day. What happens to all the fish, larvae, phytoplankton, zoo plankton, and necessary microorganisms that end up in this wash cycle with bleaching chlorine?

Rose Willis: Habitats like the mud hole and monsters ledge in the New York Bight should be off limits. Before proceeding with mass construction in Hudson Canyon, home of the unique marine environment with a cold pool, BOEM should implement a pilot project, considering the studies on this cold pool were done in the North Sea, which is a different environment.

Rose Willis: Especially since the currents around the turbines are exactly what breaks down the cold pool.

Rose Willis: We have one chance with ocean to too many assumptions exist. We're moving too fast. I, too, support a longer comment. Period 45 days isn't enough. Thank you for your time.

Hanna Khalil, Facilitator, Kearns & West: Thanks so much for your comment. Next, we are, going to go to Mark, followed by Angel, and then S Muthukrishnan, and then followed by George, Teresa and Trisha.

Hanna Khalil, Facilitator, Kearns & West: Okay, next up we have Mark. I'll invite you to come off mute now.

Mark Suer: Can you hear me?

Hanna Khalil, Facilitator, Kearns & West: Yes, I can.

Mark Suer: Okay.

Mark Suer: There's just a great wisdom to creating clean energy with renewable energy. The studies and atmospheric self need more research to come up with more lucrative sources to produce clean energy.

Mark Suer: Rushing the cart before the horse with calculations on paper, without proper pilot studies to prove sustainability, is ludicrous.

Mark Suer: Let's let's look at green energy. We are all for it. But since when does it mean destroying a whole ecosystem from ground up?

Mark Suer: From the seafloor to the waves

Mark Suer: the the push current, and the tide our our ecosystem is being compromised.

Mark Suer: Marine food sources, such as planktons, mollusks,

Mark Suer: by valves. The primary sources are affected by abnormal frequencies. Fish are affected by abnormal sounds and vibrations.

Mark Suer: Each species has its different vulnerability index, which is a critical component

Mark Suer: of all the overall risk assessment but it's not discussed, and that's quoted from your fine book there. The amount of marine real estate used for these turbine arrays will push natural-recurring feeding, breeding, migration, and navigation out of its natural areas.

Mark Suer: The effects of the unnatural structures will force loss of generational commercial jobs

Mark Suer: for just a few temporary jobs. As somebody said before, there were 80,000 jobs. But there's 9 million people in New Jersey. What percentage is that? That's not really a lot.

Mark Suer: There's a lot of misinformation that were that people are being accused of. But if you look at the direct correlation between the

Mark Suer: mortalities and the the research surveys that have been done it. There. It's it's common sense, it just. It's unbelievable that that it continues.

Mark Suer: I would just like to say that it's just not natural to put these things in our waters and stop with the experiments.

Mark Suer: And this is this is not a chicken little

Mark Suer: effect here. Thank you for your time.

Hanna Khalil, Facilitator, Kearns & West: Thanks so much for your comment. Okay, next we have Angel Garcia, and then we will go to S. Muthukrishnan, followed by George, then Teresa and Trisha, and then Jason.

Hanna Khalil, Facilitator, Kearns & West: Okay, Angel, I will invite you to come off mute.

Angel Garcia: Hi! Can you hear me?

Hanna Khalil, Facilitator, Kearns & West: Yes, I can.

Angel Garcia: Okay, thanks.

Angel Garcia: Okay. Hi. My name is Angela Garcia. I'm a long-term resident of the South Bronx in New York City, living in public housing almost all my life.

Angel Garcia: I have a daughter and grandson with respiratory conditions exacerbated by polluted days and conditions in our region.

Angel Garcia: I'm also a member of the Sierra Club NYC Chapter and a community gardener with a strong interest in the climate and the dangers currently experienced by climate change.

Angel Garcia: We live with economic and environmental inequality in my home area.

Angel Garcia: The South Bronx has remained the poorest urban Congressional district in the U.S. It's also afflicted with some of the worst air pollution rates in the state and country.

Angel Garcia: We experience it by being near the vehicle intensive pollution of the Deegan, the Bruckner, and the Cross Bronx highways, the pollution of industrial and warehouse facilities, and the power, authority, and natural gas plants in Morris, in Port Morris, among others.

Angel Garcia: The Bronx is Community District One, in which I live, has the highest childhood asthma hospitalization rates in the city.

Angel Garcia: The poverty, economic, economic, environmental and health indicators in our community are statistically

Angel Garcia: a cry for a fundamental societal change in our economic and environmental policies.

Angel Garcia: One of these changes is the creation of renewable affordable energy, including offshore wind power.

Angel Garcia: That is why I am excited to know that there are projects already about to come online in a few weeks on the northeast coast

Angel Garcia: including the South Fork project in Long Island.

Angel Garcia: There should be as many other South Fork-style projects as can possibly and sustainably be built and operating

Angel Garcia: so that the many working-class rental apartment buildings in the city, including the South Bronx, can provide clean, affordable power and heat for our communities.

Angel Garcia: The 6 proposed projects under the BOEM Proposal 2024-0001 if implemented equitably can benefit unemployed and underemployed residents such as ours

Angel Garcia: with living wage manufacturing construction and operational jobs. Much industrial activity has taken place in the South Bronx for decades.

Angel Garcia: It can happen again with a ready workforce.

Angel Garcia: While this will not be a catchall solution for all our issues,

Angel Garcia: these renewable energy projects can improve and transform our economy, our environment, and our health

Angel Garcia: in the South Bronx. So, I'm calling on the BOEM and New York State to advance the implementation and expansion of offshore wind projects in the New York Bight with the equitable application of business, contracting,

Angel Garcia: and training related employment resources of the firms approved for the 6 projects.

Angel Garcia: By the way I looked for any reports on Wind farm projects in the world, including the U.S.

Angel Garcia: I found that, according.

Hanna Khalil, Facilitator, Kearns & West: Please wrap up your comment, please.

Angel Garcia: Okay.

Angel Garcia: Thank you. I think it's time to turn around the inequities suffered by us in the South Bronx.

Angel Garcia: And thank you for the opportunity.

Hanna Khalil, Facilitator, Kearns & West: Thanks so much for providing your comment. Okay. Next, we're going to go to S Muthukrishnan and if you could please state your full name when I invite you to come off mute. That'd be very helpful. Thank you and apologies if I mispronounce your name.

S Muthukrishnan: Hello. Hi! Can you hear me?

Hanna Khalil, Facilitator, Kearns & West: Yes, yes, I can.

S Muthukrishnan: You did pronounce my last name correct and thank you for that. My name is Swarna Muthukrishnan, and I'm from Clean Ocean Action. I'm this scientist and water quality research director over there. And I just wanted to offer some of my comments while we strategize to combat climate change.

S Muthukrishnan: We know that offshore wind is largely untested in the United States. It's imperative that we truly understand what this means to the marine environment and humans, especially the true reduction in greenhouse gas emissions.

S Muthukrishnan: The real impacts to benthic resources, ocean biogeochemical cycles, under water and in-air acoustic impacts, sea surface temperature changes from all activities, and so on and so forth

S Muthukrishnan: which can have far-reaching ramifications, if not done correctly with the most recent science and plugging data gaps, which are many as a first step. This requires not just skimming the PEIS, but doing a sincere and diligent review.

S Muthukrishnan: For this we need an extension, and therefore request a 90-day extension as we requested earlier in writing. Thank you so much.

Hanna Khalil, Facilitator, Kearns & West: Thanks. So much for providing your comment. Okay, next, we're going to go to George, followed by Trisha, and then, Jason. George, you can come off mute now.

George Povall: Hi. Thank you for the opportunity to speak today. My name is George Povall, and I'm executive director of All Our Energy. We are a Long Island nonprofit, focused on environmental protection and education who inspire the public to take action to protect the environment since 2014.

George Povall: And we like offshore wind. This past month alone, we've seen climate storms across the country from a foot of rain in California to our local Long Island beaches washed away, and some of our Long Island waterfront communities underwater at high tide, including today.

Wind would help protect from further climate impacts.

George Povall: It also offers an incredible opportunity to stop the harm disadvantage and environmental justice communities are currently saddled with like polluting power plants, pipelines, compressor stations and other

George Povall: impacts in those communities.

George Povall: But, like the majority of people in poll after poll, we know offshore wind is backed by most environmental groups because of the expert consensus and science and substantial benefits that can be gained for the environment, wildlife, rate payers, commerce or lifestyle,

George Povall: and our care for future generations. Polls just completed from climate nexus and turned forward with a large sample of thousands of coastal residents indicate the vast majority, 68%, are in favor of offshore wind. So, we feel very good about the future of offshore wind and done right that number can only go up.

George Povall: That's because once you realize choosing offshore wind instead of the current fossil fuels and dangerous nuclear plants that we have now would mitigate harm from those fuels to humans, wildlife, marine life.

George Povall: And so, you realize we have an easy choice to make. Wind is the least impactful of all the choices we have for power output for the output that it offers, but, impacts from wind would not be in addition to what we face now. It will displace and that drastically reduce the current harm that is being done from our current system of massive fossil fuel, mining, leaking, spilling, and burning.

George Povall: That is the choice. Reduce harm as far as possible, or not.

George Povall: All Our Energy support well-regulated offshore wind, and that it be built in the most environmentally wa- environmentally sound way possible, and as soon as possible, including in the New York Bight as part of the desperately needed power that we need to alle- sorry to alleviate the climate impacts. We are facing today.

George Povall: In our industrial lives,

George Povall: we need to displace these dirty fossil fuels that are the cause of the climate crisis. Right now, this is the choice that we make. It is not

George Povall: wind versus nothing. It's moving forward and reducing the harms that we're doing today.

George Povall: With that we can make a future for our descendants that they will be proud that we created today. Thank you.

Hanna Khalil, Facilitator, Kearns & West: Thank you so much for providing your comment.

Hanna Khalil, Facilitator, Kearns & West: We're going to go to Trisha next. And then Jason. Trisha, I'll invite you to come off mute now.

Trisha DeVoe: Hello. My name is Tricia Devoe. I'm a conservation biologist, and I'm very concerned about offshore wind development, especially regarding its impact on whale populations. We have seen an unprecedented increase in whale strandings in the New York and New Jersey area over the past 14 months which directly corresponds with offshore wind vessel activities in our area.

Trisha DeVoe: So, while many say that there's no evidence linking offshore wind to the recent whale deaths,

Trisha DeVoe: no one is at the same time, no one is providing evidence that offshore wind activity is not a contributing factor to these strandings. So, we, I feel we definitely need to have more studies on the potential impact that offshore wind will have not just on marine mammals, but on all marine life

Trisha DeVoe: prior to construction of these wind turbines. As it stands right now, scientists really do not know how the construction of thousands of wind turbines will impact the marine ecosystem.

Trisha DeVoe: So, I would like to request one an extension on the public comment period, along with more studies prior to construction of all these wind turbines. While I agree that we need to have clean, renewable energy, we also need to make sure that we protect our ocean and all the life it contains. Thank you so much for the opportunity to comment.

Hanna Khalil, Facilitator, Kearns & West: Thanks for providing your comment today. Okay. Now, I'm going to turn it over to Jason for your comments, and you should be able to come off mute now.

Jason Hansana-Cofield: *Aquay Nitôpak*. Hello, friends. My name is Jason Hansana-Cofield. I'm a tribal citizen for the Shinnecock Indian Nation.

Jason Hansana-Cofield: I'm number 3 in our Tribal government as the executive director of Tribal Operations. We're the oldest self-governing Tribe in the United States of America.

Jason Hansana-Cofield: We're a first contact Tribe. We're located on Long Island.

