EXAMINING THE PRESIDENT'S FY 2024 BUDGET REQUEST FOR THE BUREAU OF OCEAN ENERGY MANAGEMENT, THE BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT, AND THE U.S. GEOLOGICAL SURVEY

OVERSIGHT HEARING

BEFORE THE

SUBCOMMITTEE ON ENERGY AND MINERAL RESOURCES

OF THE

COMMITTEE ON NATURAL RESOURCES
U.S. HOUSE OF REPRESENTATIVES

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Wednesday, April 26, 2023
U.S. House of Representatives
Subcommittee on Energy and Mineral Resources
Committee on Natural Resources
Washington, DC

The Subcommittee met, pursuant to notice, at 2:27 p.m. in Room 1324, Longworth House Office Building, Hon. Pete Stauber [Chairman of the Subcommittee] presiding.

Present: Representatives Stauber, Gosar, Graves, Rosendale, Collins, Duarte, Westerman; Ocasio-Cortez, Huffman, Kamlager-Dove, and Napolitano.

Also present: Representatives Carl, Luna, Smith, and Van Drew.

Mr. STAUBER. The Subcommittee on Energy and Mineral Resources will come to order.

Without objection, the Chair is authorized to declare a recess of the Subcommittee at any time.

Under Committee Rule 4(f), any oral opening statements at hearings are limited to the Chairman and the Ranking Minority Member.

I ask unanimous consent that the gentleman from New Jersey, Mr. Van Drew, and Mr. Chris Smith, and the gentlelady from Florida, Mrs. Luna, be allowed to participate in today's hearing.

I now recognize myself for an opening statement.

STATEMENT OF THE HON. PETE STAUBER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MINNESOTA

Mr. STAUBER. Today, in the Energy and Minerals Resources Subcommittee, I am pleased to host an oversight hearing on the proposed budgets of the Bureau of Ocean Energy Management, the Bureau of Safety and Environmental Enforcement, and the U.S. Geological Survey. And it could not have come sooner. The President's budget across the entire Administration is a roadmap to spending more, and mortgaging our children's future for further expansion of government control, and the agencies we have here today are certainly an embodiment of that broken, spend-your-way-out-of-the-hole Beltway philosophy.

And in the Bureau of Ocean Energy Management's case, they asked for a funding increase right on schedule, but somehow managed to do less. Come this June, BOEM will be a year late to offer the 5-year plan, which is the linchpin of offshore oil and gas

development. We will hear assurances from the Administration before us today that, no worries, the plan will be offered by this fall, or maybe this winter, but, yes, some time they may offer a plan.

However, we do know this. In the program's 43 years of age, BOEM has never offered a 5-year leasing plan late or not at all. And not offering the plan means BOEM has not started environmental reviews, which, as we all know, means more delays well into the election season.

Further, President Biden announced a re-election campaign to a term past his 84th birthday, and Americans know what he said about oil and gas leasing during his last election, and I quote: "I guarantee you we are going to end the fossil fuel use."

Let's be real here. This delay is intended to walk a line between promises to the billion-dollar activist ecosystem, including the likes of Michael Bloomberg, and the millions of Americans who just want high-wage jobs or affordable fuel for their homes and vehicles, or to have the comfort of knowing we are not reliant on foreign sources of energy, and the lack of a 5-year plan is an embodiment of this.

Bureaucratic delay after delay, lawsuit after lawsuit, let deadlines for reviews lapse. Yet, the concern doesn't stop there. This Administration has left the possibility open of having no oil and gas lease sales in the 5-year plan. This is unconscionable.

Besides the cost increases passed to American families, we are leaving conservation dollars on the table. We just had a hearing with Director Sams last week, where we discussed how funding flows from lease sales and development to park funding. Lease Sale 259 generated nearly $270 million in bids, demonstrating the value here.

And just one more point on oil and gas leasing. The previous director, Amanda Lefton, said the quiet part out loud in a leaked memo, and admitted that the goal is to drive down demand by setting the highest possible royalty rates. The anti-development agenda of this Administration truly knows no bounds and has no shame.

And before I close, I just want to briefly touch on some of the funding requests for the U.S. Geological Survey. While I am pleased at requests for programs like Earth MRI, I don't understand some of the decreases. Why are we cutting funding for chronic wasting disease? Another site in my district had a positive case.

And, meanwhile, the Climate Adaptation Science Center saw a huge increase request, and that program receives very little oversight. It is currently conducting projects in places like Madagascar, China, or Laos. USGS needs to focus on issues that matter to the Americans here at home, and I am happy to support them when they do. However, when they diverge from their mission, we will hold them accountable.

Thank you, and I yield to my colleague from New York, Ranking Member Ocasio-Cortez.

STATEMENT OF THE HON. ALEXANDRIA OCASIO-CORTEZ, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

Ms. OCASIO-CORTEZ. Thank you, Mr. Chairman, and thank you to Director Klein, Deputy Director Huang, and Director Applegate for taking the time to be with us here today.

I am grateful to discuss the important work of the Bureau of Ocean Energy Management, the Bureau of Safety and Environmental Enforcement, and the U.S. Geological Survey, each of which are agencies critical to helping our country achieve our climate and clean energy goals. These agencies are charged with managing our nation's offshore energy resources, ensuring the safety of our workers and the environment offshore, and providing critical science on natural resources and climate change.

First, let me start with the Bureau of Ocean Energy Management, otherwise known as BOEM. BOEM is playing a vital role in facilitating the development of offshore wind energy, which has the potential to create tens of thousands of jobs and significantly reduce our reliance on fossil fuels.

Off the coast of my home state of New York, there are currently five offshore wind projects under development. Together, these projects will produce 4,300 megawatts of clean energy. That is enough to power at least 2 million homes. And New York plans to more than double that number of at least 9,000 megawatts, or 9 gigawatts, by 2035.

These projects will not just bring New Yorkers and the country clean energy. They will bring billions of dollars of revenue and 10,000 jobs to the state. I am dedicated to working with BOEM and the full range of stakeholders to make sure that these are good, union-paying jobs, and that the benefits of this new industry set a standard across the country.

BOEM also oversees oil and gas leasing off our coasts, and I look forward to hearing more about what the agency is doing to address emissions and mitigate risks to communities most impacted by offshore fossil fuel development.

Now turning to BSEE. BSEE was formed in the aftermath of the Deepwater Horizon tragedy, and is charged with ensuring that offshore energy industries operate safely and responsibly. While we in this room share different views on the future of the oil and gas industry, it is essential that current operations are conducted as safely as possible to minimize risk to workers and neighbors. The safety of our communities must be prioritized, especially for frontline communities that are disproportionately burdened with pollution and other risks.

And I am encouraged to see BSEE prioritize some of these efforts in the Fiscal Year 2024 budget request through ongoing rulemakings, including efforts to update decommissioning guidance and enhance transparency after equipment failures or "near misses."

Last, but not least, I am glad to have the USGS here with us today to highlight some of the incredible work they are doing to advance our scientific understanding of climate change and how we can adapt to it, among other important initiatives. USGS's network of monitoring stations, research facilities, and experts provide

critical, actionable data and tools to help communities on the ground deal with climate change. USGS scientists do everything from making cutting-edge models to predict climate change-driven glacial flooding in Alaska so local communities aren't taken by surprise, to helping resource managers integrate climate risks into their decision making to better prepare and respond to fire and drought.

I look forward to working with the three of you and with your corresponding agencies in our jurisdiction, and advance the progress that we are currently making.

I yield back.

Mr. STAUBER. Thank you very much. Now, I will introduce our witnesses.

Ms. Liz Klein serves as Director of the Bureau of Ocean Energy Management; Mr. Paul Huang serves as Deputy Director of the Bureau of Safety and Environmental Enforcement; and Dr. David Applegate serves as Director of the U.S. Geological Survey.

The Chair now recognizes Director Klein for her opening statement.

STATEMENT OF LIZ KLEIN, DIRECTOR, BUREAU OF OCEAN ENERGY MANAGEMENT, WASHINGTON, DC

Ms. KLEIN. Thank you. Chairman Stauber, Ranking Member Ocasio-Cortez, and members of the Subcommittee, I am pleased to appear before you today to discuss the mission and proposed budget of the Bureau of Ocean Energy Management, or BOEM. My name is Liz Klein, and I am the Director of BOEM at the Department of the Interior.

BOEM is taking a leading role in transitioning the United States to a clean energy future, one that will advance renewable energy, create good-paying jobs, and ensure economic opportunities are accessible to all communities, while continuing to manage the development of oil and gas resources on the Outer Continental Shelf. Together with our partners, we can move forward with offshore energy development in a way that helps create a cleaner, more sustainable energy future for our nation.

BOEM's FY24 budget request reflects the resources needed to further Administration priorities and develop the Bureau's capacity to execute its mission carefully, responsibly, and effectively in service of the American people. It will equip BOEM to continue to bolster the nation's energy security, foster climate resilience, meet the rising demand for renewable energy, create greater certainty for industry, conduct more environmental studies to inform our decision making, further build the National Offshore Sand Inventory, and advance critical minerals science.

In addition, the 2024 budget request supports the development of an offshore carbon sequestration program. The proposed funding would enable BOEM to effectively oversee this new activity, in partnership with BSEE, by building a dedicated team of specialized experts.

Offshore wind has the potential to play a critical role in meeting President Biden's goals of a fully carbon-free power sector by 2035, and supporting new domestic industry. The Administration established a goal to deploy 30 gigawatts of offshore wind by 2030,

which could support nearly 80,000 jobs. To date, BOEM has held 10 competitive lease sales and issued 27 commercial wind leases in the Atlantic Ocean, generating over $5 billion in high bids and over $6.4 million in annual rental revenue, forming the foundation for an emerging offshore wind industry in the United States.

In addition, BOEM recently held an auction for five wind leases offshore California. The leased areas have the potential to produce over 4.6 gigawatts of offshore wind energy, enough to power over 1.5 million homes.

BOEM is also in the planning stages for identifying areas for potential wind leasing offshore the central Atlantic, Gulf of Maine, Gulf of Mexico, and Oregon.

BOEM is making considerable progress toward our goal of 30 gigawatts by 2030. The Bureau has approved two commercial offshore wind projects in the Atlantic, and is currently processing an additional 16 construction and operations plans, which together would total nearly 27 gigawatts, if approved.

With respect to conventional energy, as of April, BOEM is managing over 2,000 active oil and gas leases on approximately 11.5 million acres of the OCS, over 70 percent of which are not yet in production. BOEM's obligations under the OCS Land Act for conventional energy include administering existing leases, permitting geological and geophysical surveys, reviewing exploration and development plans, evaluating resources, and developing a national OCS oil and gas leasing program.

As required by the OCS Lands Act, BOEM prepares the National OCS Program to schedule proposed offshore oil and gas lease sales over a 5-year period. The National OCS Program is designed to best meet the nation's energy needs, while balancing potential access to oil and gas resources with the potential for adverse impacts.

In July 2022, the Department announced the availability of the proposed program and the Draft Programmatic Environmental Impact Statement for the next National OCS Program. The proposed program includes a range of potential OCS oil and gas lease sales, from 0 to 10 potential lease sales in the Gulf of Mexico, and up to one potential lease sale in the Cook Inlet planning area of Alaska. The Department expects to complete and publish the proposed final program in September, with a final decision expected by the Secretary before the end of the year.

Thank you once again for the opportunity to join you here today. BOEM's proposed FY24 budget reflects the Administration's continued commitment to ensuring a clean and low-cost energy future, one that is sustainable and beneficial for all Americans. Our work together has the potential to shape future generations for the better. And my team and I look forward to working with the Subcommittee on these important issues moving forward.

I would be happy to answer any questions you may have.

[The prepared statement of Ms. Klein follows:]

PREPARED STATEMENT OF ELIZABETH KLEIN, DIRECTOR, BUREAU OF OCEAN ENERGY MANAGEMENT, U.S. DEPARTMENT OF THE INTERIOR

Chairman Stauber, Ranking Member Ocasio-Cortez and members of the Subcommittee, I am pleased to appear before you today to discuss the mission and proposed budget of the Bureau of Ocean Energy Management (BOEM, Bureau). My name is Liz Klein, and I am the Director of BOEM at the Department of the Interior (Department).

BOEM is taking a leading role in transitioning the U.S. to a clean energy future—one that will advance renewable energy, create good-paying jobs, and ensure economic opportunities are accessible to all communities, including underserved communities that have powered this nation for generations, while continuing to manage the development of oil and gas resources on the Outer Continental Shelf (OCS) in an environmentally and economically responsible manner. BOEM is working with Tribal Nations, other Federal agencies, state and local governments, underserved communities, ocean users, and other key stakeholders to ensure that offshore energy development is done responsibly and relies on the best available science and Indigenous knowledge. Together, with our partners, we can move forward with offshore energy development in a way that helps create a cleaner, more sustainable energy future for our nation.

FY 2024 Budget Request

The 2024 Budget Request proposes $268.2 million for BOEM operations, including $57 million in offsetting collections. The 2024 Budget Request includes a net increase in BOEM's total budget authority of approximately $50.6 million from the 2023 Enacted Budget baseline level.