Jason Hansana-Cofield: We've never given up our sovereignty in over 500 years.

Jason Hansana-Cofield: As a result of that, we claim all of our territory out to exclude out to include the exclusive economic zone

Jason Hansana-Cofield: 200 nautical miles offshore.

Jason Hansana-Cofield: We are the only coastal federally-recognized Tribe

Jason Hansana-Cofield: in the New York Bight and New Jersey area.

Jason Hansana-Cofield: It is my assertion to educate BOEM once again

Jason Hansana-Cofield: that the President of the United States and BOEM

Jason Hansana-Cofield: have overstepped in this process.

Jason Hansana-Cofield: Our tribal organization, our tribal

Jason Hansana-Cofield: government has not been included

Jason Hansana-Cofield: in any of this process. Actually, we were just being brought on board as an afterthought.

Excuse me.

Jason Hansana-Cofield: We assert that it should be mandatory that Tribal cultural monitoring be mandatory both offshore and onshore. We believe it should be mandatory that

Jason Hansana-Cofield: Tribal participation be involved in

Jason Hansana-Cofield: permitting and and leasing of the of the lands of our submerged lands.

Jason Hansana-Cofield: And we also agree with many on this call, Indigenous and non,

Jason Hansana-Cofield: who have said that the comment period is just too short.

Jason Hansana-Cofield: We recommend that an additional minimum of 90 days be extended to the comment period.

Jason Hansana-Cofield: so that

Jason Hansana-Cofield: in these other organizations

Jason Hansana-Cofield: other townships, other government - governmental pieces

Jason Hansana-Cofield: have the ability to go through this this documentation.

Jason Hansana-Cofield: You know, 2,400 pages, 1,700 pages.

Jason Hansana-Cofield: A lot of tribal organizations as well as community organizations that may be one person that that's working this project

Jason Hansana-Cofield: that has to represent their community.

Jason Hansana-Cofield: That that is just a tremendous load for one individual to then have to take and disseminate amongst their community to get feedback to make sure that they can make the proper comments that represent their community.

Jason Hansana-Cofield: As I've said. Thank you for your time, and thank you for allowing us to have these comments.

Hanna Khalil, Facilitator, Kearns & West: Thanks much for your comment, Jason.

Hanna Khalil, Facilitator, Kearns & West: Okay, I'm going to do a last call now for anyone who would like to submit their comment today. Feel free to raise your hand and we can come to you.

Hanna Khalil, Facilitator, Kearns & West: Okay, I'm seeing Kathy I'm going to invite you to come off mute now.

Kathy Miklosey: Hi! Can you hear me? I can. Okay.

Kathy Miklosey: My name is Kathy Miklosey. I am

Kathy Miklosey: strongly

Kathy Miklosey: against offshore wind have been from the beginning, and always will be. There haven't been any

Kathy Miklosey: you know, necropsies on any of the whales or dolphins on their ears.

Kathy Miklosey: Which common sense will tell anyone

Kathy Miklosey: if you mess with the noise in the ocean or make noise in the ocean anything that can hear it's going to affect it negatively.

Kathy Miklosey: If you go down to the sea bed, to the sea floor and disrupt that,

Kathy Miklosey: that life will not come back. You have

Kathy Miklosey: metal, oil,

Kathy Miklosey: all these negative things they're going into the ocean from the turbines, the cables, I could go on and on. There is not one positive thing about any of this.

Kathy Miklosey: Our ocean is about to become industrialized forever. An industrialization factor.

Kathy Miklosey: Total factory. The ocean is something meant

Kathy Miklosey: for all

Kathy Miklosey: life to live in and for people to enjoy that. And you're going to destroy all of that with the turbine. This is not the answer.

Kathy Miklosey: We are getting ready to drive hundreds of thousands of tons of steel into the ocean floor for thousands of turbines. Thousands of miles of the EMF

Kathy Miklosey: landing cable, jet-trenched through the ocean floor.

Kathy Miklosey: We’re about to destroy an entire, the entire ecosystem with the mass construction when BOEM's own documents state and I quote overall

Kathy Miklosey: it is anticipated that there will be no collective impact on global warming as a result of offshore wind projects. Now that is quoted.

Kathy Miklosey: Too many unanswered questions exist, too many assumptions that are being made. BOEM needs to slow down

Kathy Miklosey: significantly.

Kathy Miklosey: I support the extension

Kathy Miklosey: of more than even a 40-day comment period. Like someone had mentioned previously, there is not enough time to read all of these pages. We need more time.

Kathy Miklosey: And again,

Kathy Miklosey: this is not the answer. To kill sea life, marine mammals

Kathy Miklosey: and all the loss of jobs. The the fishermen, the lobstermen,

Kathy Miklosey: clamers, these things are down, the muscles, the clams, the scallops are down in the seabed, and that's going to ruin everyone who does this for a living.

Kathy Miklosey: Thousands and thousands jobs are going to be lost, and everyone continues to say that there are thousands of jobs.

Kathy Miklosey: Thank you for your time.

Hanna Khalil, Facilitator, Kearns & West: Thank you. Appreciate it.

Hanna Khalil, Facilitator, Kearns & West: Okay, next we're going to go to Philip and then Mark. And once again, if you'd like to provide comment, please raise your hand at this time. That'll just give us a sense of who we have in the queue before we wrap up.

Hanna Khalil, Facilitator, Kearns & West: Okay, Philip, I'm going to unmute you now.

Philip Falcone: Thank you.

Philip Falcone: I would like to celebrate the linear scientists and technologists who have refined the scientific method and the design process and also the discovery of electromagnetism nearly 200 years ago. I'm awed by the continued revelations of the life sciences.

Philip Falcone: I've taught chemistry, and I'm impressed by its magic. But I'm a little suspicious that chemistry can seem like a runaway train. And I guess that impacts I'm I'm talking a little bit about fossil fuels and

Philip Falcone: you know, development of plastics. Which hasn't actually been brought up as an impact on the ocean. I'm truly excited that that BOEM's energy balancing act over many, many years now includes offshore wind and electricity. Besides the chemistry and the biology.

Philip Falcone: I'm very trusting of the diligence of the PEIS and the COPs.

Philip Falcone: And I look forward to trusting BOEM to continue to pursue its balancing work

Philip Falcone: carefully and expeditiously.

Philip Falcone: and I thank you for your time.

Hanna Khalil, Facilitator, Kearns & West: Thanks much for providing your comment. I'm going to go to Mark now, Mark. You'll be allowed to come off mute.

MARK HEANY: Hi! My name is Mark Heaney. I'm a resident of Cape May, New Jersey.

MARK HEANY: One thing I haven't heard anybody talk about is the alternative nuclear energy which I've heard,

MARK HEANY: previously in other conversations, people say that that is the alternative to offshore wind.

MARK HEANY: Currently 40% of New Jersey's electricity is provided by the 3 nuclear reactors. But I think that what people miss is that

MARK HEANY: within the next 12 years they're going to start being decommissioned. We've already been subsidizing these reactors at 300 million a year since 2019

MARK HEANY: and I'd like to point out that building a new one the most recent nuclear reactor that was built

MARK HEANY: is the Volta 3 in Georgia. It took 17 years and 16 billion dollars to build

MARK HEANY: compared to Vineyard Wind, which just got energized last month took 2.8 billion and 26 months to build.

MARK HEANY: Another thing I'd like to point out and possibly remind people of is that while nuclear power may be clean while it's being used,

MARK HEANY: when they are decommissioned, spent uranium can remain radioactive for 24,000 years, requiring it to be monitored for that entire period.

MARK HEANY: And one more thing as

MARK HEANY: to those claiming that offshore wind development has anything to do with whale strandings, I ask you to question how a new technology like this could be responsible for something that has been happening since the beginning of time.

MARK HEANY: It's like comparing ice cream sales or or blaming ice cream sales on, excuse me blaming drownings on ice cream sales. There's really no connection between the two.

MARK HEANY: And that's all I wanted to say, Thank you.

Hanna Khalil, Facilitator, Kearns & West: Thanks so much, Mark.

Hanna Khalil, Facilitator, Kearns & West: Okay, one last call for comments, and if you've already given a comment, please lower your hand.

Hanna Khalil, Facilitator, Kearns & West: I see folks have given their comments, have their hands raised again.

Hanna Khalil, Facilitator, Kearns & West: So, if you could just please lower your hand, that is helpful for us.

Hanna Khalil, Facilitator, Kearns & West: Jason and Philip, I believe you've both given your comments already.

Hanna Khalil, Facilitator, Kearns & West: And Mark as well, if you could please lower your hands.

Hanna Khalil, Facilitator, Kearns & West: I'm just going to check Philip. I believe you gave your comment.

Philip Falcone: I think I already commented. I appreciate it.

Philip Falcone: Thank you very much. Thanks for clarifying.

Hanna Khalil, Facilitator, Kearns & West: Okay, then, I think that brings us to the end of our public comment period. Thank you for this meeting. Thank you everyone for sharing your thoughts with us today. At this time we'll take a short break, and then when we come back, we'll move into the question and answer portion of our agenda, where BOEM subject matter experts will share responses to the questions that you submitted earlier.

Hanna Khalil, Facilitator, Kearns & West: So we will see you shortly. We'll be right back here on this exact same webinar. We're just going to take a quick break for 10 min. So, see you in 10 min.

Hanna Khalil, Facilitator, Kearns & West: Right welcome back everyone.

Hanna Khalil, Facilitator, Kearns & West: We're going to now move on to the question-and-answer portion of our agenda.

Hanna Khalil, Facilitator, Kearns & West: So, through registration and during the presentation portion of the meeting today, participants had the opportunity to submit questions for BOEM subject matter experts to consider and answer. So, now we're going to take some time to hear BOEM's responses to your questions.

Hanna Khalil, Facilitator, Kearns & West: And the first batch of questions is going to be answered by Courtney Strain. So, Courtney, if you could just introduce yourself once more for everybody, and then I can share the questions that we received.

Courtney Strain (BOEM): Sure, thanks, Hanna. Hello, everyone. My name is Courtney Strain, and I am an oceanographer in BOEM's Office of Environmental Programs. And I'm serving as the project manager for the New York Bight programmatic environmental impact statement.

Hanna Khalil, Facilitator, Kearns & West: Great thanks, Courtney. So, the first question that we had is: How to insist that independent scientists conduct a pilot-scale project?

Courtney Strain (BOEM): Thanks, Hannah, and thanks for this input Susan. So BOEM conducts research on the impacts of all of our activities, including offshore wind.

Courtney Strain (BOEM): We employ hundreds of scientists and work with other federal agencies as well as external scientists and researchers. BOEM has conducted research in preparation for offshore wind development

Courtney Strain (BOEM): and alongside that development to ensure that we understand and adequately monitor for environmental impacts. And in terms of pilot projects, there are currently 2 projects that have been installed off the U.S. Coast.

Courtney Strain (BOEM): One is a 5-turbine pilot project called the Block Island Wind Farm,

Courtney Strain (BOEM): which was permitted by the U.S. Army Corps of Engineers, and is located about 3 miles offshore, Block Island, Rhode Island. And the other is a 2 turbine research pilot project

Courtney Strain (BOEM): called the Coastal Virginia Offshore Wind or CVOW project that BOEM permitted, and it is located about 27 miles offshore, Virginia Beach, Virginia.

Courtney Strain (BOEM): And through BOEM's Real-time Opportunity for Development Environmental Observations or RODEO study, we are learning and gathering information during construction and operations of offshore wind facilities.

Courtney Strain (BOEM): For example, at CVOW measurements were taken during the insulation of two monopile turbines. One was installed, using a bubble curtain to reduce the sound, while the other was not.

Courtney Strain (BOEM): Comparing results demonstrated that the bubble curtain reduced the sound significantly and supports the requirement for using bubble curtains as a mitigation measure.

Courtney Strain (BOEM): The reports from these efforts can be found on BOEM's website, and we will post that link in the chat for you all.

Hanna Khalil, Facilitator, Kearns & West: Great. Thank you, Courtney.

Hanna Khalil, Facilitator, Kearns & West: The next question we have is: Why are we required to ask questions prior to the meeting before having the opportunity to see the presentation?

Courtney Strain (BOEM): Sure. Thanks, thanks for the question. So, the registration form for this meeting had a space to input initial questions. Attendees could also ask questions using the Q&A function during the opening remarks, the presentations, and the beginning of the comment portion of the meeting today.

Courtney Strain (BOEM): We certainly appreciate all of the great questions we've received and are glad you all stayed on the line to hear our responses.

Hanna Khalil, Facilitator, Kearns & West: Thank you.

Hanna Khalil, Facilitator, Kearns & West: The next question is: What consequences of delaying comment period?

Hanna Khalil, Facilitator, Kearns & West: delaying the comment period

Courtney Strain (BOEM): Sure, thanks for the question and for participating in today's meeting.

Courtney Strain (BOEM): So BOEM is required to provide a minimum of 45 days for public review of and comment on a draft EIS or environmental impact statement. The public comment period will close February 26, 2024

Courtney Strain (BOEM): Currently BOEM does not anticipate a comment period extension. However, we review and consider all requests for extensions when received.

Courtney Strain (BOEM): We expect that the final programmatic EIS will be published in October of this year and part of the reason why we are preparing this programmatic EIS is to help streamline the subsequent environmental reviews.

Courtney Strain (BOEM): The PEIS will provide content that can be incorporated into the environmental analyses at the Construction Operations Plan stage for the 6 New York Bight leases.

Hanna Khalil, Facilitator, Kearns & West: Great. Thank you. And our next question is: What advantages is there to putting wind farms in the ocean rather than on high ground and land?

Courtney Strain (BOEM): So, thanks for the question. So, as with all resource development activities, there are advantages and and disadvantages. And this is also true for wind and other renewable energy development, both on land and in the ocean.

Courtney Strain (BOEM): BOEM's responsibility is to analyze the potential impacts of energy development activities within its jurisdiction, which is the outer continental shelf or OCS.

Courtney Strain (BOEM): The New York Bight programmatic EIS is a first step in the analysis of the potential environmental impacts of offshore wind energy facilities in 6 lease areas specifically located in the New York Bight region.

Hanna Khalil, Facilitator, Kearns & West: Great thanks so much, Courtney. The next question is, going to be answered by John Mccarthy. So, John, if you want to introduce yourself. I can then hand you the question.

John McCarty (BOEM): Hi, yes, thank you. I'm John McCarty. I'm a landscape architect within the Office of Renewable Energy Programs at at BOEM. My specialty is in visual impact assessment.

Hanna Khalil, Facilitator, Kearns & West: Great thanks, John. So the question we have is, how will BOEM assess and mitigate visual impacts.

John McCarty (BOEM): Yes, thank you.

John McCarty (BOEM): Ms. Rafferty, for your question.

John McCarty (BOEM): BOEM guidance for assessing visual impacts is titled "Assessment of Seascape Landscape and Visual Impacts of Offshore Wind Energy Developments

John McCarty (BOEM): on the Outer Continental Shelf of the United States". Now, that's a that's a long title, and we've reduced that down to a short acronym of SLVIA, or otherwise affectionately referred to as "Sylvia". So we'll refer to that as we move forward here.

John McCarty (BOEM): BOEM followed this guidance in the assessing of visual impacts for the New York Bight programmatic EIS.

John McCarty (BOEM): The process entails establishing a geographic analysis area using GIS

John McCarty (BOEM): produced affected view shed mapping

John McCarty (BOEM): based on two different dimension scenarios of wind turbine generators. The first 853 feet tall, which is what's currently commercially available today

John McCarty (BOEM): and then a 1,312 foot

John McCarty (BOEM): tall wind turbine, which is a speculative possibility of what may be available sometime in the future, based on current trends in the evolution of wind turbine designs.

John McCarty (BOEM): The EIS needed needed life over a period of years and so we look at what's available today in the wind turbine dimensions and then what potentially may be available in the future to create this this range

John McCarty (BOEM): of of impact evaluations.

John McCarty (BOEM): The in addition, in a visual impact assessment we look at the inventory. We do an inventory of coastal seascape and landscape character within the geographic analysis area.

John McCarty (BOEM): We identify key observation points which are locations where people congregate, where the ocean views play a role in those experiences and why they go to these places.

John McCarty (BOEM): These at these key observation points we take photography, and we produce photos simulations.

John McCarty (BOEM): We then we assess the impact to the physical,

John McCarty (BOEM): the scenic physical attributes of seascape and landscape and ocean character areas that are products of that inventory I just mentioned and then impacts the viewer experiences at the key observation points.

John McCarty (BOEM): Cumulative effect simulations were also produced and analysis of impacts from foreseeable planned actions was also prepared. Details on these methods are described in the SLVIA guiding document that I mentioned earlier, and when I get done responding to your your question

John McCarty (BOEM): I will I will put that link in the chat.

John McCarty (BOEM): The visual impact is in two locations. the which which include the draft programmatic EIS Volume one, chapter 3, section 3.6.9,

John McCarty (BOEM): and then Volume 2, Appendix, H. Seascape, Landscape and Visual Impact Assessment.

John McCarty (BOEM): The volume 2 appendix H ,that's the detailed analysis with a lots of tables and explanations and evaluations of impact.

John McCarty (BOEM): In chapter 3 is the summary of the findings in in Appendix H.

John McCarty (BOEM): I will also put a link

John McCarty (BOEM): where volume one may be downloaded in the chat and then also a link for where you can go directly to Appendix H.

John McCarty (BOEM): Download from there and then also on that same page where the appendix is is a list of the photo simulations that you can either link on and view online or also download

John McCarty (BOEM): and view from your own computer and from your own hard drive. When you go to that site

John McCarty (BOEM): for the appendix H, you'll, it'll be a general page, and you go up to the top, and there are several tabs across the top, and the third from the left is labeled “Visual Impact Assessment”. That's where you want to go download from.

John McCarty (BOEM): Now, regarding your question on mitigation,

John McCarty (BOEM): generally mitigating visual impacts is accomplished by reducing visual contrast between the proposed action and the setting where the project site is located.

John McCarty (BOEM): Reducing visual contrast is accomplished through design adjustments to the project's facilities in form, line, color, and texture. And and

John McCarty (BOEM): we can accomplish that well on shore, it is a little bit more difficult offshore, so as a result, mitigating impacts by offshore energy features such as wind turbines

John McCarty (BOEM): are pretty much limited, limited to the possibility of reducing the height of the wind turbines, which again, is

John McCarty (BOEM): kind of restricted by what's available in the industry

John McCarty (BOEM): and also adjusting the distance between the viewer and the wind turbines, which is restricted to within a lease area.

John McCarty (BOEM): We do have some COPs and and EIS for those for those leases that both those strategies have been used and looking at alternatives to reduce visual impact.

John McCarty (BOEM): Now, mitigating nighttime visual impacts by offshore facilities

John McCarty (BOEM): may be accomplish the deployment of the aviation detection lighting systems are otherwise known as ADLS that

John McCarty (BOEM): that keep aviation warning lights in the off position until low flying aircraft enter the collision risk area, at which time the aviation lights are then triggered to the on position until the aircraft leaves the danger zone.

John McCarty (BOEM): Now a little bit on onshore facilities, visual impact by onshore facilities that are connected to the offshore wind energy projects may be mitigated through

John McCarty (BOEM): those adjusting the visual elements of form, line, color, and texture reducing those visual contracting elements by strategic siting of facilities, screening, you know, leaving vegetation in place or planning additional vegetation, color treatments to facilities that blend in with the background as opposed to contrasting in the background and other design measures.

John McCarty (BOEM): I'll post those links as you move on to your next series of questions and answers. Thanks.

Hanna Khalil, Facilitator, Kearns & West: Great. Really appreciate it. Thank you, John.

Hanna Khalil, Facilitator, Kearns & West: Okay, I'm going to turn it back to Courtney to answer the next few questions.

Hanna Khalil, Facilitator, Kearns & West: Okay, our next question is: Are the cumulative effects of all the Eastern seaboard wind projects taken into consideration?

Courtney Strain (BOEM): Sure. Hi, everyone. I'm Courtney Strain. If you miss my first introduction, I'm an oceanographer in BOEM's office of environmental programs and serving as the project manager on the New York Bight programmatic EIS.

Courtney Strain (BOEM): So this question was about the cumulative effects

Courtney Strain (BOEM): of all Eastern seaboard wind projects, just to recap. So, in short, yes, they are taking into consideration the cumulative impacts analysis in this draft programmatic EIS considers all other ongoing and planned offshore wind activities.

Courtney Strain (BOEM): So ongoing offshore wind activities

Courtney Strain (BOEM): for the cumulative impact analysis does not include any of the 6 New York Bight leases, but it does include all others that are currently either under construction in operation or they have an approved construction and operation plan, or COP, as of November of 2023,

Courtney Strain (BOEM): whereas planned offshore wind activities include other reasonably foreseeable future offshore wind activities

Courtney Strain (BOEM): other than the 6 New York Bight projects.

Courtney Strain (BOEM): And that is projects that have an executed lease, but for which there is not an approved construction operation plan. Yet at the time of the publication of this draft programmatic EIS.

Hanna Khalil, Facilitator, Kearns & West: Great thanks, Courtney. The next question we have is: How will the avoidance and mitigation measures proposed be coordinated with regional science plans and priorities like the RWFSC?

Courtney Strain (BOEM): Thanks for the question. So BOEM along with other Federal scientists, lessees, NGOs, and academic institutions participate on various ways with the Regional Wildlife Science Collaborative or RWSC. And BOEM will consider findings from the RWSC and other sources in determinizing the appropriate mitigation measures for specific projects and in BOEM’s environmental studies program.

Hanna Khalil, Facilitator, Kearns & West: Thank you.

Hanna Khalil, Facilitator, Kearns & West: The next question is: I would like to learn more about how individual projects will tier to the PEIS.

Courtney Strain (BOEM): Thanks for the question. So one of the objectives for this programmatic EIS is to support tiering of project specific environmental analyses.

Courtney Strain (BOEM): The Programmatic EIS includes the analysis upon which the COP-specific NEPA can build, and it also details for each resource whether the programmatic analysis may need to be refined in the COP-specific NEPA stage.

Courtney Strain (BOEM): So, generally, if a COP proposes activities captured by the Programmatic EIS design envelope, the COP-specific NEPA will focus on what is different

Courtney Strain (BOEM): or site-specific analysis that could not be conducted in the Programmatic EIS. So, for example, since details of onshore components are not known at this time,

Courtney Strain (BOEM): detailed site-specific analysis of these components will be deferred and evaluated at the COP-specific stage for all New York Bight lease areas.

Courtney Strain (BOEM): Appendix C of the Draft Programmatic EIS may also be a good resource for additional information as it provides guidance for each resource on how the programmatic analysis may need to be refined at the COP-specific NEPA stage and we will add a direct link to Appendix C in the chat.

Hanna Khalil, Facilitator, Kearns & West: Thank you. And I see that that link was added, great. Our next question is: Overall, what amount of environmental damage and marine species loss will occur from the New York Bight offshore wind project.

Courtney Strain (BOEM): So the Draft Programmatic EIS analyzes potential impacts from a representative project that could occur in any of the six NY Bight lease areas.