BOEM's 2024 Request reflects a rigorous analysis of the resources needed to further Administration priorities and develop the Bureau's capacity to execute its mission carefully, responsibly, and effectively in service of the American people. It will equip BOEM to continue to bolster the Nation's energy security, foster climate resilience, meet the rising demand for renewable energy, create greater certainty for industry, conduct more environmental studies to inform decision-making, and further build the National Offshore Sand Inventory and advance critical minerals science.

In addition, the 2024 Budget Request supports the development of an Offshore Carbon Sequestration Program. This request funds the implementation of new authority granted in the Infrastructure Investment and Jobs Act (IIJA). The proposed funding would enable BOEM to effectively oversee this new activity in partnership with the Bureau of Safety and Environmental Enforcement (BSEE) by building a dedicated team of specialized experts and acquiring and maintaining Geological Interpretive Tools that will allow for the characterization of potential sequestration sites and carbon dioxide (CO_2) plume migration in the subsurface. Funding will also facilitate the development of a model and methodology for a comprehensive, national-level assessment of CO_2 storage capacity across the OCS.

Renewable Energy

Offshore wind has the potential to play a critical role in meeting President Biden's goals of a fully carbon-free power sector by 2035 and building a new domestic industry from the ground floor. The Departments of the Interior, Energy, and Commerce have established a goal to deploy 30 GW of offshore wind by 2030, which could support nearly 80,000 jobs. More recently, the Department of the Interior also announced an additional goal to deploy 15 GW of floating offshore wind capacity by 2035.

Renewable energy development activities include the siting and construction of offshore wind facilities on the OCS, as well as the development of other forms of offshore renewable energy resources such as wave and current energy. BOEM facilitates the responsible development of these resources through conscientious planning; meaningful engagement with Tribal Nations, government entities, ocean users and other diverse stakeholders; comprehensive environmental analysis; and sound technical review.

To date, BOEM has held 10 competitive lease sales and issued 27 commercial wind leases in the Atlantic Ocean from Massachusetts to North Carolina, generating over $5 billion in high bids and over $6.4 million in annual rental revenue, forming the foundation for an emerging offshore wind industry in the U.S. Most recently, BOEM held an auction for five wind leases offshore California, the first lease sale to help achieve the 15 GW goal for floating offshore wind by 2035. BOEM is also in the planning stages for identifying areas for potential wind leasing offshore the Central Atlantic, Gulf of Maine, Gulf of Mexico, and Oregon. The Inflation

Reduction Act directed the Department to work with the Governments of U.S. Territories to determine the suitability of, and start planning for, offshore wind leasing off their respective coasts, and BOEM intends to focus first on working with Puerto Rico.

BOEM is making considerable progress toward our goal of 30 GW by 2030. The Bureau has approved two commercial offshore wind projects in the Atlantic (Vineyard Wind offshore Massachusetts and South Fork offshore New York) and is currently processing an additional 16 construction and operations plans, which together would total nearly 27 GW if approved.

BOEM will continue to advance its renewable energy program through identifying new Wind Energy Areas (WEAs), pursuing informed leasing efforts, and improving its permitting and environmental review processes. This includes an efficient and effective process for reviewing plans to develop existing leases, and an inclusive and transparent process for identifying areas for potential future lease sales. BOEM will continue focusing on reviewing proposals for potential renewable energy projects spurred by the renewable energy goals of the Administration and coastal States.

As part of BOEM's commitment to acquire and use the best available information and Indigenous knowledge in its decision-making, BOEM is improving its processes for identifying future offshore wind energy sites. For example, BOEM is collaborating with the National Oceanic and Atmospheric Administration's (NOAA) National Centers for Coastal Ocean Science to employ a spatial model that analyzes entire marine ecosystems. This ocean planning tool will help inform BOEM's draft WEAs and will be available for public review and comment prior to final WEA designations. The Bureau is applying these changes to ongoing planning efforts in the Gulf of Mexico, Central Atlantic, Gulf of Maine, and off the Oregon coast.

At BOEM, we engage Tribes, our government partners, ocean users, and other key stakeholders throughout our planning process to identify areas where environmental impacts and user conflicts can be avoided, reduced, or mitigated. For example, in partnership with NOAA Fisheries, BOEM has developed a joint Draft North Atlantic Right Whale and Offshore Wind Strategy to protect and promote the recovery of that endangered whale while responsibly developing offshore wind energy. The strategy focuses on improving the science and identifying approaches to mitigate and monitor offshore wind development impacts on North Atlantic right whales. The strategy also establishes the agencies' plans to engage Tribal Nations, state and local governments, partners, ocean users, and other stakeholders on these issues.

Offshore wind has the potential to play an integral role in our Nation's future energy portfolio. BOEM will continue to work closely with other Federal agencies, Tribal Nations, states, and many key stakeholders to ensure the responsible development of this sector.

Conventional Energy

As of April 1, 2023, BOEM is managing 2,145 active oil and gas leases on approximately 11.5 million acres of the OCS, of which approximately 74 percent are not yet in production. BOEM's obligations under the OCS Lands Act for conventional energy include administering existing leases, permitting geological and geophysical surveys, reviewing exploration and development plans, evaluating resources, and developing a National OCS Oil and Gas Leasing Program (National OCS Program). In meeting these obligations, BOEM supports energy security, environmental protection, and economic development, including a fair market value for the American taxpayer, mitigation of adverse environmental impacts, and maintenance of adequate financial assurance by leaseholders.

As required by section 18 of the OCS Lands Act, BOEM prepares the National OCS Program to schedule proposed offshore oil and gas lease sales over a 5-year period. The National OCS Program is designed to best meet the Nation's energy needs while balancing potential access to oil and gas resources with the potential for adverse impacts from such activity.

On July 1, 2022, the Department announced the availability of the Proposed Program and the Draft Programmatic Environmental Impact Statement for the 2023–2028 National OCS Program. The Proposed Program includes a range of potential OCS oil and gas lease sales, from zero to ten potential lease sales in the Gulf of Mexico and up to one potential lease sale in the Cook Inlet Planning Area of Alaska. The Department expects to complete and publish the Proposed Final Program in September 2023 with a final decision issued by the Secretary before the end of the year.

Carbon Sequestration

In 2022, BOEM began the process of developing a Carbon Sequestration Program for the OCS. Section 40307 of the IIJA amended the OCS Lands Act to authorize the Secretary of the Interior to grant a lease, easement, or right-of-way on the OCS for activities that "provide for, support, or are directly related to the injection of a carbon dioxide stream into sub-seabed geologic formations for the purpose of long-term carbon sequestration." Additionally, the IIJA directs the Secretary of the Interior to promulgate regulations to carry out this new authority. BOEM and BSEE have been working together on these regulations.

We intend for the regulations to provide sound regulatory oversight by both BOEM and BSEE and to assure the American public that carbon sequestration operations on the OCS will be safe and protective of the environment. BOEM is requesting funds to develop a Carbon Sequestration Program comprised of specialized experts to implement and enforce the regulations, and to conduct the necessary scientific research to inform future decision-making.

Marine Minerals

The OCS Lands Act gives the Secretary of the Interior responsibility for managing marine mineral exploration and development on the OCS. BOEM's Marine Minerals Program carries out that charge, facilitating access to and managing these crucial resources to support resilient coasts, natural disaster preparedness, climate change adaptation, and critical infrastructure development and protection. BOEM's marine minerals mission involves environmentally responsible stewardship, mineral resource exploration and leasing activities, coordination with governmental partners, engagement of stakeholders, and scientific research to improve decision-making and manage risk.

As of March 2023, BOEM had conveyed the rights to nearly 188 million cubic yards of OCS sediment and executed 66 negotiated agreements for projects in eight States that have restored nearly 449 miles of coastline. BOEM expects to facilitate additional mineral exploration and leasing through FY 2024 on the Gulf of Mexico and Atlantic OCS, including the potential for the first negotiated agreement with the State of Texas.

BOEM continues to see a trend of increasing numbers of requests for OCS sediment, as well as a commensurate increase in the volume of OCS sediment allocated per year. These trends are driven by diminishing resources in state waters and a high frequency of recent storms along the Atlantic and Gulf of Mexico coasts. Because of this, BOEM is continuing the development of a National Offshore Sand Inventory to identify potential sources of sand for projects and to facilitate long-term planning.

Critical minerals also continue to be a focal area for BOEM's Marine Minerals Program. BOEM is building the National Offshore Critical Mineral Inventory to centralize information about potential OCS critical mineral resources and environmental conditions associated with critical mineral-bearing deposits. In FY 2023 and 2024, BOEM will conduct baseline assessment and environmental characterization work in the Alaska, Pacific, and Gulf of Mexico regions.

Environmental Program

All of BOEM's authorizations for energy and minerals exploration and development are subject to the environmental safeguards developed through the studies and assessments of BOEM's Environmental Program. For 50 years, the Bureau's Environmental Studies Program (ESP) has funded research on the potential environmental impacts of activities the Bureau authorizes. Because of the quality, scale, and duration of studies performed under its auspices, the ESP is a leading contributor to the growing body of scientific knowledge about the Nation's marine and coastal environments, leveraging partnerships with academic institutions and other Federal agencies to produce top-tier scientific work.

BOEM's environmental assessment staff use ESP and other research results to evaluate the environmental impacts of energy and mineral development and to develop measures for incorporation in leases, plans, and permits to mitigate and monitor those impacts. These mitigation measures are the fabric for regulatory compliance work by BOEM and BSEE.

A key recent addition to BOEM's science and assessment capabilities is the Bureau's Center for Marine Acoustics, whose work has already established it as a trusted voice in the scientific community. Additionally, since 2015, BOEM has sponsored a standing committee and other work by the National Academies of Science, Engineering and Medicine to provide the Bureau with independent and authoritative advice on our Environmental Program. Advice from the Academies, first

established by Abraham Lincoln, is a foundation for the excellence that our Environmental Program continuously pursues.

Conclusion

Thank you once again for the opportunity to join you here today. BOEM's proposed FY 2024 budget reflects the Administration's continued commitment to ensuring a clean and low-cost energy future, one that is sustainable and beneficial to all Americans. Our work together has the potential to shape future generations for the better, and my team and I look forward to working with the Subcommittee on these important issues moving forward. I would be happy to answer any questions you may have.

QUESTIONS SUBMITTED FOR THE RECORD TO LIZ KLEIN, DIRECTOR, BUREAU OF OCEAN ENERGY MANAGEMENT

Ms. Klein did not submit responses to the Committee by the appropriate deadline for inclusion in the printed record.

Questions Submitted by Representative Westerman

Question 1. Can you provide a detailed timeline of BOEM's plans to publish a final 5-year OCS plan, including environmental reviews?

Question 2. What steps is the agency taking to schedule Gulf of Mexico lease sales in 2024 and 2025 to meet the nation's energy needs?

2a) How would a one-year or two-year delay in investing in the offshore industry affect ancillary industries such as maritime transport and offshore support services, cyber security, oil-spill prevention, and has the potential impact of such delays been assessed?

Question 3. In recent notices regarding the IRA-mandated Gulf of Mexico lease sales, BOEM has reduced the areas that are being offered for lease, resulting in nearly 10 million fewer acres being offered for lease. Much of this area was previously issued for lease with certain stipulations aimed at preserving the OCS as a multiple-use resource.

3a) Why did BOEM remove acreage previously offered with mitigation measures?

3b) Do you believe that the OCS should remain a multiple-use resource?

Question 4. The National Marine Fisheries Service (NMFS) requires a Letter of Authorization to perform offshore geological and geophysical testing. Due to errors made in the preparation of the final rule and NMFS' overly conservative modeling, companies cannot currently obtain these permits.

4a) Has BOEM cooperated with NMFS in resolving problems with Letters of Authorization for offshore geological and geophysical testing?

Question 5. Has BOEM contacted EPA regarding the need for new discharge permits for offshore operations?

5a) Do you know when EPA plans to issue the new permit, and if not, can you inquire and provide that information to the committee?

Question 6. Can you provide the exact amount of decommissioning liabilities the U.S. taxpayer has acquired in the 60+ year history of offshore oil and gas development? Can you provide this information to the Committee?

Questions Submitted by Representative Mullin

Question 1. My understanding is that BOEM is working to ensure that the local coastal and inland communities near the Morro Bay Wind Energy Project are being engaged to minimize economic and cultural disruptions. The Santa Ynez Band of Chumash Indians has found that there will be no adverse effects for the Morro Bay Wind Energy Area under Section 106 of the National Historic Preservation Act. This finding is based on additional BOEM work to protect sacred and other cultural resources in the area. Please share what the Bureau has done thus far to mitigate the impacts on Indigenous cultural sites and what additional funding is still needed to ensure that the Traditional Cultural Landscape will be fully funded.

Questions Submitted by Representative Chris Smith

Question 1. Two weeks ago, BOEM, NOAA Fisheries, and the Responsible Offshore Development Alliance issued a report that claims, "Physical changes associated with (offshore wind) developments will affect the marine environment—and, subsequently, the species that live there—to varying degrees. These include construction and operation noise and vibration, electromagnetic fields, and thermal radiation from cables, as well as secondary gear entanglement." This statement seems to conflict with other statements of BOEM and the Biden Administration used to dismiss claims that offshore wind industrialization may be contributing to marine mammal deaths by interfering with their hearing. Given that no project of such magnitude has ever been constructed on the US East Coast as those off the coast of New Jersey, how can BOEM be sure of the practical effect of 3,400 wind turbines on the marine environment?