Courtney Strain (BOEM): The analysis considers the maximum case scenario, or in other words, the most impactful scenario to capture the most conservative range of potential impacts if any one project were to be developed.

Courtney Strain (BOEM): The Draft PEIS uses a four-level classification scheme to characterize the potential beneficial impacts and adverse impacts of alternatives and those are negligible, minor, moderate, or major.

Courtney Strain (BOEM): And for many resource areas, the Draft Programmatic EIS describes potential impacts from all six representative projects to be negligible to moderate. However, for a few resources, the analysis acknowledged the potential for major impacts.

Courtney Strain (BOEM): These include impacts to marine mammals, finfish, invertebrates and essential fish habitat, scenic and visual resources, cultural resources,

Courtney Strain (BOEM): fisheries, and the scientific research and surveys component of the other uses resources.

Courtney Strain (BOEM): Potential beneficial impacts were also identified for several resources.

Courtney Strain (BOEM): And the impacts analysis in the draft programmatic EIS typically resulted in a range, such as from negligible to moderate, due to the large range in the representative project design envelope that was analyzed.

Courtney Strain (BOEM): The environmental review completed at the Construction and Operations Plan, or COP, phase will analyze the details of each specific lease area and proposed project and will provide a more refined impacts analysis.

Courtney Strain (BOEM): Additionally, consultations under the Marine Mammal Protection Act and the Endangered Species Act will be completed once COPs are received, which will identify specific potential impacts to marine and avian species.

Hanna Khalil, Facilitator, Kearns & West: Thanks, Courtney.

Hanna Khalil, Facilitator, Kearns & West: Our next question is: In the PEIS table G it states there will be monitoring that must be completed prior to construction. What happens if the monitoring is disrupted

due to anomalies like El Nino, hurricane, funding, oil spill, etc.? Will the monitoring be continued? Will construction be delayed until baseline data is complete?

Courtney Strain (BOEM): So, thanks for this question. There are many types of monitoring required prior to and throughout the phases of offshore wind planning and development. In addition, there is a substantial amount of ecological, oceanographic, and human use information available for the areas in the Atlantic where the New York Bight leases are located.

Courtney Strain (BOEM): If a monitoring effort were disrupted in some way, BOEM would assess what data were already available, what was lost as a result of the disruption, and the implications of that disruption in the monitoring to the overall project and associated requirements before determining next steps.

Courtney Strain (BOEM): And regarding the disruption of funding, project construction cost and overruns are outside BOEM's control. However, Lessees are required to post financial assurance to cover the decommissioning, or removal, of project infrastructure including wind turbine generators, offshore substations and cables.

Courtney Strain (BOEM): This financial assurance is most often provided in the form of a bond or letter of credit.

Hanna Khalil, Facilitator, Kearns & West: Our next question is:

Hanna Khalil, Facilitator, Kearns & West: When will – sorry - When will a formal EIS be available for viewing? Will there be meetings upon the final EIS for public comment?

Courtney Strain (BOEM): So, the Draft Programmatic EIS is currently available to review and comment on. We will post the link to the document in the chat. And we are accepting comments through February 26th.

Courtney Strain (BOEM): We anticipate that the final programmatic EIS will be available in October of this year.

Courtney Strain (BOEM): There will not be additional public meetings for the final PEIS, but there will be project-specific meetings in the future as NEPA analysis for the construction and operation plans are conducted.

Thank you.

Hanna Khalil, Facilitator, Kearns & West: The next question is: Some A triple M's indicate that multiple agencies are responsible for their enforcement, but do not indicate whether one takes the lead and which one, if so. Will this information be made available in the final PEIS?

Courtney Strain (BOEM): Well, thank you. Thank you for your question. The requested information will not be included in the final PEIS.

Courtney Strain (BOEM): And that is because BOEM does not indicate which agencies have the lead, as each agency identified may have responsibilities under their respective authorities or regulations.

Courtney Strain (BOEM): The exception here, however, is BOEM and the Bureau of Safety and Environmental Enforcement or BSSE as roles for each

Courtney Strain (BOEM): each agency are identified in a recent rule making.

Hanna Khalil, Facilitator, Kearns & West: Okay.

Hanna Khalil, Facilitator, Kearns & West: Okay? And our next question is: How were the findings of the Synthesis of Science report quote “major gaps in knowledge” taken into consideration for the current environmental impact statements?

Courtney Strain (BOEM): Thank you for your comment. BOEM uses best available science to understand the potential impacts to living marine resources and benthic habitats from proposed projects.

Courtney Strain (BOEM): t is important for Federal regulators and fisheries stakeholders to have a common scientific understanding of the environment. The 2020 workshop allowed BOEM, RODA, and NOAA Fisheries to share common scientific information to help identify research needs.

Courtney Strain (BOEM): And this report was co-produced by members from the fishing communities to provide their perspective on the current understanding of offshore wind interactions with the environment and in the identification of data gaps.

Courtney Strain (BOEM): There have been several studies concluded and initiated since that workshop to help address information needs the results of these studies are incorporated into BOEM's environmental analyses, such as this programmatic draft, draft, programmatic EIS.

Hanna Khalil, Facilitator, Kearns & West: Great. Thanks.

Hanna Khalil, Facilitator, Kearns & West: The next question asks, can you talk a little bit about why BOEM included voluntary AMMM measures in Appendix G that have not been included in COPs previously and how would these mitigation measures apply?

Courtney Strain (BOEM): Thanks for the question. So this draft programmatic EIS provided an opportunity for BOEM to analyze how additional or new and measures could reduce potential impacts. In many cases these new AMMM measures were suggested through the programmatic EIS scoping process or through input from cooperating agencies or BOEM subject matter experts.

Courtney Strain (BOEM): Some of these more novel measures are identified as voluntary because they are more of a best management practice or need more detailed information to be applied.

Courtney Strain (BOEM): And the application of these mitigation measures may be revisited at the COP NEPA stage and, if selected, additional detail would be incorporated as appropriate into the COP terms and conditions.

Courtney Strain (BOEM): And BOEM included these am measures that have been previously included as COP terms and conditions to support streamlining of that analysis at the COP-specific NEPA stage.

Hanna Khalil, Facilitator, Kearns & West: Thanks so much, Courtney. Appreciate your answers. I'm now going to go to Gwen Gallagher for the next question. So, Gwen, if you just want to introduce yourself. And then I can read out the question.

Gwen Gallagher (BOEM): Hi, everyone. My name is Gwen Gallagher, and I am a biologist within the Office of Environmental Programs at BOEM.

I'm going to answer the question we received related to the leasing through decommissioning process.

Hanna Khalil, Facilitator, Kearns & West: Thanks, Gwen. So the question is: When turbines are either decommissioned or damaged beyond repair as well as when the lease has expired, will they be replaced with new turbines and/or a renewed lease?

Gwen Gallagher (BOEM): Thanks, Hannah. Each of the 6 approved leases in the New York Bight has an operations term of 33 years that would commence on the date of the Construction and Operation plan approval.

Gwen Gallagher (BOEM): After those 33 years, the lease would expire or terminate for the programmatic EIS analysis. BOEM assumes that each of the New York Bright projects would have an operating period of 35 years. We did this to avoid the possibility of underestimating any potential effects.

Federal regulations require that the lessee must decommission the facility within 2 years following the termination or expiration of the lease.

Gwen Gallagher (BOEM): A lessee may request a renewal of the operation terms and BOEM, at its discretion, may approve a renewal request to conduct similar activities as originally authorized.

Gwen Gallagher (BOEM): BOEM considers the following criteria when thinking about whether to renew a lease

Gwen Gallagher (BOEM): One is the design life of the existing technology. The second consideration is the availability and feasibility of the new technology, if new technology is being proposed.

Gwen Gallagher (BOEM): The third is the environmental and safety record of the lessee. The fourth consideration is the operation and financial compliance record of the lessee.

Gwen Gallagher (BOEM): The fifth consideration is competitive interest and fair return considerations. And the sixth is the effects of the lease on generation, capacity, and reliability within the regional electrical distribution and transmission system.

Gwen Gallagher (BOEM): Overall any renewal request would be subject to environmental and technical reviews to assess if the existing environmental compliance is sufficient, or if new analyses are needed.

Hanna Khalil, Facilitator, Kearns & West: Thanks so much, Gwen, appreciate the answer.

Hanna Khalil, Facilitator, Kearns & West: Now, the next few questions I'm going to hand over to Ian Slayton. So if Ian, you want to introduce yourself, and then I can read out the next few questions

Hanna Khalil, Facilitator, Kearns & West: Over to you, Ian.

Ian Slayton (BOEM): Oh, hello, my name is Ian Slayton. I'm a program analyst in the Office of Renewable Energy Programs.

Hanna Khalil, Facilitator, Kearns & West: Great, thanks.

Hanna Khalil, Facilitator, Kearns & West: Okay. Our first question here is: Can you please provide clear and definitive on and offshore emissions predictions for survey and interconnection construction services?

Ian Slayton (BOEM): Sure. So, emissions associated with survey activities were considered in the 2021 New York Bight environmental assessment that considered impacts from issuing leases in the New York Bight.

Ian Slayton (BOEM): And a link to that document is being shared in the Chat.

Ian Slayton (BOEM): Yup. There it is.

Ian Slayton (BOEM): An estimate of total emissions from a single project during construction is given on page 3.4.1-13 of the New York Bight Draft Programmatic Environmental Impact Statement. So, the documents we're talking about today.

Ian Slayton (BOEM): And an estimate for total annual emissions from a single project during the operations and maintenance period is given on page 3.4.1-15

Ian Slayton (BOEM): of that document.

Ian Slayton (BOEM): And it's difficult to give an estimate specific to onshore admissions without a specific project proposal. It would, it would vary greatly, depending on the number of cables, whether they're connecting to an existing interconnection point, or building a new one or something in between where they're

Ian Slayton (BOEM): you know, adding to an existing one, and where it's located in terms of how far on shore.

Ian Slayton (BOEM): The the purpose of this draft PEIS

Ian Slayton (BOEM): is to consider the level of potential impacts to the development of a level of potential impacts due to the development of 6 leases in the New York Bight

Ian Slayton (BOEM): and the change in those impacts from potential avoidance minimization, mitigation and monitoring measures. That's the AMMM that was mentioned earlier. I don't know if we we told you, but that said somebody asked about it.

Ian Slayton (BOEM): That could be adopted for the specific project proposals. Each project will have a project specific consideration prior to any decision and each project is subject to clean air act permitting requirements.

Hanna Khalil, Facilitator, Kearns & West: Great. Thank you, Ian. The next question is: How many GHG greenhouse gas will be eliminated after these projects go online.

Ian Slayton (BOEM): Thank you for the question. A conservative approach to answering this question is comparing the greenhouse gas emissions from electricity produced by the existing grid mix from all sources, and then, considering

Ian Slayton (BOEM): considering these the potential avoided emissions for the same amount of electricity that would be produced by offshore wind in megawatt hours

Ian Slayton (BOEM): and then subtract from that construction emissions and emissions from operations and main and maintenance.

Ian Slayton (BOEM): And so, without a specific proposal, it's difficult to provide a figure, but one can expect with greenhouse gas emissions relative to the existing grid and the low millions of metric tons annually per project after factoring in construction and operations and maintenance activities. And a good example of this can be found in the recent Empire Wind final environmental impact statement

Ian Slayton (BOEM): on page 3.4-19 in Appendix G, and a link to that is going to be shared in the chat as well.

Ian Slayton (BOEM): And I would expect projects proposed in these 6 leases to be similar to that with the caveat, that, as you have more clean energy facilities come online, and the grid mix itself becomes cleaner in the future. There would then be less emissions to offset in that future on a per project basis than there is today.

Hanna Khalil, Facilitator, Kearns & West: Thanks. Again, the next question looks like it might have been cut off a little strangely, so I'll read it out, but I know we're going to try our best to answer it. It says, what is the windmill carbon footprint fro - and then it got cut off.

Ian Slayton (BOEM): Yeah, I think the question what was partly lost in transmission, but I'm going to try to anticipate

Ian Slayton (BOEM): the direction it was going in here.

Ian Slayton (BOEM): So if the question was, What is a windmill carbon footprint from?

Ian Slayton (BOEM): We look at emissions related to constructing, operating, and maintaining the windmills and assume decommissioning will be equal to the emissions from construction at the end of the project. So, essentially, the construction emissions are counted twice in the overall carbon footprint

Ian Slayton (BOEM): And in case the question was wanting to ask about materials in the offshore wind farm components in terms of their carbon footprint a broader perspective on carbon footprints more remote to specific proposed action, considers the life cycle emissions of an electricity generating technology which would include the greenhouse gas emissions related to the materials used as well. From mining and refining to manufacturing and fuel if applicable.

Ian Slayton (BOEM): Offshore wind has among the lowest life cycle emissions of any generating technology according to a study by the National Renewable Energy Laboratory, that we will link in the chat here, that harmonizes life cycle assessments.

Hanna Khalil, Facilitator, Kearns & West: Great. Thank you for tackling that.

Hanna Khalil, Facilitator, Kearns & West: Okay. The next question is: What are the inputs in the model for the life cycle analysis of the carbon footprint of wind turbines? Is raw material extraction included, and what generation capacity is assumed?

Ian Slayton (BOEM): So it it was great having these questions back to back, I answered one and then the other one came in, and it was just fate. A life cycle is considered to be cradle to the grade

Ian Slayton (BOEM): meaning it begins at the point of the extraction of raw materials and ends at decommissioning.

Ian Slayton (BOEM): The harmonization of life cycle assessments that we just shared in the previous response

Ian Slayton (BOEM): it combines several assessments. So, a range of turbine capacities are considered across separate studies that are then part of that harmonized comparison to other generating technologies.

Hanna Khalil, Facilitator, Kearns & West: Thank you.

Hanna Khalil, Facilitator, Kearns & West: Okay? And then our next question is: Has BOEM done research on or considered potential impacts on coastal microclimates from large offshore wind farms? Thank you.

Ian Slayton (BOEM): Thank you for the question. Yes, BOEM has considered microclimates in the context of offshore when and we will share a short white paper on the topic in the chat here.

Ian Slayton (BOEM): While some localized effects are possible offshore on rare occasions they're negligible onshore into the overall environment within the context of natural variability. And there's a a good amount of discussion in that short paper about the various

Ian Slayton (BOEM): microclimate effects we're looking at.

Hanna Khalil, Facilitator, Kearns & West: Great. Thank you so much, Ian, for helping answer these questions. Appreciate it. The next question is, going to be taken by David Bigger. So, David we will spotlight you. And then, if you want to just give a little intro and then I can read out the question.

David Bigger: Yeah, good afternoon, everybody. I'm David Bigger. I am with BOEM in the office of renewable energy programs in the Environmental Review branch. I am a environmental protection specialist. I specialize on a lot of avian and bat issues.

David Bigger: Perfect, So the question is: What compensatory, compensatory mitigation plans do you have for incidental impacts to bird populations from the planed turbine build out?

David Bigger: Well, thank you for the question. Compensatory mitigation offsets

David Bigger: the remaining unavoidable impacts after all appropriate and practical avoidance and minimization measures have been applied by replacing or providing substitute resources or environments.

David Bigger: And compensatory mitigation aims to restore and enhance

David Bigger: or create equivalent ecological value elsewhere.

David Bigger: So BOEM is working very closely with the U.S. Fish and Wildlife Service in developing a process for compensatory mitigation.

David Bigger: And there are various compensatory mitigation strategies being discussed, including in-lieu fee programs, mitigation banks, credit exchanges, and additional measures. Thanks again for your question.

Hanna Khalil, Facilitator, Kearns & West: Thanks, David.

Hanna Khalil, Facilitator, Kearns & West: Okay. The next set of questions are going to be answered by Jerry Wisman. Jerry, if you want to introduce yourself, and then I can take us through the questions.

Jeri Wisman (BOEM): Hi, thanks, Hanna. Hi all I'm Jerry Wisman. I work with BOEM as a marine mammal and sea turtle subject matter expert in our Office of Renewable Energy Programs.

Hanna Khalil, Facilitator, Kearns & West: Thanks, Jerry. The first question is: What criteria is used to authorize incidental takes in regards to the MMPA, ESA, MSA?

Jeri Wisman (BOEM): Yeah, thank you for your question. So, some background for folks who may not know, and, like you noted in your question. 'take' of a marine mammal is not determined through the National Environmental Policy Act (or NEPA)

Jeri Wisman (BOEM): process, but through the Marine Mammal Protection Act (or the MMPA) and/or the Endangered Species Act (or the ESA) consultation. So, for clarity, BOEM does not authorize any permits or takes. Only the National Marine Fishery Service, has the authority through the MMPA or ESA.

Jeri Wisman (BOEM): Given the nature of this programmatic document, lessees covered will not submit an application under the MMPA to NMFFS for an incidental take regulation until they are at construction, operation, and or decommissioning, permitting phase of their individual wind projects.

Jeri Wisman (BOEM): The MMPA and ESA require that incidental take documents are prepared to estimate the potential for harassment and or harm resulting from offshore wind development prior to any activities being conducted. Types of incidental taking include Level B harassment, so, for example, behavioral disturbance, Level A harassment, for example, non-serious injury and or serious injury or mortality.

Hanna Khalil, Facilitator, Kearns & West: Thank you. The next question is: Are there required mitigation options required during offshore wind pile driving construction regarding marine maps?

Jeri Wisman (BOEM): Yeah, thank you again for your question. So, Appendix G, titled Mitigation and Monitoring of the New York Bight Programmatic DEIS includes a large table of the programmatic avoidance, minimization, mitigation and monitoring, or AMMMs, as many people have mentioned.

Jeri Wisman (BOEM): And these measures include - are related to potential offshore wind pile driving and construction related noise impacts on marine mammals. We have indicated in the table which measures have been included in previous authorizations. However, any mitigation measures will not be required until there is an authorization,

Jeri Wisman (BOEM): in other words, COP approval.

Hanna Khalil, Facilitator, Kearns & West: Thanks, Jeri.

Hanna Khalil, Facilitator, Kearns & West: Next question is: Where is the proof the surveying seismic seismic blasting, etc., causes no harms to whales

Hanna Khalil, Facilitator, Kearns & West: porpoises, I think, and marine life?

Jeri Wisman (BOEM): Yeah, great question. So, regarding the recent deaths of marine mammals and the geophysical surveys conducted by offshore wind developers being cited as the cause of these unfortunate deaths. The Marine Mammal Commission, who is an independent Federal agency,

Jeri Wisman (BOEM): their sole purpose is the protection of marine mammals, they have stated, quote, “Despite several reports in the media, there is no evidence to link these strandings to offshore wind energy development and for more information on offshore energy development and whales, please see this fact sheet produced by the Bureau of Ocean Energy Management.” I believe someone will drop that link in the chat.

Jeri Wisman (BOEM): And to date no whale mortality has been attributed to offshore wind activities. Since January of 2016, NOAA Fisheries has monitored Unusual Mortality Events or UMEs for humpback whales with elevated strandings along the entire East Coast. This UME began prior to any offshore wind activities in the Atlantic Ocean and corresponds

Jeri Wisman (BOEM): to an increase in the humpback whale populations on the Atlantic that led to the removing, removing them from the endangered species list in 2016. And I believe we're also going to drop the link for the Commission's letter from the Marine Mammals Commission's letter in the chat.

Hanna Khalil, Facilitator, Kearns & West: Yes, thank you. Great.

Hanna Khalil, Facilitator, Kearns & West: The next question is: Would you consider taking the time to address all of the potential impacts on migratory marine mammals?

Jeri Wisman (BOEM): Yeah, thank you for your question. The potential impacts of the New York Bight programmatic DEIS’ alternatives on marine mammals are assessed in Section 3.5.6 of the document.

Jeri Wisman (BOEM): These will be reassessed at each of the project-specific phases for the National Environmental Policy Act.

Jeri Wisman (BOEM): And I'd like to encourage you or anyone else to please submit a public comment if there is important information you feel was not addressed or included in this draft EIS.

Hanna Khalil, Facilitator, Kearns & West: Thanks, Jari.

Hanna Khalil, Facilitator, Kearns & West: Next question is: Were baseline studies on humpback whale populations in the New York Bight conducted? And if not, how can EI be measured?

Jeri Wisman (BOEM): Yeah. So, humpback whales were assessed and discussed in also in section 3.5.6 of the programmatic draft DEIS and relevant, available studies at the time were included in the description and impact analysis sections. These will also be reassessed at each of the project-specific phases for the National Environmental Policy Act process.

Jeri Wisman (BOEM): At this time, the humpback whale population that occurs in the Western North Atlantic is not listed under the Endangered Species Act, but it is still considered through the Marine Mammal Protection Act permitting process which is conducted by the National Marine Fishery Service, and that's done at the project-specific phase.

Jeri Wisman (BOEM): So, information like stock assessments and relevant, available science are also included in these processes.

Jeri Wisman (BOEM): On top of that there have been several studies conducted by both State and Federal agencies to assess how various species, including Marie mammals, use the New York Bight and there will be a few examples put into the chat as well you can look at. And, again, I would like to

encourage you or anyone else to please leave a public comment if there's important information or baseline study that was not that you feel was not addressed or included in the draft EIS.

Thank you.

Hanna Khalil, Facilitator, Kearns & West: The next question is: Please comment on the accusations that the wind farm to shore electrical cables will kill whales, dolphins, and fish.

Jeri Wisman (BOEM): Yeah, thank you for for allowing me to comment on the issue. Again, I would like to for more detailed information, I'd encourage folks to visit Section 3.5.6 of the programmatic draft EIS

Jeri Wisman (BOEM): for analysis of each of the expected impact producing factors impacts on marine mammals. Specific to your question about the impacts from cables, BOEM notes that cable, electric and magnetic fields, or EMF for short, effects on marine mammals from ongoing and planned offshore wind projects vary in extent and magnitude, depending on the overall cable length,

Jeri Wisman (BOEM): the proportion of varied versus exposed cable segments, and project-specific transmission design.

Jeri Wisman (BOEM): However, measurable EMF effects are generally limited to within tens of feet of cable corridors. Cables would have an appropriate shielding and would be buried or covered, which would also minimize potential EMF effects from cable operation. So, given this, BOEM determine for all project alternatives

Jeri Wisman (BOEM): in the DEIS that EMF and heat from cables is anticipated to be of the lowest level of detection, and barely measurable, with no perceptible consequences to individuals or the populations for marine mammals.

Hanna Khalil, Facilitator, Kearns & West: Thank you. And then, I think, last question for you, Jeri, is: How is it that the cumulative environmental impacts for marine mammals Alternatives A and B both

Hanna Khalil, Facilitator, Kearns & West: be both the same?

Jeri Wisman (BOEM): Yeah, thank you for your question. Under the No Action Alternative (Alternative A), existing environmental trends and ongoing activities would continue in addition to impacts from other ongoing and planned wind activities. Marine mammals would continue to be affected by natural and human-caused impact-producing factors such as fishing and shipping.