Question 2. In terms of off shore wind development and fisheries, it has often appeared that BOEM and NOAA Fisheries are not effectively working together. How can BOEM improve its coordination with NOAA fisheries, commercial and recreational fishing communities, and regional councils? I'm specifically curious about where BOEM can require OSW developers to share data with fisheries managers and scientists and multi factor bidding which potentially can encourage restoration and research efforts.

Mr. STAUBER. Thank you. I thank the witness for their testimony.

The Chair now recognizes Director Applegate for an opening statement.

STATEMENT OF DAVID APPLEGATE, DIRECTOR, U.S. GEOLOGICAL SURVEY, RESTON, VIRGINIA

Mr. APPLEGATE. Thank you, Chairman Stauber, Ranking Member Ocasio-Cortez, and members of the Subcommittee. It is my pleasure to be here today to discuss the Biden-Harris Administration's budget for the U.S. Geological Survey for Fiscal Year 2024.

As the science arm of the Department of the Interior, the USGS delivers objective, policy-neutral information used to protect life and property, inform environmental and natural resource management decisions, and serve as a foundation to advance the next generation of scientific discovery.

As the Director of the USGS, I am committed to building on our 144 years of scientific excellence focused on the needs of the nation and to ensuring that our science reaches those who need it the most.

This budget makes targeted investments in the delivery of science to support sound land and resource management decisions, and, in particular, to address the effects of environmental changes on our nation's ecosystems and physical infrastructure.

Wildfire and drought are two of the most consequential challenges facing the Department of the Interior and the U.S. Forest Service in carrying out their missions to manage natural resources. To ensure they get the best, most useful science from the USGS, we are requesting a new investment focused on working with our partners to collaboratively develop the science they need on decision making.

To enable science delivery in this and many other key areas, the budget also builds out much-needed science infrastructure, including advanced scientific computing, the next generation of the

Landsat land imaging satellite constellation, and state-of-the-art facilities to enable innovation. These resources will help the USGS meet the ever-growing demand for our science, and best ensure that it is useful and accessible to the public and to decision makers like yourselves.

The budget for the USGS energy and mineral resources programs includes funding to advance the assessments of geothermal resources and areas for potential geologic carbon sequestration. The funding also builds on investments in critical minerals research to expand assessments of mine waste resources that could be a significant new source of domestic critical minerals.

The budget for the USGS Natural Hazards Programs continues funding for the operations and build-out of ShakeAlert Earthquake Early Warning, the National Volcano Early Warning System, and implementation of the Landslide Hazards Preparedness Act. New investments would expand our work characterizing the threat posed by giant earthquakes, volcanoes, tsunamis, and landslides that can be generated in the subduction zones that lie off the edge of Alaska, the Pacific Northwest, and the Caribbean.

The budget also includes additional funding for addressing community resilience and landscape changes caused by coastal storms. These investments support our ongoing work with partners, including the National Park Service, NOAA, and the U.S. Army Corps of Engineers to help local decision makers and land managers respond to the storms they face today, and better plan for future risks.

Our core science systems programs provide essential mapping, surveying, and remote sensing capabilities. For example, Landsat has provided a continuous observational record of changes on the Earth's surface for more than 50 years, and we are preparing for the future with Landsat Next, which will collect more data than its predecessors, with more detail, as well as proposing a commercial satellite data pilot that will help the USGS better understand how commercial data can augment Landsat.

Our budget invests in high performance and cloud computing resources to meet our stakeholder needs for finer scale, better integrated models in real time. Advances in USGS ecosystems programs also supports the nation in the face of future challenges.

The budget supports a variety of work including continued monitoring of harmful algal blooms, assessments of potential biological carbon sinks on Federal lands, and partnering with states and tribes to map big game migration corridors.

Additionally, the budget supports wildlife disease work and the climate adaptation science centers.

All of this science requires a skilled workforce. As we seek to bring on board our next generation of scientific talent, we are working to strengthen our existing university partnerships and build new ones to tap into the full range of diverse talent that is out there. The USGS has partnerships with minority-serving institutions such as City College of New York and Alaska Pacific University, and we are working to expand those partnerships.

On behalf of the highly skilled and dedicated public servants of the USGS, thank you for the opportunity to testify today. I am happy to answer any questions you may have.

[The prepared statement of Mr. Applegate follows:]

PREPARED STATEMENT OF DAVID APPLEGATE, DIRECTOR, U.S. GEOLOGICAL SURVEY, U.S. DEPARTMENT OF THE INTERIOR

Chairman Stauber, Ranking Member Ocasio-Cortez, and members of the Subcommittee, it is my pleasure to be here today to summarize the Biden-Harris Administration's budget for the U.S. Geological Survey (USGS) for Fiscal Year 2024. As the science arm of the Department of the Interior (Department), the USGS delivers objective, policy-neutral, actionable scientific information to protect life and property, inform environmental and natural resource management decisions, and serve as a foundation to advance the next generation of scientific discovery. I am Dave Applegate, and it is my honor to serve as the Director of the USGS. I am committed to building on this remarkable institution's 144 years of scientific excellence focused on the needs of the Nation and ensuring that our science reaches those who need it the most.

Overall, the 2024 budget provides $1.8 billion for the USGS. The budget makes targeted investments in the delivery of science to support sound land and resource management decisions and, in particular, address the effects of environmental changes on our Nation's ecosystems and physical infrastructure. Wildfire and drought are two of the most consequential challenges facing the Department and the U.S. Forest Service in carrying out their missions to manage natural resources. Ensuring they get the best, most useful science from the USGS is a very high priority, and we are requesting an investment of $6.5 million to improve our ability to bring our science to bear on these hazards with a focus on working with our partners to collaboratively develop the science they need for decision-making. To enable science delivery in this and many other key areas, the budget also builds out the science infrastructure we need to set a firm foundation for the future, with investments in advanced scientific computing, the next generation of the Landsat land-imaging constellation, and state-of-the-art facilities to enable innovation. These resources will help the USGS meet the ever-growing demand for our science and best ensure that it is useful and accessible to the public and to decision makers like yourselves.

The budget proposes $150.8 million for the USGS Energy and Mineral Resources programs, an increase of $46.5 million over the 2023 enacted level. This includes funding to advance the assessments of geothermal resources and areas for potential geologic carbon sequestration. The funding also builds on investments in critical minerals research to expand assessments of mine-waste resources that could be a significant new source of domestic critical minerals and on funding from the Infrastructure Investment and Jobs Act, commonly known as the Bipartisan Infrastructure Law (BIL), that supports foundational data on mineral resources in the energy supply chain.

The budget for the USGS Natural Hazards programs proposes $226.2 million, an increase of $25.9 million over the 2023 enacted level, continuing funding for the operations and build out of *ShakeAlert* earthquake early warning, the National Volcano Early Warning System, and implementation of the Landslide Hazards Preparedness Act. New investments would expand our work characterizing the threat posed by giant earthquakes, volcanoes, tsunamis, and landslides that can be generated in the subduction zones that lie along the edge of Alaska, the Pacific Northwest, and the Caribbean territories. The budget also includes additional funding for addressing community resilience and landscape changes caused by coastal storms. These investments support our ongoing work with partners, including the National Park Service (NPS), the National Oceanic and Atmospheric Administration (NOAA), and the U.S. Army Corps of Engineers, to develop and disseminate models of coastal change that will help local decision makers and land managers respond to the storms they face today and better plan for future risks. More than 40 percent of the U.S. population is in coastal counties, so these hazards are a matter of national interest.

Investments in science infrastructure provide benefits for the long term. Our Core Science Systems programs are an example of this science infrastructure, as they provide many of the mapping, surveying, and remote sensing capabilities that other scientists, as well as the public, rely on. Core Science Systems also includes the National Cooperative Geologic Mapping Program and the National Geological and Geophysical Data Preservation Program that are supporting the energy supply chain work from the BIL that I mentioned earlier. The budget proposes $368.6 million for Core Science Systems, an increase of $84.0 million over the 2023 enacted levels. Landsat, which for more than 50 years has provided a continuous observational record of changes on the Earth's surface, is another part of the Core Science

System portfolio of science infrastructure investments. Landsat missions 7, 8, and 9 are in orbit and we are preparing for the future with Landsat Next, which will collect more data than its predecessors, with more detail, as well as a commercial satellite data pilot that will help the USGS better understand how commercial data can augment Landsat data. Similarly, the budget supports USGS coordination with other agencies and partners to improve Federal climate services and data delivery, providing accessible climate information to users to respond to climate risks and improve climate resilience. Our budget invests in high-performance and cloud-computing resources to meet our stakeholder needs for finer-scale, better integrated models in real-time or near-real-time. Where we are able to make these investments, we have seen the enormous difference it can make. For example, during the recent eruptions on the Island of Hawai'i, access to high-performance computing resources enabled us to estimate lava flows in 30 seconds—work that used to take 27 hours.

Advances in USGS Ecosystems programs also support the Nation in the face of future challenges. The budget proposes $395 million, an increase of $87.8 million over the 2023 enacted level, which supports a variety of work, including continued monitoring of harmful algal blooms, assessments of potential biological carbon sinks on Federal lands, and partnering with States and Tribes to map big-game migration corridors. Additionally, the budget supports wildlife disease work, such as ongoing efforts to prevent the extinction of native Hawaiian forest birds, and it supports the Climate Adaptation Science Centers. Our Ecosystems programs, along with our Water Resources Mission Area, play a key role in the proposal to transform the decision-support tools we provide to characterize the impacts of wildfire and drought.

All of this requires a skilled workforce and functional, safe facilities for them to work in. Rebuilding the USGS workforce so that we can meet the high expectations to deliver our science where and when it is needed is one of my most important responsibilities. As we seek to bring on board our next generation of scientific talent, we are working to strengthen our existing university partnerships and build new ones to tap into the full range of diverse talent that is out there. To that end, the USGS now has partnerships with five minority serving institutions, including City College of New York and Alaska Pacific University, and we are working to expand those partnerships. We are also continuing to invest in improving our facilities, including a new energy and mineral research facility on the campus of the Colorado School of Mines, continuing our move from Menlo Park to the National Aeronautics and Space Administration (NASA) Ames Research Park at Moffett Field, updated laboratory capabilities for our National Wildlife Health Center, and the re-location of the Hawaiian Volcano Observatory, which was damaged by the eruptions at Kīlauea in 2018.

On behalf of the 8,000 highly skilled and dedicated public servants of the USGS, thank you for the opportunity to testify today. I am happy to answer any questions you may have.

QUESTIONS SUBMITTED FOR THE RECORD TO DR. DAVID APPLEGATE, DIRECTOR, U.S. GEOLOGIC SURVEY

Dr. Applegate did not submit responses to the Committee by the appropriate deadline for inclusion in the printed record.

Questions Submitted by Representative Westerman

Question 1. In creating the critical minerals list your agency relies on the most recent data. But as we know, the world is constantly changing, and certain mineral supply chains can be greatly affected by the opening or closure of a single mine, not to mention wars or diplomatic breakdowns.

- *What kind of forecasting tools does your agency have to look ahead to current global events that may lead to imminent supply chain disruptions?*

Question 2. What are the selection criteria for grant recipients for the Climate Adaptation Science Centers program, and what is the methodology for creating such criteria?

- *I understand the directors of the Regional CASCS have a large amount of discretion in selecting projects for their program to fund. Is the selection criteria for the Regional CASCs publicly available and transparent to grant applications? Is this criteria uniform across the regions?*

Question 3. In the hearing, you told Congressman Collins that you would be willing to transmit additional data and calculations behind the decision to no longer consider the non-fuel uses of uranium sufficient to qualify it as a non-fuel mineral. Please transmit that data to the Committee.

Questions Submitted by Representative Lamborn

Question 1. It is my understanding that the USGS 30 Elevation Program, or 3DEP, has reached 90% completion. This is a significant accomplishment to date as I was one of over 35 bipartisan members to cosign the USGS 3DEP FY2024 funding letter to the Appropriations Committee. How does USGS plan to map the remaining 10% given most of that area is located in public lands states in the West? When will the USGS reach 100% nationwide completion for 3DEP?

Questions Submitted by Representative Gosar

Question 1. At the Committee on Natural Resources hearing on April 19, 2023, I asked Secretary Haaland about copper and the official USGS critical minerals list. In response, she referenced the next update of list coming in 2025. However, in written correspondence to the Governors of Arizona, Idaho, and Utah last year, USGS committed to not waiting until the next 3-year update if the circumstances for copper changed. In fact, in Section 7002 of the Energy Act of 2020, Congress specifically gave the Department the authority to revisit the list sooner than every 3 years. Because USGS relied upon data from 2015–2018 for the 2022 list, the methodology on copper was already grossly out of date when the list was announced. The supply risk to copper has dramatically increased since that time.