Jeri Wisman (BOEM): Even though the projects included in the programmatic DEIS would not be included under the No Action Alternative, all other ongoing and planned wid and non-win activities are still included in the analysis and have varying degrees of anticipated impacts.

Jeri Wisman (BOEM): And in context of other reasonably foreseeable environmental trends, incremental impacts contributed by the 6 New York Bight projects to the cumulative impacts on marine mammals would range from undetectable to noticeable and appreciable.

Jeri Wisman (BOEM): 6 New York Bight projects would contribute to the cumulative impacts primarily through construction, noise, vessel traffic, and the presence of structure structures as related to secondary entanglement and derelict fishing gear.

Hanna Khalil, Facilitator, Kearns & West: Thanks so much. Yeah, I appreciate your help with all these questions.

Hanna Khalil, Facilitator, Kearns & West: Okay, the next question is, going to be answered by Stan Labak. Stan, if you want to come off mute and give a little intro, and then I can read out the question.

Stan Labak (BOEM): Sure. Hi, I'm Stan Lebak. I'm I'm underwater acoustic here for BOEM center for marine acoustics.

Hanna Khalil, Facilitator, Kearns & West: Thanks, Dan. And the question is: what are recovery times from sonic testing events individually and collectively?

Stan Labak (BOEM): Yes, thank you for the question. It was a little difficult to answer, because I'm not sure exactly what you're asking. But by sonic testing, I assume that you're you mean the high resolution geophysical or HRG surveys being conducted offshore during the site assessments for these projects.

Stan Labak (BOEM): In general, these sonar systems (which include sidescan sonars and sub-bottom profilers and others) have a very small or negligible chance of impacting the animals due to both the way the systems operate their characteristics, which includes their frequency source, level, beam patterns, and other factors,

Stan Labak (BOEM): and also the mitigation measures that are in place during their operation.

Stan Labak (BOEM): Experimental measurements on marine mammals have shown that recovery times for signals much louder than these

Stan Labak (BOEM): systems have been measured in terms of seconds or up to several minutes. But these are for louder and stronger signals and longer duration signals than are typically used by these systems.

Stan Labak (BOEM): Acoustic thresholds also are used to indicate the thresholds of both - they use both peak levels and energy levels to look at the individual transmissions, and then the all the energy accumulative in a multiple transmissions collectively, and those are part of the thresholds that are looked at and examined during an analysis of these systems.

Hanna Khalil, Facilitator, Kearns & West: Thanks, Dan, appreciate it. Okay. The next few questions are going to be answered by Brandon Jensen. So, Brandon, I will spotlight you, and if you don't mind giving an introduction, and then I'll lead us to these questions.

Brandon Jensen | BOEM: Sure thing, hey everyone. Good afternoon. Thanks for sticking out this period with us. It's a long one. But happy to answer some questions. I'm Brandon Jensen fisheries biologist with the Office of Renewable Energy Programs, Environmental

Brandon Jensen | BOEM: Branch for Renewable Energy. Subject matter expert for benthic ecology and central fish habitat and fisheries.

Hanna Khalil, Facilitator, Kearns & West: Thanks, Brandon.

Hanna Khalil, Facilitator, Kearns & West: So, the first question we have is, why risk the marine life for this unreliable energy production when we have more efficient ways to produce energy?

Brandon Jensen | BOEM: Yeah, thanks for your comment. Congress gave BOEM the authority to regulate offshore renewable energy through the Energy Policy Act. BOEM takes seriously its role to avoid, minimize and if necessary mitigate the potential impacts from activities that it authorizes. The programmatic draft EIS includes an extensive analysis of marine life, including fish and vertebrates, essential fish habitat, and other sensitive marine species.

Brandon Jensen | BOEM: I welcome you to review Chapter 3, Affected Environment and Environmental Consequences, Section 3.5 Biological Resources. We welcome receiving your comments with respect to any particular analyses that are lacking or any resource not accounted for. Thanks.

Hanna Khalil, Facilitator, Kearns & West: Thank you.

Hanna Khalil, Facilitator, Kearns & West: Okay. The next question is: “BOEM states this concern about offshore cooling stations quote “the number of larval fish and invertebrates lost in the process is difficult to measure “ end quote.

Hanna Khalil, Facilitator, Kearns & West: How many cooling stations are you proposing in this area? And what have you done to alleviate the problem of killing fish larvae?

Brandon Jensen | BOEM: Yeah, thanks for that comment. And it's good to point out sort of where we're at with with our process. Right now, what we're discussing here today, this is a programmatic draft environmental impact statement that we are where we're considering the potential interactions with existing marine resources at a high level. The specifications for any substations requiring open loop cooling systems as the commenter alluded to

Brandon Jensen | BOEM: would require the intake of ocean water. That would be used to to to cool those systems, and that particular component of the project would be considered in the construction operation plan stage of these projects. Individual project-level EIS, or in environmental impact statements would tier off of this programmatic draft EIS or programmatic EIS eventually, and during the Essential Fish Habitat consultations with our partners at NOAA fisheries

Brandon Jensen | BOEM: the potential impacts to larval fish and vertebrate entrainment will be evaluated and efforts to potentially avoid or minimize those interactions would be contemplated at that time.

Hanna Khalil, Facilitator, Kearns & West: Thank you.

Hanna Khalil, Facilitator, Kearns & West: The next question that we have is: How many wind turbines and substations will be installed off our ocean, and how will it affect the radar systems for weather and national security?

Hanna Khalil, Facilitator, Kearns & West: This is a 2 in 1. Also: How will affect the effect - How will this affect the thousands of fishermen that work these waters for generations, getting some of the best fresh fish on the east coast?

Brandon Jensen | BOEM: Yeah, certainly. Thanks. And again, important to kind of point out where we're at here and what we're discussing. So at this phase of the New York Bight lease development BOEM is drafting a programmatic EIS to consider the potential interactions with existing marine resources at a high level

Brandon Jensen | BOEM: potential data gaps will be identified and developers will begin to consider plans to address those data gaps to support their construction operations plans. The number of turbines, substations, inter-array cables and Export Cable Corridors will be a part of the development -excuse me-

Brandon Jensen | BOEM: of the Construction Operation Plan per lease area.

Brandon Jensen | BOEM: So, I recommend taking a look at section 3.6.6 of the draft programmatic EIS, which discusses the potential impacts from offshore wind facilities. Specifically on page 3.6.6.-18 that the USCG noted in its final Areas Offshore of Massachusetts and Rhode Island Port Access Route Study

Brandon Jensen | BOEM: that various factors play a role in potential marine radar interference by offshore wind infrastructure, stating that “the potential for interference with marine radar is site specific and depends on many factors, including, but not limited to turbine size, the array layout itself, the number of turbines and construction materials, and the vessel types.”

Brandon Jensen | BOEM: In the event of radar interference, other navigational tools are available to ship captains. For more information on this topic, I recommend that you take a look at the BOEM-sponsored

Brandon Jensen | BOEM: National Academies of Science, Engineering and Medicine study from 2022. Impacts to weather and national security will also be addressing a separate response a little later today. I recommend taking a look at section 3, sorry 3.6.1, which addresses the potential impacts to commercial fisheries.

Brandon Jensen | BOEM: Fishing is an important use of the economic or excuse me, the Exclusive Economic Zone that BOEM must consider in its decision-making process.

Brandon Jensen | BOEM: BOEM regularly engages with commercial and recreational fishermen to understand their concerns from both a biological and socioeconomic impact perspective.

Brandon Jensen | BOEM: Project-specific environmental assessments include an analysis of impacts to fisheries and every project approved to date has identified fishery compensation programs.

Brandon Jensen | BOEM: The draft programmatic EIS includes proposed mitigation measures to reduce impacts to fisheries that may be adopted by or sorry for New York Bight projects. Take a look at table G-1, Proposed

Brandon Jensen | BOEM: AMMMS and so for minimization, mitigation, monitoring measures in Appendix G, which includes the Commercial Fisheries - 1 or COMFIS-1, compensation for gear loss and damage and commercial fish, section dash 6. Also, in the appendix, specific to fisheries compensatory mitigation.

Brandon Jensen | BOEM: These measures reflect BOEM, draft fisheries, mitigation guidance developed over the past couple of years, and your comments on these measures in particular are very welcome. And we we welcome feedback specific to the this PEIS process. Thanks.

Hanna Khalil, Facilitator, Kearns & West: Thank you.

Hanna Khalil, Facilitator, Kearns & West: Okay. The next question says: Speaking as a recreational fisherman and New Jersey-based charter fishing business owner, I support offshore wind development in New York Bight because it'll provide much needed additional underwater habitat (artificial reefs) for

marine life to grow and flourish and help sustain New Jersey's fishermen both recreational and commercial.

Hanna Khalil, Facilitator, Kearns & West: I'm hoping that BOEM will consider implementing a quote “rigs to reefs” program similar to the one currently in play in the Gulf of Mexico with its decommissioned oil rigs. It makes zero sense to remove the established reef structure after the 25 year lease period.

Brandon Jensen | BOEM: Yeah, thanks for your comment. It's pretty forward thinking. I appreciate that. The New York Bight draft programmatic DPEIS considers eventual decommissioning of the offshore wind infrastructure in section 2 2.1 Alternative B Subsection 2.1.2.1.3 Conceptual Decommissioning.

Brandon Jensen | BOEM: At the end of the project's lifetime an extensive environmental review process, similar to what's partaking today with this environmental impact statement review, that will be initiated to contemplate decommissioning applications and to review alternatives to remove these components of offshore wind infrastructure and to avoid, minimize, and mitigate potential environmental impacts. Thank you for your questions.

Hanna Khalil, Facilitator, Kearns & West: Yeah, thanks so much, Brandon, for helping us answer those now I'm going to turn it over to Megan Cornelison, who is going to answer the next couple of questions. Again, if you'd like to introduce yourself to everybody and then I can read out the next question.

Meghan Cornelison, BOEM: Sure. Hi, so I'm Megan Cornelison. I'm a social scientist with the Office of Environmental Programs at BOEM.

Meghan Cornelison, BOEM: And I think I have a couple questions. Yep.

Hanna Khalil, Facilitator, Kearns & West: Great. Okay. The first question is:

Hanna Khalil, Facilitator, Kearns & West: Inadequate buffer zones around shipwrecks?

Meghan Cornelison, BOEM: Sure. Yeah, thanks for this question. So for this question, I'm actually sharing a response that was provided by marine archaeologists and cultural resource experts at BOEM. So I'll be sharing that response.

Meghan Cornelison, BOEM: So in each of the New York Bight Leases, there are requirements for the lessee to provide the results of a high-resolution remote sensing survey

Meghan Cornelison, BOEM: and archaeological assessment of that data with its site assessment plans or SAPs

Meghan Cornelison, BOEM: and construction operation plans or COPs.

Meghan Cornelison, BOEM: The lessee also must ensure that the analysis of archaeological survey data collected in support of a plan submittal, again, a SAP or a COP,

Meghan Cornelison, BOEM: and the preparation of archaeological reports are conducted by a qualified marine archaeologist as defined by the Secretary of the Interior. Furthermore, the lessee may not knowingly impact a potential archeological resource without BOEM’s prior approval.

Meghan Cornelison, BOEM: BOEM has a talented staff of marine archaeologists and other cultural resource professionals that review the data presented in the marine archaeological reports

Meghan Cornelison, BOEM: to ensure that the correct avoidance buffers are established around each potential shipwreck prior to approving any seafloor disturbing activities.

Meghan Cornelison, BOEM: BOEM consults with many different consulting parties, including, but not limited to, the applicable State Historic Preservation officers,

Meghan Cornelison, BOEM: State Underwater Archaeologists, and the U.S. Naval History and Heritage Command per the procedures established by the National Historic Preservation Act Section 106 regulations to ensure that shipwrecks are adequately considered during the construction and operations of offshore wind facility.

Meghan Cornelison, BOEM: BOEM does not prescribe a one-size-fits-all approach when assigning avoidance buffers to potential and or known archaeological sites, including shipwrecks. Avoidance buffers are designed and placed around known shipwrecks and targets or anomalies identified as a result of the high-resolution remote sensing survey data sets

Meghan Cornelison, BOEM: and an archaeological assessment of that data provided to BOEM for a SAP or COP review.

Meghan Cornelison, BOEM: These targets can include side-scan sonar targets, magnetic anomalies, features identified in the sub-bottom profiler data, and multibeam echo sounder data (or a combination of all these data points).

Meghan Cornelison, BOEM: While BOEM utilizes a a standard avoidance criterion of 50-meters for some known archaeological sites and shipwrecks, this avoidance criterion is often modified to account for the overall size of a site.

Meghan Cornelison, BOEM: For example, if a shipwreck is over 200 feet in length, the avoidance criterion is adjusted to account for the entirety of that shipwreck and its surrounding debris field.

Meghan Cornelison, BOEM: Moreover, for unknown sonar targets, magnetic anomalies, or data points identified in a remote sensing survey BOEM, marine archaeologists analyzed the information and make a determination as to the appropriate avoidance buffer for those individual targets.

Meghan Cornelison, BOEM: In many cases BOEM will not simply avoid a sonar target based on the sonar image.

Meghan Cornelison, BOEM: Rather BOEM utilizes a combination of sonar data as well as the overall magnetic signature to determine the appropriate avoidance for that target and ensure the entirety of a potential site is completely covered by an avoidance buffer accounting for the sonar target and any potential debris field nearby.

Meghan Cornelison, BOEM: More often than not, this approach covers a larger swath of sea floor, encompassing the sonar target and magnetic anomaly.

Meghan Cornelison, BOEM: In many cases the avoidance buffer can result in well over 100 meters of seafloor surrounding the potential archaeological site or shipwreck.

Meghan Cornelison, BOEM: For additional information regarding BOEM Section 106 consultation process and historic preservation related topics, please refer to BOEM website regarding Historic Preservation Activities

Meghan Cornelison, BOEM: and Offshore Renewable Energy and BOEM Survey Guidelines for Providing Archaeological and Historic Property Information.

Meghan Cornelison, BOEM: Pursuant to 30 CFR Part 585. And I see we've just put those links into the chat for. Yeah, that was a lot. Thanks for hanging in there.

Hanna Khalil, Facilitator, Kearns & West: Yeah, thanks for the comprehensive answer, Megan.

Hanna Khalil, Facilitator, Kearns & West: Great. Okay. The next question is, is BOEM engaging with native American tribes that are not federally recognized? New Jersey has no federally recognized tribes, so does this mean that no native peoples are involved in BOEM's activities in New Jersey?

Meghan Cornelison, BOEM: Thank you. This is an important question.

Meghan Cornelison, BOEM: So, as a Federal agency BOEM has an obligation to consult on a government to government basis with federally recognized tribes which are recognized by the Federal Government as sovereign nations.

Meghan Cornelison, BOEM: That formal government-to-government consultation obligation only applies to federally recognized tribes, including those who may have ancestral ties to the New Jersey area.

Meghan Cornelison, BOEM: However, another avenue through which non-federally recognized tribes can participate is through

Meghan Cornelison, BOEM: engagement BOEM is conducting with environmental justice communities and organizations.

Meghan Cornelison, BOEM: Since October of 2022, BOEM has been holding quarterly environmental justice forums related to the New York Bight PEIS

Meghan Cornelison, BOEM: to hear from community-based organizations who work on environmental justice related issues in the New York and New Jersey region.

Meghan Cornelison, BOEM: Both federally and non-federally recognized Tribes as well as indigenous serving organizations are welcome to engage through the environmental justice forums.

Meghan Cornelison, BOEM: We'll put a link to more information on the EJ Forums in the chat. BOEM has worked hard to reach out to Tribes, both recognized and non-recognized to make sure they are aware of the EJ Forums and invite their participation.

Meghan Cornelison, BOEM: Specific to New Jersey, in October 2023, we presented at a meeting of the New Jersey Commission on American Indian Affairs to share information about the EJ Forums and invite participation by the Tribal organizations they work with.

Meghan Cornelison, BOEM: However, we're always open to additional recommendations for additional contacts whom we should be reaching out to to make sure we're being as inclusive as possible through

the EJ forums. So, if you do know of an organization, you think we should reach out to please email environmental.justice@boem.gov

Meghan Cornelison, BOEM: That's an email address. We'll put that in the chat as well, and we would love to hear from you. Thank you

Hanna Khalil, Facilitator, Kearns & West: Thanks so much, Megan.

Hanna Khalil, Facilitator, Kearns & West: Okay, the next few questions are going to be answered by Mark Jensen. So, Mark, if you want to introduce yourself, then I can read out the questions.

Mark Jensen, BOEM: Hmm, hmm!

Mark Jensen, BOEM: Hello. Yes. My name is Mark Jensen. I'm an economist in BOEM's Economics division.

Hanna Khalil, Facilitator, Kearns & West: Great. The first question we have is: What is the real cost of a windmill from its birth idea to its life end?

Mark Jensen, BOEM: Oh, thank you for the question. It can take several billion dollars to build and operate an offshore wind farm.

Mark Jensen, BOEM: However, given the differences in project sizes and in the timing of spending, it is typical to estimate these costs relative to the electricity production of a particular wind farm levelized cost of energy or LCOE is a commonly used measure of the estimated cost of Wind Farm.

Mark Jensen, BOEM: If a particular project has won a State solicitation and is finalized a power purchase agreement,

Mark Jensen, BOEM: one can also assess any publicly available information regarding electricity prices within those contracts. The National Renewable Energy Laboratory publishes an annual market report that summarizes recent data

Mark Jensen, BOEM: and trends regarding the cost of offshore wind farms, and we can post that report in the chat. Thank you.

Hanna Khalil, Facilitator, Kearns & West: Thank you. And yeah, I see that has been added to the chat. The next question is: How much more will New Jersey residents be paying for energy after these projects go online?

Mark Jensen, BOEM: Thank you for the question the effects of an offshore wind farm on retail electricity prices

Mark Jensen, BOEM: will depend on the differences in wholesale electricity prices for offshore wind and other energy sources. The effects on residential prices also depends on the functioning of the regional electricity market and any applicable State laws.

Mark Jensen, BOEM: In January 2024, the New Jersey Board of Public Utilities awarded 3.7 GW of offshore wind to two New York Bight lessees: Leading Light Wind and Attentive Energy Two.

Mark Jensen, BOEM: In a statement, the New Jersey Board of Public Utilities estimated that these two projects combined

Mark Jensen, BOEM: would increase residential electricity prices by an average of $6.84 per month.

Mark Jensen, BOEM: And we can put that statement in the chat as well. Thank you.

Hanna Khalil, Facilitator, Kearns & West: Thanks, Mark, I think last question for you, for now is: You mentioned that BOEM evaluates the economics of offshore wind projects.

Hanna Khalil, Facilitator, Kearns & West: How are economic determinations made and what criteria is used to evaluate economic costs considered by BOEM? Where can the public find the BOEM economic evaluation process and criteria for review?

Mark Jensen, BOEM: Thank you for the question. The New York Bight PEIS provides some information regarding demographics, employment and economics in section 3.6.3

Mark Jensen, BOEM: The economics of particular projects will be further analyzed in project specific environmental documents. BOEM's consideration of these impacts will be made public in these environmental documents and in the accompanying record of decisions. Thank you.

Hanna Khalil, Facilitator, Kearns & West: Great, thank you so much.

Hanna Khalil, Facilitator, Kearns & West: Okay. Now, I'm going to turn it over to Lola. Sorry I'm going to turn it over to Jo'Anne who's going to answer the next couple of questions. Jo'Anne if you want to introduce yourself, that'd be great.

Jo'Anne Lewis [BOEM]: Thank you, Hannah. Hello! My name is Jo'Anne Lewis, and I work with BOEM as a navigation analyst in their Engineering and Technical branch.

Hanna Khalil, Facilitator, Kearns & West: Great, so the question we have for you is, how are impacts from ship/boat traffic to and from New York harbor being factored into the leases?

Jo'Anne Lewis [BOEM]: Okay? Well, to delineate areas for leasing, BOEM considered information from environmental reviews, consultations, public comments and coordination with Intergovernmental Renewable Energy Task Forces, which includes Agencies like the U.S. Coast Guard. BOEM must address unique issues and challenges of the area or region of interest, like impacts to ship/boat traffic,

in conjunction with changing technologies and industry advancements.

Jo'Anne Lewis [BOEM]: BOEM engages with the maritime industry to gain understanding of the potential concerns from the industry during the planning and analysis phases of the lease development process.

Jo'Anne Lewis [BOEM]: And the impacts to navigation and vessel traffic are analyzed in section 3.6.6 of the draft programmatic EIS environmental impact statement.

Jo'Anne Lewis [BOEM]: BOEM also requires developers and lessees to submit as part of their individual construction and operations plan, also known as the the COP, a Navigation Safety Risk Assessment or NRSA, which will be used to analyze marine vessel traffic impact in the geographic area of the nearby areas.

Jo'Anne Lewis [BOEM]: Thanks for the question.

Hanna Khalil, Facilitator, Kearns & West: Yeah, I appreciate your help.

Hanna Khalil, Facilitator, Kearns & West: Great the next set of questions is going to be answered by Jade. Jade, if you want to introduce yourself, and then I can read through the questions.

Jade Haug (BOEM): Hi. My name is Jade Haug. I am a geophysicist for BOEM's engineering and technical review branch.

Hanna Khalil, Facilitator, Kearns & West: First question is: Does the cement have any toxicity for marine mammals or plants?

Jade Haug (BOEM): So, typically cement is made from a mixture of materials primarily containing lime, which is calcium oxide, silica, which is silicon dioxide and alumina, which is aluminum oxide that react to harden and bind with an aggregate material such as crushed rocks.

Jade Haug (BOEM): The source material for the lime is typically limestone or calcium carbonate.

Jade Haug (BOEM): The source material for silica is typically quartz sand and alumina is bauxite, which is a common sedimentary rock.

Jade Haug (BOEM): The chemical reaction that occurs with these materials

Jade Haug (BOEM): combined and mixed with water is called hydration in which materials melt together to form cement or calcium

Jade Haug (BOEM): silicate hydrate. Once it's fully cured, it is inert, meaning it is no longer chemically reactive, therefore no react- no toxicity would be expected, so, speaking broadly, on cement for any purpose, if any of the materials or processing equipment used were somehow contaminated, or if they were, there were problems with some problematic additives, those could leach out of the cement, but the cement itself would be considered non-reactive, and should not leach into anything

Hanna Khalil, Facilitator, Kearns & West: Great. Thank you. The next question is: What steps are being taken to ensure national security

Hanna Khalil, Facilitator, Kearns & West: (radar) is not negatively impacted.

Jade Haug (BOEM): So the potential impacts on military and national security radar systems are analyzed in section 3.6.7 of the draft programmatic EIS.

Jade Haug (BOEM): Potential impacts under Alternative B were found to be minor for most military and national security use and moderate for radar systems.

Jade Haug (BOEM): Potential impacts under Alternative C were found to be minor for most military and national security uses and radar systems.

Jade Haug (BOEM): Radar radar impacts will be further assessed by lessees in their construction and operations plans and reviewed by BOEM and other agencies in the project-specific NEPA analysis.