- *Given this, will you commit to revisiting the copper critical mineral score, using the same methodology and cutoff you used for the 2022 list, without waiting until 2025?*

Mr. STAUBER. I thank the witness for their testimony.

The Chair now recognizes Deputy Director Huang for an opening statement.

STATEMENT OF PAUL HUANG, DEPUTY DIRECTOR, BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT, WASHINGTON, DC

Mr. HUANG. Good afternoon, Chairman Stauber, Ranking Member Ocasio-Cortez, and members of the Subcommittee. Thank you for the opportunity to be here today to discuss the President's Fiscal Year 2024 budget request for the Bureau of Safety and Environmental Enforcement, also known as BSEE. I am Paul Huang. I am the Deputy Director at BSEE. And before I start, I do want to send apologies from our Director, Kevin Sligh, who couldn't be here today due to a family emergency.

BSEE's mission is to promote safety, protect the environment, and conserve offshore resources as we regulate and monitor offshore energy operations from exploration through facility installation, production, and ultimately decommissioning on the Outer Continental Shelf, also known as the OCS.

The Fiscal Year 2024 budget request is for $270.6 million in total funding, of which $190.9 million is appropriated, and $79.7 million from offsetting collections from rental receipts, cost recoveries, and inspection fees. The 2024 budget request fully supports President Biden's priority to tackling the climate crisis and increasing renewable energy production safely and responsibly. This includes supporting the Administration's goal of 30 gigawatts of offshore wind production by 2030, while also overseeing safe, responsible offshore oil and gas production.

The 2024 budget request helps support BSEE's renewable and conventional energy programs, which will enable timely and rigorous industry plan, permit reviews, create a robust offshore renewable compliance verification and insurance program, and demonstrate BSEE's commitment and leadership to drive safe performance and protection of all offshore workers. Additionally, to protect our nation's environmental, cultural, and biological resources on the OCS.

The 2024 budget request also supports decommissioning of orphaned wells and infrastructure. It allows us to build a carbon sequestration program and establish a tribal liaison program. Earlier this year, the Department published the Renewable Energy Split Rule. As a result, BSEE is now responsible for administering safety, environmental compliance, and enforcement of OCS renewable energy activities.

Tens of thousands of new offshore wind workers will also depend on BSEE's robust oversight of worker health and safety. We aim to deliver. BSEE is dedicated to fostering a safe and environmentally sound offshore wind industry in the United States. We are actively working with industry leaders and external organizations to develop comprehensive and technical safety standards. Our commitment to promoting a culture of safety and environmental responsibility throughout the industry is unwavering.

While the development of renewables is an increasing area of work for BSEE, we remain focused on ensuring that the oil and gas industry is operating safely on the OCS. The continued health of the oil and gas industry on the OCS contributes to our nation's energy security, and BSEE is proud to be a part of that work.

A focus in 2023 and continuing into 2024 is strengthening the organization's decommissioning oversight. BSEE uses the full spectrum of regulatory authorities to ensure timely decommissioning. For 2024, BSEE is requesting $30 million to properly plug in abandoned orphan wells in the OCS and properly decommission the associated orphaned pipelines and structures. Given that some of these structures have been waiting to be decommissioned for over a decade, further delay on receiving this funding request increases the risk of potential environmental incidences, such as oil spills.

I would like to take the opportunity to thank the hard-working men and women of BSEE. We have such a dedicated workforce. The BSEE 2023 to 2026 Strategic Plan has four key goals: people, protection, reliability, and sustainability. But without our people, we would never be able to accomplish the other three goals.

I also want to express my appreciation for your support of the BSEE mission to ensure that offshore energy and industry operates in a safe and environmentally sustainable way. Your continued

support of our budget will allow BSEE to build on the advances we have made over the years, and allow us to build our capabilities to even be more effective on the oversight of the OCS operations.

Thank you, Chairman Stauber and Ranking Member Ocasio-Cortez. I look forward to your questions today.

[The prepared statement of Mr. Huang follows:]

PREPARED STATEMENT OF PAUL HUANG, DEPUTY DIRECTOR, BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT, U.S. DEPARTMENT OF THE INTERIOR

Chairman Stauber, Ranking Member Ocasio-Cortez, and Members of the Subcommittee, I am pleased to join you today to discuss the President's FY 2024 budget request for the Bureau of Safety and Environmental Enforcement (BSEE, Bureau), a bureau of the Department of the Interior (DOI).

FY24 Request

BSEE's FY 2024 budget request is $270.6 million in total funding, including $190.9 million in current appropriations and $79.7 million in offsetting collections from rental receipts, cost recoveries, and inspection fees.

BSEE's FY 2024 Budget Request fully supports President Biden's priority for tackling the climate crisis and increasing renewable energy production safely and responsibly, and the goal of deploying 30 gigawatts (GW) of offshore wind by 2030. The FY 2024 Budget Request continues to support BSEE's renewable and conventional energy programs, which will enable timely and rigorous industry plan and permit reviews, the creation of a robust compliance verification and assurance program for offshore wind, and demonstration of BSEE's commitment and leadership to drive safe performance and the protection of environmental, cultural, and biological resources on the Outer Continental Shelf (OCS). BSEE's FY 2024 Budget Request will continue to focus attention on priority areas that foster safe and environmentally responsible exploration, development, and production of offshore resources, including activities to decommission orphaned wells and infrastructure, prepare for the advancement of offshore wind, build a Carbon Sequestration Program, and establish a Tribal Liaison Program.

The FY 2024 Budget Request will enable BSEE to continue strengthening oversight, regulatory, and research capabilities on the OCS by building and sustaining staff capabilities. Funds will be used to recruit, train, and retain expert engineers, geoscientists, and inspectors; oil spill planning, prevention, and response specialists; and employees in other disciplines to support the implementation of BSEE's regulatory oversight responsibilities. BSEE will continue outreach and dialogue with stakeholders from academia, industry, nongovernmental organizations, and other governmental agencies to enhance the knowledge base of technical personnel related to innovative technologies, regulatory gaps, real-time monitoring capabilities, and risk-based decision making for safety and environmental enforcement.

The energy resources and activities under BSEE's jurisdiction are vast, as the OCS is an important source of energy for the U.S., with significant oil and gas production and a rapidly developing offshore wind industry. The Nation's first two commercial-scale offshore wind projects on the OCS have been approved and DOI has initiated the review of an additional 14 projects that, if approved, could provide up to 27 GW of clean energy for the Nation. From January through December 2022, OCS leases offshore Alaska, California, and in the Gulf of Mexico produced approximately 630 million barrels of oil and over 784 billion cubic feet of natural gas, roughly 14 percent of domestic oil production and 2 percent of domestic natural gas. Ninety-nine percent of offshore oil and gas production occurred in the Gulf of Mexico. Deepwater wells (those in greater than or equal to 1,000 feet water depth) accounted for 89 percent of all barrels of oil equivalent produced on the OCS.

Decommissioning

Development in the shallow water areas of the Gulf of Mexico, first drilled in 1947, is mature and is experiencing drastic reductions in the number of wells drilled and the oil and gas resources produced. This area of the Gulf of Mexico is experiencing significant infrastructure removal that BSEE believes will continue to accelerate, leading to an increase in regulatory workload. Similarly, in the Pacific Region, eight of the 23 platforms no longer produce oil and gas, and are located on terminated leases that do not allow resumption of production. BSEE expects to receive decommissioning applications for these eight platforms and associated pipelines and infrastructure in the near term.

An important part of BSEE's responsibilities is to ensure that infrastructure used in exploration, development, and production activities undertaken pursuant to the Outer Continental Shelf Lands Act (OCSLA) is properly decommissioned to ensure the long-term protection of the resource and the surrounding environment. The Administration is committed to addressing orphan oil and gas wells that pose serious safety hazards and cause ongoing air, water, and other environmental damage across the U.S. Orphaned infrastructure are wells, structures, or pipelines left on the OCS following termination of the underlying lease or right of way without having been decommissioned to regulatory standards, and for which there is no remaining liable party capable of performing decommissioning. As part of this effort, BSEE is requesting $30.0 million in FY 2024 to properly plug and abandon orphaned wells on the OCS and properly decommission the associated orphaned pipelines and structures. This funding would augment forfeited financial assurances the Bureau of Ocean Energy Management (BOEM) receives from operators, proceeds from bankruptcy proceedings, and potential funds from the Federal orphaned wells program established by the Bipartisan Infrastructure Law (BIL) to address the most immediate and urgent needs to reduce the risk of safety incidents and pollution.

Offshore Wind and Renewable Energy

In addition to regulating oil and gas operations on the OCS, BSEE continues to support the development of a safe, robust, and sustainable offshore renewable energy industry in the United States. In anticipation of rapid industry growth, BSEE is engaging with offshore wind developers to identify and promote best practices for ensuring worker safety and environmental protection. Engagement with industry, Federal partners including BOEM and the U.S. Coast Guard (USCG), Tribes, and non-Federal stakeholders continues to inform the development of renewable energy program functions.

DOI is reviewing its siting and permitting processes on public lands and in offshore waters to identify steps that can be taken to increase renewable energy production, with the goal of deploying 30 GW of offshore wind by 2030 and creating good-paying jobs that support working families. The Department has issued 27 offshore wind commercial leases in the Atlantic and 2 research leases (one each in the Atlantic and Pacific). Two Construction and Operations Plans have been approved since 2021; there are 14 projects under various stages of review. Based on this activity and industry estimates, BSEE anticipates receiving over 40,000 engineering reports for review in FY 2023 and FY 2024 combined, associated with Facility Design Reports, Fabrication and Installation Reports, and Certified Verification Agent reports required by applicable regulation. BSEE will also support this effort through its environmental stewardship vision of meeting the Nation's energy and mineral needs without compromising the Nation's natural and cultural resources.

On January 31, 2023, DOI published a final rule in the Federal Register (88 FR 6376) that reassigned regulations pertaining to safety and environmental oversight of OCS renewable energy activities from BOEM's oversight to BSEE's oversight.

Carbon Sequestration

Section 40307 of the BIL amended OCSLA and authorized DOI to administer leases, easements, and rights-of-way on the OCS for geologic sequestration (i.e., storage) of carbon dioxide, and directed DOI to promulgate implementing regulations for those activities. In FY 2024, BSEE is requesting $1.5 million to establish a Carbon Sequestration Program to implement the BIL requirements. The FY 2024 request will allow BSEE to actively pursue solutions to address the unique challenges presented by sub-seabed CO_2 storage, including creating a multidisciplinary team to focus on identifying relevant industry standards and enforcement requirements, determining applied research needs and requirements, creating baseline risk assessment criteria for carbon storage projects, reviewing flow modeling, assessing conservation considerations, and instituting performance and safety standards.

BSEE is partnering with BOEM to develop new regulations and create a fully formed program for oversight of carbon sequestration activities on the OCS. BOEM will be responsible for leasing, assessing the broader environmental impact of carbon sequestration, and certain other components of the program. BSEE will be responsible for the activities related to installation, operations, inspections, emergency response plans, and decommissioning, among other roles.

Inspections and Permitting

As required by statute, BSEE conducts on-site inspections of safety equipment on each OCS facility at least once a year. BSEE will continue to execute its Risk-Based Inspections Program, which allows for targeted inspections of higher-risk operations and facilities, with increased focus on areas such as: crane safety; fired vessel

operations; continued evaluation of risks associated with high-pressure and high-temperature equipment; and implementation of a quality assurance program to support effectively carrying out core Bureau functions by promoting use of sufficient controls to mitigate risk and supporting continuous improvement.

Among the Bureau's priorities is ensuring the public receives fair market value for resources and that fees and cost recovery are fair and reasonable. In coordination with the Office of Natural Resources Revenue, BSEE's offshore inspectors ensure that production volumes are accurately measured and reported for the assessment of royalties owed to the American people. BSEE's measurement approval, verification, and inspection responsibilities help validate the collection of billions of dollars in royalties from offshore oil and gas resources each year. This important work will continue in FY 2024.

Permitting processes are also being regularly reviewed to support timely processing and appropriate consideration of the risks and phases of development on the OCS. The continuation of robust stakeholder technical and procedural workshops along with other engagement efforts is critical to the success of these modernization and reform efforts. BSEE will continue to hold stakeholder engagement meetings, including meetings with industry association groups, to provide updates on permitting procedures and BSEE's "e-permitting" modules.

In FY 2024, BSEE is requesting the authority to charge a per-visit production facility inspection fee rather than the current once-per-year fee that has been in place since FY 2012, as well as to adjust the existing fees for inflation. This will allow BSEE to recover a greater share of the actual costs incurred in overseeing these operations and reduce the direct cost to taxpayers, while providing an incentive to operators to improve safety performance and reduce the need for follow-up inspections.

Cybersecurity and Safety

BSEE will continue developing key relationships across the Federal Government in developing the BSEE offshore operational technology (OT) cybersecurity safety threat detection and mitigation program. These relationships with Federal partners, the intelligence community, and industry partners are key to ensuring that, as the program develops, it is equipped to inform and address OT cybersecurity risks on the OCS. BSEE will continue to explore program enhancements and engagement strategies to improve and integrate a cybersecurity posture within all OCS activities. Additionally, BSEE has initiated efforts to develop a cybersecurity risk profile for its offshore operators. BSEE began determining the vulnerabilities within OT systems utilized by a cross-section of these operators. Field assessments will identify strengths and weaknesses within client OT networks and provide BSEE with a snapshot of offshore operator OT vulnerabilities. This, in turn, will contribute to the development of an overall cybersecurity risk profile.

Strengthening our Regulatory Program

BSEE continues to support its statutory responsibilities by developing and effectuating a robust regulatory program. BSEE has established regulatory priorities and is working to advance all identified rulemaking efforts. Over the past year, BSEE has published the High-Pressure High-Temperature and Subpart B Revisions proposed rule, the Blowout Preventer Systems and Well Control Revisions proposed rule, the joint BOEM/BSEE Renewable Energy Reorganization final rule, and the Decommissioning Activities and Obligations final rule. BSEE is currently working on several other regulatory priorities including the Oil-Spill Response Requirements for Facilities Located Seaward of the Coast Line proposed rule, the Revisions to Subpart J—Pipelines and Pipeline Rights-of-Way proposed rule, the BSEE Renewable Energy Modernization proposed rule, and the joint BSEE/BOEM Carbon Sequestration proposed rule.

Strengthening our Commitment to Safety and the Environment

To continue and encourage the movement by operators toward a performance-based safety approach, BSEE works closely with operators as they shift their attention from designing to implementing their Safety and Environmental Management Systems (SEMS) processes. Through this approach, BSEE leverages the capabilities and expertise of government, industry, and independent third parties to continually improve safety and environmental outcomes.

BSEE's SafeOCS Program is aimed at collecting and analyzing near-miss, safety, and failure data for well-control equipment and other safety and pollution prevention equipment. The goal of the program is to identify proactive steps to mitigate risks and ensure offshore operations are safe, reliable, and environmentally responsible. BSEE will continue to obtain statistical advice on the evaluation of daily

notifications of safety events through its partnership with the Department of Transportation's Bureau of Transportation Statistics.

The BSEE!Safe program uses text messaging to send links to published Safety Alerts, which are used to inform the offshore oil and gas industry of the circumstances surrounding an incident or near miss and provide recommendations to help prevent the recurrence of such incidents. BSEE!Safe is part of the Bureau's strategy to supplement regulation with innovative programs, expanding the available toolbox of methods for driving safety performance and environmental stewardship improvements, and is the first instance in which a safety regulator has communicated directly with the industry workforce to ensure the distribution of critical safety information. As of March 2023, more than 7,900 subscribers have signed up for the service.

BSEE is also expanding the Safety Performance Enhanced by Analytical Review (SPEAR) Program, with the goal of surfacing innovative data analytic tools and strategic Bureau-wide processes. SPEAR enables BSEE subject matter experts to thoroughly analyze data to identify current and emerging safety and environmental hazards from OCS energy operations. The SPEAR Program: (1) explores the potential use of advanced data analytic tools to support the Bureau's processes; and (2) establishes a world-class approach to analyzing and communicating data and information throughout the Bureau and to external stakeholders as needs arise. In 2024, BSEE will develop new use cases to evaluate and develop data for other useful applications.

BSEE provides technical training to field personnel, inspectors, scientists, and engineers to ensure staff have the tools and knowledge needed to accomplish the agency's mission safely and effectively. BSEE's training programs provide staff with the most up-to-date, relevant training available that addresses the technological advances the Bureau's workforce will encounter in the field. The Bureau's National Offshore Training Center (NOTC) provides cutting-edge, comprehensive, multi-tiered training and professional development opportunities for BSEE's inspectors, engineers, and scientists to ensure safe and environmentally-sound offshore energy operations. In FY 2024, BSEE plans to continue to implement a multi-phased approach to assess the current program to identify training gaps, develop and implement curriculum, develop and implement an accreditation plan, and perform annual curriculum reviews. This includes incorporating training on renewable energy topics into the NOTC curriculum. These investments will help demonstrate the Bureau's commitment to building a "best in class" technical training program, and will allow BSEE to better capture and track the costs associated with the program.

Collaboration

The Bureau values its close cooperative relationships with Federal and State partners on the OCS and is also working to strengthen resources through intra- and interagency cooperation. In FY 2023 and FY 2024, the Bureau is planning on completing several state-level agreements regarding oil spill preparedness coordination. Also, BSEE has been involved in discussions on continuous safety improvement and safety culture policy with other Federal partners focused on high reliability organizations, such as the Pipeline and Hazardous Materials Safety Administration and the Nuclear Regulatory Commission. BSEE continues to engage in opportunities to leverage resources and share information across U.S. government agencies.

BSEE will continue to enhance its international collaborative efforts. BSEE engages regularly with its international counterparts to promote the safe and environmentally responsible development of offshore energy resources globally. BSEE has established itself as a leader in international cooperation, actively participating in multilateral forums such as the International Regulators Forum, the Arctic Offshore Regulators Forum, the International Offshore Petroleum Environment Regulators group, and Arctic Council bodies such as the Emergency Prevention, Preparedness, and Response Working Group. BSEE's roles in preparedness activities at the international scale span work in both temperate and Arctic waters. The Bureau is taking an international leadership role to better understand the viabilities of traditional oil spill cleanup strategies in different environments. Additionally, BSEE places a priority on maintaining strong bilateral relationships with several international partners.

Oil Spill Prevention

BSEE continues to implement a comprehensive, cost-effective, long-term research program dedicated to improving response countermeasures for oil spills offshore, including in Arctic environments. The research program is based upon a strategic plan that recognizes the evolving risks in offshore exploration and production and BSEE's mission of protecting the environment. BSEE focuses its oil spill response

research on advancing state-of-the art methods and technologies for oil spill detection.

A crucial and unique asset that aids BSEE's ability to conduct this work is Ohmsett, The National Oil Spill Response Research and Renewable Energy Test Facility in Leonardo, New Jersey. Ohmsett hosts a large, outdoor, aboveground concrete test tank that is 667 feet long, 65 feet wide, 11 feet deep, and filled to a depth of eight feet with 2.6 million gallons of saltwater and allows government agency and private industry oil spill response personnel to hone techniques and test full-scale equipment in realistic sea environments. Ohmsett plays an important role in protecting the Nation's oceans by supporting development of the most effective response technologies as well as preparing responders by creating the most realistic training environment available.

Tribal Coordination

To support the Administration's commitment to Tribal coordination and consultation, BSEE is requesting $800,000 to establish a National Tribal Engagement Program with dedicated, full-time Tribal liaison positions. BSEE has committed to growing its Tribal engagement program to engage with federally recognized Tribal Nations through government-to-government interactions. With this additional funding, the National Tribal Engagement Program will be able to provide timely coordination and consultation with Tribes.

BSEE regulates activities that may have direct or indirect impacts to the integrity of the shoreline and its ecology, offshore habitat, marine mammals, other critical species, natural view-scape, and submerged historical or archaeological sites. BSEE strives to ensure that its processes surrounding activities that may have effects on Indigenous communities are open, transparent, and thorough. BSEE hosts consultations with Tribal Nations for three primary reasons: to honor our nation-to-nation relationship; to hear directly from Tribal leaders as we address economic, racial justice, and climate crises, all of which disproportionately impact Native Americans and Alaska Natives; and to commit ourselves to a process that addresses Tribal needs and ensures we respect and understand the input we receive.

Conclusion

I would like to take this opportunity to express our appreciation for the continued support for safe and environmentally sustainable offshore energy. The FY 2024 request will support BSEE's efforts to ensure responsible development of offshore energy and mineral resources, build on the advancements that it has made, and expand its capabilities to provide effective oversight of the OCS through the initiatives outlined above.

I thank the Chairman and Ranking Member for inviting me here today and would be happy to answer the Subcommittee's questions.

QUESTIONS SUBMITTED FOR THE RECORD TO PAUL HUANG, DEPUTY DIRECTOR, BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT

Mr. Huang did not submit responses to the Committee by the appropriate deadline for inclusion in the printed record.

Questions Submitted by Representative Westerman

Question 1. Can you provide the exact amount of decommissioning liabilities the U.S. taxpayer has acquired in the 60+ year history of offshore oil and gas development? Can you provide this information to the Committee?

Mr. STAUBER. Thank you for your testimony, and we do wish the Director well in what is going on in his personal life, and we appreciate you being here at the last minute.

And thanks to the witnesses for your 5-minute opening statements.

The Chair will now recognize Members for 5 minutes for questions. And at this moment, I will recognize myself for 5 minutes.

Director Klein, it is great to see you again. We met last week in our office, and I appreciate you joining us here today. I understand that BOEM is working on a new rule concerning financial assurance for offshore operators. Do you have an exact amount of what decommissioning liabilities the U.S. taxpayer has acquired in the 60-plus-year history of the offshore oil and gas development?

Ms. KLEIN. Thank you very much for the question, and I certainly appreciated the opportunity to meet with you last week before our hearing today, and will look forward to continuing our work together.

We are in the midst of developing a financial assurances regulation. Aging infrastructure on the OCS is a concern, and we want to make sure that we are not creating undue liabilities for the American taxpayer.

I don't have the exact number off the top of my head, but I am happy to have our staff follow up with your staff on the numbers that we are seeing.

Mr. STAUBER. That would be great. And could you provide that information to the Committee?

Ms. KLEIN. Yes.

Mr. STAUBER. OK, thank you. When we talk about the revenue generated by the offshore industry, is that a good return for the taxpayers, in your opinion?

Ms. KLEIN. Thank you for that question. I think at BOEM, certainly as Director, my job is to implement the President's priorities and follow the law. Part of the mission of BOEM is to manage the environmentally responsible, safe development of resources on the Outer Continental Shelf in a way that ensures a fair return to the taxpayer, so we will continue to do that, moving forward.

Mr. STAUBER. I would just ask that you reconsider the arbitrary increase in the bonding requirements for the offshore operators be reasonable.

And as we move forward, the ESG movement continues to make access to capital harder and harder. Operators will be unable to continue to invest. And this rule just stacks another—as we saw earlier—clearly unnecessary burden on operators, regardless of the size. I would like to move from the talks about ESG and some of the other items that you will be responsible for. I want to discuss some ethics questions here.

Prior to working in this Administration, you were employed at the Bloomberg-funded State Energy and Environmental Impact Center based in New York City. Is that correct?

Ms. KLEIN. I was employed at the State Energy Environmental Impact Center, which is affiliated with the NYU School of Law. At the time I was working there, it was located in Washington, DC.

Mr. STAUBER. And then that center funds lawyers to work for Bloomberg, some of the pet causes, and the State Attorney General offices across the country. Would that be correct?

Ms. KLEIN. Thank you for the question. I welcome you to communicate with the State Impact Center about the work that they do currently. Certainly, while I was there, the mission of the center was to support State Attorneys General in their efforts to engage on environmental and energy issues.

Mr. STAUBER. And I will just say some of the lawyers that were assigned were put forth in our very own Minnesota Attorney General's office. And shortly thereafter, there were some, in my opinion, some questionable lawsuits filed by the State with lawyers paid by Bloomberg under your direction against several oil and gas firms, in line with the millions provided by Bloomberg.

In my last 47 seconds, I will just say that my concern in your position now—we had a meeting last week, and I want to be able to trust that you are going to make the best decisions. Your background does speak volumes about your angst against the offshore oil and gas industry. I would just hope that in your new position you would look at it in a broader way, that there could be reliable and affordable clean energy under the all-of-the-above opportunities for us.

So, I will just say I appreciate you coming in. I appreciate your comments today. And I will now turn it over for 5 minutes of questioning to Ranking Member Ocasio-Cortez.

Ms. OCASIO-CORTEZ. Thank you, Mr. Chair, and thank you, Director Klein.

As the Vice Ranking Member on the House Oversight Committee, one's background and any potential conflicts of interest are always something that are of high concern. I have not seen any evidence of that here, and I applaud you for your service.

In advancing much of our climate policy, I am particularly focused on making sure that we secure good jobs and invest in building and nurturing the skills needed for this new and emerging clean energy industry that is coming, that is here, that has arrived, that is growing, and that will continue to grow, virtually, no matter what we do, because the technology is here and the need is here.

However, in the 2021 U.S. Energy and Employment report, it states that only about 10 percent of solar and wind workers are presently unionized. Dr. Klein, can you speak a bit about how BOEM incentivizes project labor agreements in these offshore wind projects, and BOEM's work with Labor, State, and local government to ensure that the offshore wind industry is creating union jobs?

Ms. KLEIN. Thank you so much for the question. I think certainly when the President set a goal of 30 gigawatts of offshore wind by 2030, and then our additional goal to hit 15 gigawatts of floating offshore wind by 2035, he really views this as a way to create jobs here in the United States, to strengthen our domestic supply chains, and to create real economic opportunities for communities all across the country.

In some of our recent offshore wind auctions, BOEM actually found some innovative ways to include lease stipulations that encourage lessees to really make every available effort to enter into project labor agreements, and really ensure that we are creating that pipeline of domestic workers, and ensuring that, again, this effort to transition to cleaner energy sources is a job creation opportunity.