Jade Haug (BOEM): Furthermore, potential offshore wind radar impacts and mitigations are being analyzed by affected government agencies. BOEM is a member of the interagency Wind Turbine Radar Interference Mitigation Working group.

Jade Haug (BOEM): Or it's called WTRIM

Jade Haug (BOEM): W-Trim.

Jade Haug (BOEM): One of the WTRIM's primary goals is the development of technology driven mitigation solutions. A summary of ongoing and planned national security and military use activities are described in Section D.

Jade Haug (BOEM): 2.7

Jade Haug (BOEM): and Table D1-14 of the draft programmatic environmental impact statement.

Hanna Khalil, Facilitator, Kearns & West: Thanks, Jade.

Hanna Khalil, Facilitator, Kearns & West: What has been looked into the impact of the storm on turbines? What are the EMFs

Hanna Khalil, Facilitator, Kearns & West: off cable off by cables – decommissioning. It's a little choppy?

Jade Haug (BOEM): I'll I'll do my best with this one. Thank you for the question.

Jade Haug (BOEM): The New York Bight lease areas are subject to some extreme weather, such as storms and hurricanes, which may impose hydrodynamic load and sediment sediment scouring. The return rate of hurricanes may become more frequent than the historical record, and the future probability of a major major Hurricane will likely be higher than the historical record of these events due to climate change.

Jade Haug (BOEM): The engineering specifications of the wind turbine generators and their ability to sufficiently withstand weather events is independently evaluated by a certified

Jade Haug (BOEM): verification agent. So that's actually a third party that's non-governmental. That also reviews

Jade Haug (BOEM): the design reports. When when we, reviewing the facility design report and the fabrication and installation report according to international standards,

Jade Haug (BOEM): which include withstanding hurricane level events, one of these standards calls for the structure to be able to withstand a 50-year return

Jade Haug (BOEM): interval event. An additional standard includes withstanding a 3-second gusts of a 500 year return interval event which would correspond to about a category 5 hurricane windspeeds.

Jade Haug (BOEM): So, by the context of your first part of your question, I'm going to provide an answer to whether EMF considerations from cables after storm may have occurred.

Jade Haug (BOEM): In 2019 BOEM published a summary of EMF Studies. EMF levels discussed in this report associated with offshore wind energy projects were found to be well below the recommended

limits for human exposure. The recommended limits for human exposure are 12 to 100 times higher than the EMF levels from cables measured at the sea floor.

Jade Haug (BOEM): The strength of EMF decreases at a rate of the cube of distance and has been shown to have a localized effect to the area immediately surrounding the cable.

Jade Haug (BOEM): A 2014 study that investigated subsea 35kV cables off the San Ynes platform showed the strength of the EMF along the energized cable was relatively stable over time and along its length.

Jade Haug (BOEM): The EMF produced by these energized cables diminishes to background levels about one meter away from the cable.

Jade Haug (BOEM): During construction, to ensure that the cables are appropriately buried,

Jade Haug (BOEM): the cable protection system or CPS will be implemented to protect the cable from extreme loads where the cable meets the seafloor and is eventually buried to the desired depth.

Jade Haug (BOEM): A Cable Burial risk Assessment will determine the cable

Jade Haug (BOEM): target burial depth and cable protection requirements for the export cable and inter-array cable routes to ensure that cables were not exposed after a major storm event. BOEM would also require a monitoring plan be developed for post storm events,

Jade Haug (BOEM): so that's an MUL-16,

Jade Haug (BOEM): which would establish how lessees monitor facility infrastructure, foundation scour protection, and cables following storm events. While monitoring would not directly reduce effects on benthic resources, a monitoring plan would provide information about impacts on seabed conditions from storm events and our sister agency, the Bureau of Safety and Environmental Enforcement, AKA, BSSE

Jade Haug (BOEM): would retain the ability to require post-storm mitigation - mitigation to address the environmental impacts caused by the storm event.

Hanna Khalil, Facilitator, Kearns & West: Thanks so much, Jade. It's really helpful.

Hanna Khalil, Facilitator, Kearns & West: Next question we have is: How does the cooling station work to lower the temperature of the energy transfer from AC to DC and vice versa.

Jade Haug (BOEM): But the most common type of cooling system is an open loop cooling system that intakes cool, filtered seawater and discharges warmer water back into the ocean. Because of the large amount of heat generated during the conversion of alternating current, or AC, to the direct current, AKA DC, at the high voltage

Jade Haug (BOEM): DC converter offshore substations located in the wind farm, these systems must be cooled when operating. And the construction and operations plan submitted for the New York Bight lease areas may include the use of HVDC converter offshore substations that would convert AC to DC before transmission to onshore project

Jade Haug (BOEM): components.

Jade Haug (BOEM): The environmental impacts of discharging warm water back into the ocean is analyzed in the New York

Jade Haug (BOEM): Bight PEIS.

Hanna Khalil, Facilitator, Kearns & West: Thank you.

Hanna Khalil, Facilitator, Kearns & West: Okay, I think last question for you is: Who is going to be responsible for flying wind pieces when a hurricane hits the coast?

Jade Haug (BOEM): All right. Thank you for that question. There are many considerations in the event that there is marine debris. The PEIS addresses Impact-Producing-Factors, including accidental release or spills into receiving waters of a fluid or other substance, such as fuel, chemical contaminants, hazardous materials, suspended sediment, invasive species, trash or debris.

Jade Haug (BOEM): Increased accidental releases of trash and debris may occur from vessels primarily during construction but also during operations and conceptual decommissioning of planned offshore wind facilities.

Jade Haug (BOEM): This is analyzed and considered by BOEM alongside our sister Agency, BSSE, the Bureau of Safety and Environmental Enforcement which oversees the safety and environmental requirements for facility, design, fabrication, installation, operation, and decommissioning.

Jade Haug (BOEM): BSSE promotes the safety of operations through regulatory requirements and programs, such as safety management systems, inspections, incident reporting and investigations.

Jade Haug (BOEM): Projects must be in compliance with both BSSSE and BOEM regulations which require the lessees to design projects that take measures to prevent unauthorized discharge of pollutants, including marine trash and debris, into the offshore environment.

Jade Haug (BOEM): Additionally, BOEM would implement conditions for marine debris awareness and elimination that required compliance for recovery and prevention of marine debris, marine debris

and trash in the marine environment.

Hanna Khalil, Facilitator, Kearns & West: Great thanks. So much Jade for your help today.

Hanna Khalil, Facilitator, Kearns & West: Okay, the next. And I believe the last few questions are going to be answered by Stephanie Shiruca. So, Stephanie, if you'd like to introduce yourself, I can lead us through these questions.

Stephanie Sharuga (BOEM): Hi, everyone! My name's Stephanie Sharuga. I'm an interdisciplinary scientist with BOEM's Office of Environmental Programs. I'm also a member of the project management team for this New York by Programmatic EIS.

Hanna Khalil, Facilitator, Kearns & West: Thanks so much, Stephanie. Okay, the first question we have here is, yes, including – May we please see the questions participants write in the Q&A or chat so we know what is and what is not answered.

Stephanie Sharuga (BOEM): So, thanks for this question. So, simple answer is all of the questions that we have received, both during the registration portion, so if you pre when you registered, if you submitted questions

Stephanie Sharuga (BOEM): as well as any of those that we received during the Q&A, prior to the cut off time that we mentioned in this virtual public meeting, they have all been answered during this Q&A period. So, we basically compile them and provide answers to everything.

Hanna Khalil, Facilitator, Kearns & West: Thanks for clarifying stuff.

Hanna Khalil, Facilitator, Kearns & West: Okay, next question is: I still don't see the transcript from the January 31st virtual hearing posted publicly.

Stephanie Sharuga (BOEM): So, with regards to this, we do aim to make transcripts and the meeting recordings available on BOEM website within two weeks is what we aim for. Following each of the virtual public meetings. The transcripts, they need to be created from the the actual meeting recording and then everything has to undergo quality control process to make sure you know what's in the transcripts is accurate and, you know, high -quality prior to posting of that on the website.

Stephanie Sharuga (BOEM): So, the transcript and the recording from the previous virtual meeting on January 31st will be posted to the website within next few days.

Hanna Khalil, Facilitator, Kearns & West: Thanks, Stephanie. Great. Next question is: Why aren’t we supplied a copy of the PEIS?

Stephanie Sharuga (BOEM): The PEIS is available on both the website and hard copies are available on request. So, you have to specifically put in a request for an actual hard copy. But all of the full PEIS document and it's appendices are located on our website, and we will put the link in the chat for everyone there. You can access everything through that link.

Hanna Khalil, Facilitator, Kearns & West: Great. And yeah, there it is awesome.

Hanna Khalil, Facilitator, Kearns & West: Okay, and I believe we are now up to our last question today. So, the question is: Can you post the email addresses for presenters in the chat?

Stephanie Sharuga (BOEM): Short answer is, yes. So, the presenters that did the present- present-presentation at the beginning of today's meeting, were Megan Davidson and Courtney Strain, and we will be posting their contact information in the chat. So, you should see their emails pop up in there.

Hanna Khalil, Facilitator, Kearns & West: Awesome. Thank you, Stephanie, and that is all of the questions that we've received today. So, thank you so much to participants for asking those questions, and to BOEM for your thoughtful question - for your thoughtful responses.

Hanna Khalil, Facilitator, Kearns & West: And with that we've come to the end of our meeting today. Thank you, everyone, for your time and your participation. I'd now like to turn it over to Lisa Landers for closing remarks. Lisa is the NEPA Section Chief of the Environmental Branch for Renewable Energy at BOEM. So, over to you, Lisa.

Lisa Landers, BOEM: Thank you, Hanna. Good afternoon. My name is Lisa Landers, and I am the NEPA Section Chief in the Environment Branch of Renewable Energy and the Office of Renewable Energy Programs at BOEM.

Lisa Landers, BOEM: I want to thank Kearns and West and BOEM staff for holding a successful virtual public meeting for the New York Bight draft programmatic environmental impact statement. And to everyone that participated in today's meeting, I want to thank you for spending these last few hours with us and for the many thoughtful comments and questions that you submitted.

Lisa Landers, BOEM: All comments received today, and during the comment period will be assessed and considered by BOEM during preparation of the final programmatic environmental impact statement.

Lisa Landers, BOEM: I hope this has been a good forum for you to share comments on aspects of the analysis that are of concern, and that you found our answers to the questions to be both useful and responsive. Your input is essential to ensure that the analysis is sufficient and supported by the best available science.

Lisa Landers, BOEM: I also want to reiterate that there are multiple methods available to you to provide your comments on the draft programmatic environmental impact statement by February 26, 2024.

Lisa Landers, BOEM: You can submit your comments through regulations.gov and by mail more information about how to comment is available in the chat and on the BOEM website.

Lisa Landers, BOEM: As a reminder, a recording of today's virtual meeting will be posted on BOEM's New York New York Bight draft programmatic environmental impact statement virtual meeting room web page.

Lisa Landers, BOEM: Thank you again for participating in today’s virtual public meeting. Hope you enjoy the rest of your week.

Hanna Khalil, Facilitator, Kearns & West: Thanks, Lisa, and again, thank you everyone for your time today. Just one final reminder that there are still several ways to provide comment through the remainder of the public comment period which ends on February 26th.

Hanna Khalil, Facilitator, Kearns & West: And that is up on your screen. You can provide your comments via mail to the address shown or online at www.regulations.gov. And we'll be adding a link to the virtual meeting room on BOEM's website for more information on how to provide your comments.

Hanna Khalil, Facilitator, Kearns & West: And with that this meeting is adjourned. So thank you very much, and have a great rest of your day.