Ms. OCASIO-CORTEZ. Thank you. And Director Klein, I applaud the efforts that BOEM is taking to encourage unionization and PLAs in the offshore wind workforce.

I would like to turn now to inquiring a little bit about the community benefits and environmental justice in our offshore wind development.

I seek unanimous consent to enter into the record a letter from Taproot Earth, a global environmental justice organization that was delivered yesterday to BOEM's Office of Emerging Programs.

Director Klein, this letter notes that in a previous offshore wind lease sale notice for waters off the coast of California, BOEM provided a 2.5 percent credit to developers if they entered into a Community Benefit Agreement. CBAs are agreements signed by community groups and developers that identify community benefits that the developer will provide in return for the community support for the project. However, in BOEM's February 2023 Public Sale Notice for the Gulf of Mexico, no such CBA incentive is offered. So, Director Klein, could you please explain how BOEM chooses to incentivize Community Benefit Agreements in their offshore wind lease sales?

Ms. KLEIN. Thank you very much for the question. Certainly, again, we really are working very hard at BOEM to find innovative ways throughout the process, including the leasing process, to incentivize not just the domestic supply chain, but also ensuring that communities have a real voice in this development, moving forward.

You mentioned the Community Benefit Agreements, which are something we have deployed in California. I don't have the details of the Gulf of Mexico Proposed Sale Notice, but would be happy to follow up with your staff to get you those details.

I would also say that environmental justice concerns that have been raised to us by communities across the country are also at the forefront of our minds. So, we are working, for instance, in New York and New Jersey to do quarterly community meetings, where stakeholders come together and exchange feedback and ensure that we are really bringing benefits to these communities, moving forward.

Ms. OCASIO-CORTEZ. Thank you.

Director Klein and Deputy Director Huang, in a recent GAO report it was revealed that since the 1960s, BSEE and BOEM have allowed the offshore oil and gas industry to leave 97 percent of pipelines—that is 18,000 miles of infrastructure—on the sea floor of the Gulf of Mexico when no longer in use. This infrastructure is now inhibiting the development of offshore wind.

Deputy Director Huang, I understand that BSEE has discretionary authority to enable oil and gas companies to decommission in place. Can you speak a little bit as to why we are not presently requiring that companies clean up old pipelines?

And also, to Director Klein, can BOEM potentially mandate that oil and gas lessees hold fully vested trusts that ensure cleanup of infrastructure and wells?

Mr. HUANG. Yes, thank you for that question, Congresswoman.

We, at BSEE, are in charge of the entire life cycle, including decommissioning and timely decommissioning. We work closely with offshore producers to ensure that they are true to their commitments, and we have done a couple of things recently to improve that.

One was an update to our financial assurance rule to ensure that all parties, not just the current operator, get together and determine how best to address the decommissioning issues and liabilities.

Secondly, we also are updating completely our Subpart J regulations to ensure that we are looking at leak detection, pipeline integrity, and also removal of pipelines no longer used, to ensure that they are environmentally safe and compliant and removed when not used.

Ms. OCASIO-CORTEZ. I believe Director Klein is——

Mr. STAUBER. Director, do you want to follow up on that, quickly?

Ms. KLEIN. Sure, thank you. I would just say, building off of what Deputy Director Huang mentioned, we work closely with BSEE on decommissioning activities throughout the process, and the financial assurances rule that BOEM is also working on is meant to really ensure that we are not saddling the taxpayer with undue costs associated with orphaned infrastructure. And it is certainly a priority for the Bureau, moving forward.

Mr. STAUBER. Thank you very much.

And for the Members here, you will notice that I let my Ranking Member go a little longer. One of the things that Representative Lowenthal and I agreed on, as long as it is respectful, we can go a little bit to allow a question to be completely answered. So, as long as we remain respectful, I think that is the right thing to do.

The next individual, Mr. Rosendale, you are up for 5 minutes of questioning.

Mr. ROSENDALE. Thank you very much, Mr. Chair.

Mr. Applegate, thank you so much for being here with us today and providing your testimony regarding the USGS and the President's budget. I appreciate it.

I understand the importance of using real, science-based approaches to land and resource management. Montana is known as the Treasure State, and we would love to be able to unlock those resources and develop them in a responsible manner to keep and maintain that name.

In your testimony, you mentioned wildfire and drought as some of the most consequential challenges facing the Interior. I am glad you brought that up, because I have been very concerned about the lack of scientific reasoning used to make decisions concerning forest fires and drought in Montana. When you consider wildfire management and a science-based approach, does your Department include timber harvesting in those discussions?

Mr. APPLEGATE. Thank you very much for the question, and this is a key area where we are looking to ensure that our science is being put to use.

We look at wildfire both from the standpoint of the fuel loading, that is sort of that front end, including it is one of the capabilities we are able to bring our Landsat satellite to understand the vegetation loads, so that is an aspect of it, is forestry. And we are also looking at not just forested landscapes, of course, but also, for example——

Mr. ROSENDALE. I understand the things that you are looking at. But what I am asking is, are you considering the harvesting of

timber as you look at that? Because clearly, it doesn't take a scientist to figure out that when you have a forest that has not been harvested, that you have so much fuel, and you can look at as many different types of information you want, that is going to create a larger risk of wildfire than one that has recently been harvested and is managed. And I have looked at these forests, and they are much healthier after that.

So, are you taking into consideration the acreages that you are harvesting timber on, and the health of those forests, as opposed to the forests that are not being managed?

Mr. APPLEGATE. Yes. I do want to emphasize, in this area in particular, we have partnered very closely with the Forest Service and their tremendous research capabilities. They are primarily focused on those forested landscapes, on those harvest landscapes. So, I think a lot of that research is sort of more over in their bailiwick. We are particularly looking at Department of the Interior-managed lands, for example, understanding the sagebrush biome and other capabilities like that.

Mr. ROSENDALE. But, again, we do have a lot of Interior lands that are forested, as well.

Let me provide you with some statistics from the Congressional Research Service. Forty years ago, over 10 billion board feet was harvested from Federal forests, and less than 4 million acres burned in wildfires. So, we were at a ratio of much more timber being harvested and dramatically less wildfire acreage being destroyed.

As important to me and to the taxpayers, everyone around this room, we were generating in today's dollars about $2 billion a year worth of revenue from that timber that was being harvested, basically funding Forest Service actions. Right now, we are looking at about $150 million a year of revenue, and it is just a fraction of it.

Again, this trend has remained true since the 1980s. As timber harvesting is reduced, wildfires burn more land. It is really not complicated. Will you take these statistics into account when you discuss how to deliver science to the agencies?

Mr. APPLEGATE. Yes, absolutely, sir. We are part of the Joint Fire Science Program with both the Department of the Interior and Agriculture. And as part of that effort, this is an area of active research and investigation. We will certainly take that into account, yes.

Mr. ROSENDALE. OK, it looks like I am going to get down to my time.

I served on the State Land Board for the state of Montana for 4 years, managing all of the school trust lands. And we had a sustainable yield amount of 45 million board feet a year on school trust lands that was our target to make sure it could be replenished each year. Sustainable yield for the forest. We hit it every year, 45 million board feet, year after year after year.

The Forest Service has exponentially many more acres of land. Could you tell me what the sustainable yield acreage is for either Montana or cumulatively across the nation of what your target amount is?

Mr. APPLEGATE. Again, we are there to have our science put to use, but we would not be setting target amounts. We are there to inform the policy decisions, we are there to inform them——

Mr. ROSENDALE. But if you are going to be using good science, a sustainable yield harvesting number is critically important to make sure that we keep a healthy forest. It truly is.

Well, I will tell you that the sustainable yield amount for Forest Service throughout Montana is about 140 million board feet a year, much more than the 45, but they only harvest 42 million board feet a year. Therein lies the problem.

Thank you. I yield back, Mr. Chair.

Mr. STAUBER. Thank you very much. Next, Representative Kamlager-Dove, for 5 minutes.

Ms. KAMLAGER-DOVE. Thank you, Mr. Chair. This first question is for Director Klein.

According to Oceana, fishing, tourism, and recreation support nearly 600,000 jobs along California's coast—I represent Los Angeles in California—and generate over $42 million in GDP. And we know that where you drill, you spill. Most recently in 2021, an underwater pipeline leaked tens of thousands of gallons of oil, threatening communities' livelihoods across the state. And, oftentimes, the fossil fuel pollution from offshore drilling is hurting low-income families the most.

As you develop the next 5-year plan for oil and gas development, how are you considering state and community perspectives and well-founded opposition to new drilling, as well as climate impacts?

Ms. KLEIN. Thank you very much for the question. The National OCS Program, which I mentioned, is in development currently. We expect to have the proposed final out in September, with the Secretary ultimately making the decision before the end of the year.

As the Secretary makes that decision, she is actually required to evaluate a range of factors, including not just needs for energy supply, but also the concerns of communities, the potential for environmental impacts. So, the issues that you mentioned certainly are of high importance to the Secretary as she makes those decisions.

And I can say that, certainly, the feedback that we get from states is also critically important. The extent to which there is industry interest or state interest in having that type of activity off their coastlines is very important to the Secretary as she makes that decision.

Ms. KAMLAGER-DOVE. Thank you.

Director Applegate, this question is for you. I would like to turn to the importance of climate science, and ask about the USGS's role in informing policy and decision makers on the ground.

So, as we know, USGS plays a crucial role in providing scientific data and analysis to help us understand how climate change is affecting our natural resources, our communities, and the economy today, as well as how we plan for the future. However, it has been a fight to keep up adequate funding for these programs. How are communities around the country using USGS's data and tools to understand and address the impacts of climate change in their daily lives?

Mr. APPLEGATE. Thank you very much for that question and, absolutely, that is very much the goal. We use very practical, pragmatic science, understanding what those impacts are. So, whether it is decision making associated with land use as we see changing patterns—for example, changing regimes for invasive species; looking at impacts, for example, with coastal communities as we are seeing the combined effect of sea level rise, of coastal subsidence, as well as then extreme storms—so for coastal communities it is understanding that combination of impacts, both for the hazards they face today and the hazards they are going to face in the future.

So, we focus a lot on what we call co-production of science, so that we are actually working with communities to understand what are the issues that they are wrestling with, and then how can we bring science to help support the decision making.

Ms. KAMLAGER-DOVE. Thank you for that. And the follow-up question is, can you sort of talk to the importance of funding this work?

Mr. APPLEGATE. Absolutely. Funding is a key part of this. In the budget request that we have put forward, we have a number of investments related to, particularly looking at community resilience, being able to see the science put to work and, again, understanding what the biggest challenges are that we can help to inform.

Ms. KAMLAGER-DOVE. Great, thank you.

I have no further questions. I just wanted to let Director Klein know that this is also the very respectful Committee on passion and body language. I am warning you in advance, and thank you.

I am going to yield back.

Mr. STAUBER. Thank you very much. The next Member up is Representative Westerman, the Chair of the Full Committee.

Representative Westerman.

Mr. WESTERMAN. Thank you, Chairman Stauber, and thank you to the witnesses for being here today.

Director Klein, in your testimony you state that BOEM is expected to publish the 5-year offshore leasing plan in September 2023. How many lease sales has BOEM traditionally offered in the Gulf of Mexico prior to Secretary Haaland's arrival and your arrival at the Department?

Ms. KLEIN. Thank you for that question. I don't have the numbers off the top of my head for all of the lease sales in the Gulf of Mexico for each 5-year program prior to the Secretary arriving. But, certainly, I know that I had the opportunity to be in the Gulf just last month for Lease Sale 259, so we are continuing——

Mr. WESTERMAN. I will help you out. It has been at least two annually, and I believe you actually were able to do two lease sales because the IRA did two lease sales, and the proposed program published by BOEM in July 2022 includes two potential lease sales in the Gulf of Mexico for 2024. Is that correct?

Ms. KLEIN. Thank you for the question. I believe the proposed program that we put out evaluated a range of options from 0 to the potential of 10 lease sales. We are, of course, required to evaluate a range of options. And as you know, the Secretary ultimately

makes a decision balancing a range of factors for the final version of the program.

Mr. WESTERMAN. OK. Well, I believe you did put out two potential lease sales, but that leads into my next question. Have there been any specific environmental reviews undertaken or even started for those potential 2024 sales, regardless if it is 2 or 10?

Ms. KLEIN. Thank you. As I said, we are working very hard to go ahead and put out the proposed final program by September 2023. The Secretary——

Mr. WESTERMAN. But have you started any sale-specific environmental reviews for 2024 sales?

Ms. KLEIN. We have not yet started any specific environmental reviews. Certainly, the Secretary is expected to make a decision before the end of the year.

Mr. WESTERMAN. OK, but you do have the ability to initiate that process as Director, correct?

Ms. KLEIN. Again, the Secretary is expected to make a decision on the program by the end of the year. And once that decision articulates how many lease sales there will be, we will follow the law and proceed from there.

Mr. WESTERMAN. So, there have been no sale-specific environmental reviews undertaken and, if I am hearing you correctly, that is not going to happen until the end of the year, when the Secretary makes a decision.

I have come to learn that at a recent Offshore Operators Committee meeting in New Orleans that BOEM officials suggested that the review timeline for NEPA for any forthcoming sales would take at least 2 full years. Is that correct?

Ms. KLEIN. Thank you for the question. I understand that environmental reviews can take a range of time to undertake, so I can't say that I can predict how long any particular review will take at this time.

Mr. WESTERMAN. Well, BOEM officials said it would take at least 2 full years. So, if the 5-year plan is finalized in December, and NEPA is projected to take 2 years, when will the first sale happen if it all goes perfectly?

Ms. KLEIN. So, I think we are on track to put the proposed final program out in September. Then, the Secretary is expected to issue a decision before the end of the year. I think it is premature for me to say what might be in that decision.

Mr. WESTERMAN. So, if the end of the year or the start of next year is 2024, and it takes 2 years, as your office has said it will take to do NEPA permitting, we are talking about 2026 before the first oil and gas lease can occur. That will be spring of 2026, at the earliest. Would you disagree with that or agree with that?

Ms. KLEIN. As I said, I think it would be premature to predict the final decision that the Secretary makes in the program, which is expected before the end of the year.

Mr. WESTERMAN. So, it could be longer than that, but there is nothing out there that is going to speed that up, and this gets to my final point.

The Inflation Reduction Act prevents the Agency from issuing wind leases unless an oil and gas sale is held within the previous year. If the only currently planned sale takes place in September

of this year, and we have no oil and gas leases until 2026, what does that say about when wind leasing may occur?

[Chart.]

Mr. WESTERMAN. And you can feel free to use the chart behind me, and I wouldn't say cheat, but if you need some help figuring out when that date is going to be——

Ms. KLEIN. Thank you. We certainly take the direction that we have received in the Inflation Reduction Act seriously, and intend to follow the law in terms of the coupling, so to speak, between our offshore oil and gas lease sales and our offshore wind lease sales. I think, as I have mentioned in my opening statement, we feel confident in our ability to move forward with the President's goal of meeting 30 gigawatts of offshore wind by 2030.

Mr. WESTERMAN. Feeling confident and aspirational won't do much to help our energy situation here. And it appears to me that we are looking at no lease sales for oil and gas in 2024 or 2025, and none for wind in 2025. That looks like where we are at in the process right now.

My final question will be, is there anything you will try to do to speed that up? Because I know a lot of us are interested in all-of-the-above energy. And according to the IRA, you can't issue wind leases until you do some oil and gas leases.

Ms. KLEIN. Thank you. From my perspective, I feel honored to be Director of BOEM at this time, and implement the President's priorities, follow the law——

Mr. WESTERMAN. Is it the President's priorities to not be energy independent and not to produce our own energy?

Ms. KLEIN. Thank you for that question. I think the President has indicated that energy security and energy independence is important to him, and one of the ways that he views we can do that is to facilitate renewable energy, including the wonderful domestic offshore wind energy we have here in the United States.

Mr. WESTERMAN. I apologize, Chairman. I went way over time. But thank you to the witnesses, and I yield back.

Mr. STAUBER. Thank you. The Chair now recognizes Representative Lee for 5 minutes.

Mrs. LEE. Thank you, Mr. Chair, and thanks to the witnesses for being here today.

Director Applegate, I would like to ask a couple of questions about you. I represent Nevada. As you know, we are in the middle of a 23-year drought, although there has been some recent rains, but it is still drought conditions. And water, every drop, counts. And as we know, the largest share of our water use is water loss. That comes from a combination of evaporation and transpiration, or evapotranspiration. I will just say ET from now on.

Last month, I led a bipartisan, bicameral reintroduction of the Open ET Act. This is legislation that will establish an open access ET data program within the USGS to support the generation and distribution of satellite-based ET data. Can you explain why ensuring the accuracy and accessibility of such data is so critical to achieving a more sustainable future for places like the Colorado River Basin?

Mr. APPLEGATE. Thank you very much for the question. And as you indicated, evapotranspiration is a key component of

understanding the overall water budget. One of our responsibilities at the USGS is to undertake a water census. So, this information that is derived from the Landsat satellite capability has been very valuable to us in understanding the complete picture.

We are very, very pleased to be part of the Open ET consortium, working with university partners to be able to better characterize this tool capability, and also to explore how it can be applied more broadly.

Mrs. LEE. Yes, thank you. You do play an active role behind this existing, but limited program. Not only NASA, non-profits, universities, the Environmental Defense Fund take part in this program, as well. And one of the survey's key partners in this effort is the U.S. Department of Agriculture.

So, I would like to ask you how you could highlight how and why farmers and ranchers stand to benefit as much as Federal, state, and local water managers from this enhanced and reliable data.

Mr. APPLEGATE. Thank you again for the question. And, of course, particularly as we think about the arid West, but even as we extend it into the somewhat more humid Midwest, for farmers, anyone west of the hundredth meridian, every drop counts when we think about irrigation practices. So, the better that we can characterize this aspect of that total water budget, certainly, is going to be a benefit to the agriculture community, just as it is for land managers and all of those who are concerned about the many, many uses of water in the West.

Mrs. LEE. Clearly, water use is incredibly important to my state and all the seven states in the Colorado River Basin. And it is precisely all of the benefits you just highlighted that I led the effort to increase funding for the Open ET program from $1.5 million in Fiscal Year 2022 to $3.5 million in Fiscal Year 2023. And I just want to say, I will remain committed to continuing to increase funding for this vital public-private partnership in Fiscal Year 2024.

Before my time runs out, I want to just turn briefly to the 3D Elevation program or 3DEP. This is, as you know, a goal to provide a national baseline of consistent topographic data. Since the full year of 3DEP production in 2016, the Southwest has been one of the most under-mapped regions, Nevada being the most under-mapped state.

Can you provide an update of the status of 3DEP, both nationally and specifically the Southwest?

And, also, when can Nevadans expect to have complete 3DEP coverage?

Mr. APPLEGATE. Sure, thank you for that question. And, of course, this has been just an extraordinary set of partnerships that have enabled us to collect this high-resolution elevation data with an extraordinary range of applications. Nationwide, we are at about 90 percent in terms of acquisition and acquisitions that are underway.

For the Southwest, that number has lagged, in part with the heavy amounts of public lands, that somewhat limited the range of partners. But we are at about 85 percent.

And specifically with Nevada, I am very pleased to see that we have been able to tap into a number of partnerships, including with

some of the new investments associated with the infrastructure law. So, we are hoping to have acquisitions completed by the end of 2023 is my understanding.

Mrs. LEE. Great, thank you. I look forward to continuing to work and support that effort. And I yield.

Mr. STAUBER. Thank you. Next up, Representative Collins for 5 minutes.

Mr. COLLINS. Thank you, Mr. Chairman.

Director Klein, I wanted to follow up on an answer that you gave Mr. Westerman. You said that the President said it was important for us to be energy independent. Is that also a priority?

Ms. KLEIN. Thank you for the question. I think the President has indicated that energy security and a transition to cleaner energy sources, tapping into the domestic resources we have offshore is a priority.

Mr. COLLINS. All right, thank you. Also, Director Klein, the Biden administration prioritized its climate agenda over domestic energy production, and that has led to increased energy prices that affect all Americans, including Georgians, where I am from.

Of serious concern, is the Agency's decision to issue leases in Cook Inlet in Alaska with the highest possible royalty rate due to undefined social cost of greenhouse gas emissions. With this in mind, I have a few questions that I wanted to run by you regarding the woke and pandering policies of this Administration, which Congress has not authorized or mandated.

In my view, calculating the social cost of greenhouse gases is critically harmful to society, rather than helpful, due to the inherent uncertainties and limitations involved in your assumptions. I say assumptions, because they are not calculations because all we know there is no consensus on determining an accurate formula for social cost of GHG emissions.

So, Dr. Klein, do you believe that energy security is a national security?

Ms. KLEIN. Thank you for the question. I think the President has said that he believes climate crisis is something that the Federal Government has an obligation to address. And the social cost of carbon that you mentioned is a way for operators to internalize the costs of their greenhouse gas emissions, and——

Mr. COLLINS. No, I was asking do you believe that energy security is a national security?

Ms. KLEIN. My job is to implement the President's priorities. And the President has indicated that energy security is a priority for this Administration.

Mr. COLLINS. So, where in the law is the Agency directed to study the cost of greenhouse emissions and bake it into the royalty rates for offshore lease sales?

Ms. KLEIN. Thank you for the question. We are provided the authority under OCSLA to set royalty rates for our oil and gas lease sales, and the Inflation Reduction Act provided us with the direction to set a minimum and then a maximum. And within the analysis that was done in order to ensure a fair return to the taxpayer, and also to ensure that we are addressing the climate change impacts in a way that the President has said is a priority.

We also calculated a social cost of carbon to set the royalty rate at 18.75 percent, which the Inflation Reduction Act allows us to do.

Mr. COLLINS. So, do you believe that relying on these flawed or biased calculations for the social cost of GHG emissions that could ultimately do more harm than good?

Ms. KLEIN. Thank you for that. I, as Director of the Bureau of Ocean Energy Management, have the great privilege to work for just an amazing group of really dedicated, smart, hardworking public servants who contributed to that analysis.

And the Inflation Reduction Act allows us to set both a minimum and a maximum for the royalty rate. The President has made clear that he thinks addressing the climate crisis is something the Federal Government has an obligation to do, and we are moving forward with that implementation of that priority in part through the setting of royalty rates.

Mr. COLLINS. All right. Thank you, ma'am.

Dr. Applegate, I am going to try to kick this out real quick. Uranium, while primarily is used as a fuel mineral, it is also been important in non-fuel uses related to national security. What sort of analysis determined that uranium's non-fuel uses were no longer sufficient to qualify that as a critical mineral?

Mr. APPLEGATE. Thank you for that question. As I think reflected in your comment, the primary usage of uranium is as a fuel mineral. And the Energy Act of 2020 did exclude fuel minerals from the critical mineral list. And that was because of the dominant nature of that, that is what reflects its lack of inclusion——

Mr. COLLINS. But you would say that it has non-fuel uses, as well.

Mr. APPLEGATE. Yes, more limited than the fuel uses.

Mr. COLLINS. So, what made them no longer sufficient to qualify them as a critical mineral?

Mr. APPLEGATE. We would be happy to get back to you on the specifics in terms of what goes into the calculations associated with these determinations. But it is both looking from the standpoint of the resource itself, as well as looking at the vulnerability of supply chains. So, those are the factors that go into determination.

But, again, specifically in the case of uranium, its exclusion does reflect the fact that we did have direction to not include fuel minerals.

Mr. COLLINS. Would you say it is very important to national security, as far as non-fuel uses?

Mr. APPLEGATE. I will say that our focus is very much on being able to characterize all minerals, whether or not there is an inclusion in the critical minerals list. Our National Minerals Information Center is looking at all applications, all minerals. This is information that we see as being very important to determine to be able to address these.

But I certainly can get back to you with any specifics on that question.

Mr. COLLINS. All right. Thank you, sir.

Sorry for going over, Mr. Chairman. I yield back.

Mr. STAUBER. Thank you very much. Next up, Representative Huffman for 5 minutes.

Mr. HUFFMAN. Thank you, Mr. Chairman.

Director Klein, welcome to our Subcommittee. The purpose, I think, of this hearing is supposed to be to examine the President's budget request for your agency, but it sure didn't seem like it when you were taken down the rabbit hole of dog whistle conspiracy theories a little bit earlier in the hearing. I am sorry that you endured that, but thank you for your service, and for being here to answer our questions.

I am going to stay focused on this issue of royalties. And I want to ask you about fossil fuels and the external costs that are inherent in the extraction and development of fossil fuels. We know residents of Cancer Alley in Louisiana, for example, have a 50 percent greater chance of developing cancer than other U.S. citizens. Health costs for communities like Cancer Alley, not to mention the cost for mitigating and adapting to sea level rise, seem like major factors in considering the costs of fossil fuels.

Now, you have some discretion when it comes to setting royalty rates for individual lease sales, correct?

Ms. KLEIN. Thank you for the question. Yes, that is correct. We have discretion under OCSLA, and then the additional direction under the Inflation Reduction Act.

Mr. HUFFMAN. So, what does BOEM take into account when deciding royalties in these situations? Do you account for social costs?

Ms. KLEIN. Thank you for the question. Again, I think, the President has made clear that the climate crisis is something that the Federal Government has an obligation to do something about. There is a tremendous amount of effort across the Administration to address some of the very concerning impacts to communities that you noted there, from coastal erosion to extreme droughts and wildfires. These are having real impacts in communities across the country. And, certainly, as we calculate a social cost of carbon associated with the emissions of greenhouse gases, the types of costs associated with that are taken into account.

And as we set royalty rates, the Inflation Reduction Act allowed both for a minimum and a maximum. And the folks at BOEM were able to set a royalty rate that we think ensures a fair return to the taxpayer, but also ensures that oil and gas operators are internalizing the costs of their activities.

Mr. HUFFMAN. I appreciate hearing that. I think it is appropriate that those who develop and profit from the extraction of fossil fuel bear those costs instead of externalizing them onto the public and onto communities like Cancer Alley. So, thank you for including that.

I want to ask you now about a form of energy that is not causing cancer, that is not emitting greenhouse gases that are killing the planet. To my knowledge, this is a form of energy that doesn't involve explosions or massive spills that create ecological disasters. I don't think there has ever been a war fought over this form of energy. So, those concerned with energy security should embrace this form of energy. I am talking about wind energy and, in particular, offshore wind.

I think you know that in my part of Northern California we have some of the best wind energy resources around. We are very excited to be moving forward after a successful auction. Yet, these

floating offshore platforms do face some challenges. We have a relatively new technology and transmission challenges to really realize the full benefits of this.

Can you speak to how BOEM is working with industry and the Department of Energy and other stakeholders to prepare for this new technology, especially in terms of siting?

Ms. KLEIN. Thank you very much for that question. We certainly share the enthusiasm about the prospect for offshore wind off California. And I know the state of California is exceedingly excited about the prospects for offshore wind and meeting its own energy goals.

We work very closely with the Department of Energy at BOEM on the floating offshore wind challenges. And I know Energy has set its own goals to try to support decreasing the costs of this new technology, because it does hold such great prospect for bringing offshore wind to coastlines where the topography wouldn't allow for necessarily your fixed turbines.

So, we work closely with the Department of Energy, certainly, on transmission issues, as well. We recently concluded a series of workshops to do some planning on the Atlantic, and plan to do a similar effort on the Pacific, because we know that, certainly, making sure that we are taking a diligent and holistic approach to transmission planning will be crucially important for this industry, moving forward.

Mr. HUFFMAN. Thank you.

Director Huang, did you have anything to add to that?

Mr. HUANG. No. Thank you for the question, Congressman. Offshore floating wind is an emerging technology, and one that, thanks to the funding provided the last 2 years for BSEE, we have been able to staff up some researchers to ensure that we are coordinating with industry, researchers, and learning from global partners on how to safely stand up offshore floating wind.

Due to the conditions in the Pacific, the depth of water, and seismic risk, floating wind seems to be a solid solution, and we have to just make sure that we are doing it safely in a way that is also protecting the environment.

Mr. HUFFMAN. Thank you. Just one last question.

Director Klein, I am particularly interested in the energy transmission line bottleneck, and I just wonder if you could speak to how the funds that Congress provided in the Inflation Reduction Act last year are being put to use to make sure we are coordinating and streamlining and planning for the kind of transmission that we will need to speed this along.

Ms. KLEIN. Thank you for that question and, certainly, BOEM is grateful for the funding identified in the Inflation Reduction Act that went to the Department of the Interior. BOEM will be able to avail itself of a portion of that to work on just these types of issues, the type of environmental analysis, and planning, and stakeholder engagement that is really crucial as we move through this process.

And, certainly, our FY24 budget request also includes what we think are a reasonable approach to making sure that BOEM can be the most capable and efficient bureau that it can be on all of these issues.

Mr. HUFFMAN. Thank you, Mr. Chairman, for the extra time. I yield back.

Mr. STAUBER. Next up, Representative Duarte.

Mr. DUARTE. Thank you for being here. Thank you, Mr. Chairman.

Director Klein, you mentioned 30 gigawatts of wind energy targeted by the Biden administration between now and 2030 to provide renewable energy. I am Googling it as you speak, and I find that America is currently using about 100 quadrillion BTUs—they call it a quad—a year, and that 30 gigawatts is 1 percent of that. Is that as you understand it?

Ms. KLEIN. Thank you for the question. I don't know that I have seen those same sources, but would be happy to have my staff follow up with the specifics.

Mr. DUARTE. No, I just encourage you to have a conceptual idea of what we are talking about, because I believe that is true. I had my staff look at it.

So, we are talking about 1 percent of the nation's energy demand between 2023 here and 2030 being put in wind energy. And we are talking about oil leases and gas leases kind of being drug their feet on, from our perspective. We don't have a plan B for carbon energy right now. Thirty gigawatts sounds great, but it is 1 percent of our total energy needs, and it is going to occur in this program alone over the next 8 years.

So, it is not a solution. We are still working out transmission lines. The gentleman here is saying it is an emerging technology, and we have to make sure it is delivered safely. So, we really can't rely on it, and we are not developing the carbon energy sources we need today. And that concerns me, because I think it is imposing scarcity on working Americans nationwide. I think it is destroying their opportunity and affordability. And I think it is pushing many American working families up against the edge of privation with high energy costs, high food costs, and destroying our manufacturing base.

Carbon energy or carbon gas and oil aren't just energy, they are also manufacturing, they are fertilizer, they are plastics, they are pharmaceuticals, they are chemicals. So, we are really destroying not only our energy base, but as well as our manufacturing base. I will stop there; I want to talk to Mr. Applegate.

Thank you for coming today. I understand the USGS provides information, resources, and technologies that support decision making. In California, where I am from, in my district we stand to face torrential floods over the next few months. It is coming. The USGS has mapped the drainages, the water systems, where the channel flow is going to be.

Bureau of Reclamation, Army Corps of Engineers, U.S. Fish and Wildlife, NOAA, have any of these groups approached you in the last few months—I am going to ask you to send me their communications—and asked you for resources from your USGS technologies to show them where the choke points are, where the most critical flooding is likely to occur, where the dredging, where the levees, where the infrastructure improvements need to be made posthaste, or at least where flood preparations can occur? Because catastrophic flooding is highly likely to come.

Mr. APPLEGATE. Thank you for that question. And, absolutely, in light of the really extraordinary sequence of atmospheric rivers that struck the state, now we are looking at this next phase of challenge.

We work very closely with the state, with NOAA, with the Army Corps, with Reclamation, our sister bureau, a number of other partners to bring our science to bear, whether it is from the standpoint of monitoring——

Mr. DUARTE. Be very specific, please. In the last 3 months, since the beginning of the year, when the torrential flooding looks imminent, I would say, both on the coast and in the Central Valley are there specific programs that you are engaged in today or your group is engaged in today to deal with, map the flooding, look at where siltation has occurred in the last 40 years, start to make moves?

I can offer resources here in Congress. That is one thing we can do to help, is make sure you have authorizations and resources to deal with the flooding. So, specifically, can you provide me communications between yourself or your group and these agencies where there is flood planning going on today, using the information, resources, and other resources that you have?

Mr. APPLEGATE. Yes. Well, I will certainly get back to you with the specifics in terms of the interactions that are happening at our USGS California Water Science Center. But I do know that we are working with all of those partners on a weekly, even daily, basis. But I will get you the specifics in terms of the interactions.

Mr. DUARTE. Who is the lead agency status on that? Who are the local or state or Federal agencies in the Central Valley today that I can refer emergency personnel and concerned parties within my district to find out where the leadership is on flood preparations for this spring and summer?

Mr. APPLEGATE. At a state level or a Federal?

Mr. DUARTE. Whoever is in charge, whoever is going to help these people not get flooded.

Mr. APPLEGATE. Absolutely. Well, we work very closely on flooding and a range of other hazards with the California Governor's Office of Emergency Services, as well as with FEMA Region 9. So, the communities are at the tip of the spear for these issues.

But we are there to ensure that our science is getting put to work and, certainly, can follow up with you on the specifics of the interactions.

Mr. DUARTE. Please do. I would love to find out that there is focused teamwork going on here to prevent flooding in my district and others.

Mr. APPLEGATE. Absolutely.

Mr. DUARTE. Thank you.

I will yield back. Thank you, Chairman.

Mr. STAUBER. Thank you. Next up, Mr. Smith from New Jersey.

Mr. SMITH. Thank you so very much, Chairman, for including me in this Subcommittee. And I thank the Ranking Member and both sides of the aisle for this courtesy.

I represent several military installations in my New Jersey district, including Naval Weapons Station Earle, which supplies

munitions for all Atlantic fleet carrier and expeditionary strike groups. Our ocean, as you know so well, is filled to overflowing with military and civilian vessels that may be significantly put at risk by radar malfunction caused by ocean wind turbines.

I would note parenthetically, I recently learned that even the armed forces of Finland has expressed opposition to building wind farms over concerns with radar interference. And they have noted in their statement that a wind turbine, the distance between needs to be at least 40 kilometers, or about 25 miles. Otherwise, there is disturbance.

I have read BOEM's radar interference analysis from August 2020, which stated in pertinent part future offshore wind energy installations on the Atlantic Coast may impact land-based radar systems. And 2 years later, a 2022 study by the National Academies of Sciences, Engineering, and Medicine determined that "wind turbine generator returns obfuscate the marine vessel radar picture for both magnetron-based and solid state radar, thereby affecting navigation decision making." Their findings said matter of factly, "Wind turbine generators lead to interference in marine vessel radar" and will—this is their words—"frequently lead to unintended consequences of suppressing detection of small targets like boats or buoys, or creating misleading images on radar screens."

Ominously, the National Academy of Sciences report found, and I quote, "wind turbine generator mitigation techniques have not been substantially investigated, implemented, matured, or deployed."

So, my question is, is that true? This was only issued last year. Is there the possibility that some 3,400 wind turbines proposed to be deployed off our coast could make navigation less safe?

Ms. KLEIN. Thank you very much for the question. I think, since the beginning of the renewable energy program at BOEM, we have worked very closely with our partners at the Department of Defense all throughout the process, starting as we identify potential sites for offshore wind. We certainly take the input from the Department of Defense seriously, and make sure that we are deconflicting where we are placing these, suggesting that we lease for wind energy and making sure that we are not unduly impacting any Department of Defense activities. It is something we do throughout.

Actually, there is a clearinghouse within the Department of Defense that we work closely with throughout, as I said, from the leasing process through any decision that might be made on an individual project.

Mr. SMITH. But, again, as they have suggested—and it is their conclusion, it is their finding—it has not been substantially investigated, implemented, matured, or deployed.

And there is a relative fast tracking, and part of it is because of the Inflation Reduction Act with a tax credit that operations have to begin, at least, by January 2026, so there is a rush to get it done. I am very worried about all of that vessel traffic, and collisions, and worse that could happen.

Ms. KLEIN. Thank you. Again, I think, in our engagements with the Department of Defense, we also, I would add, we also work

very closely with the Coast Guard and with NASA. And it turns out our ocean is a busy place. So, from the beginning of the leasing process all the way up until the end, we make sure that we are seriously evaluating all of these potential impacts and minimizing any conflicts that may occur.

I would say—not to speak on behalf of the Department of Defense—but it is my understanding that we have been able to——

Mr. SMITH. No, I am talking about all vessels, too, not just Defense, with all due respect.

Ms. KLEIN. Sure, the Department of Defense recognizes the importance of offshore wind and the importance of working collaboratively together with BOEM as we move forward to deconflict areas on the OCS.

Mr. SMITH. Thank you. Director Klein, could I ask you, can these size-of-the-Chrysler-building wind turbines sustain a Category 3 or a Category 2 hurricane?

Ms. KLEIN. Thank you for the question. I am happy to have our folks get back to you on the details of the analysis that they do in terms of the ability of turbines to withstand extreme weather events.

Mr. SMITH. Thank you. I do have a number of other questions, but I see I am out of time. If I could submit it for the record, I would appreciate it.

I yield back.

Mr. STAUBER. Thank you very much. Next up, Representative Gosar for 5 minutes.

Dr. GOSAR. Thank you folks for showing up today. We appreciate it. I understand that a bipartisan letter led by Senators Manchin and Sinema urged the Department of the Interior to re-evaluate if copper should be added to the critical minerals list, as an updated supply risk score for copper has indicated that it would now qualify for the list using your existing methodology.

Considering the electrification goals of your Administration, that will require massive amounts of copper in the coming years. Will USGS, Mr. Applegate, commit to using its authority under the Energy Act of 2020 to re-evaluate the critical minerals list before its next required update in 2025?

Mr. APPLEGATE. Thank you very much for the question. There is no question that copper is essential for our economy. The terminology, though, of the critical minerals designation is, of course, both the importance of the mineral, as well as then the vulnerability of the supply chain.

So, in the case of copper, of course, we produce a lot, we have secondary recovery in terms of recycling, and we have a number of key partners with which we have free trade agreements from which we receive imports.

So, under our current assessment of the situation, it does not meet that criticality determination. But I would also stress that we are doing a tremendous amount of science, particularly through our earth mapping resource initiative, because copper deposits also are host to a whole range of other critical minerals, as well. So, the investments that we are making to better understand the copper resources in the United States are not impacted by that designation.

We are continually assessing, changing, whether it is from a supply chain standpoint or other factors. But at this time, that has been our determination.

Dr. GOSAR. OK, I am going to take off with where you are saying that.

Critical minerals uses, as you said, a number of factors to look at critically, which, by necessity, ranks certain minerals as more important and in danger of disruption than others. As you know, this can be extremely hard to predict, as mineral supply chains are subject to sudden changes due to shifting global circumstances. Uranium is a prime example of this. Uranium was removed from the previous version of the list, despite its well-known non-fuel uses, and the ongoing war in Eastern Europe increasing supply vulnerabilities.

Would you agree that the inherent weaknesses in ranking non-fuel minerals by criticality at all, and that a scaled system may be better to capture global supply risk than a static list published every 3 years?

I mean, these are so used in the technology, it is a little of this, a little of that. And you throw in the smelting process that we don't do, you turn over the predictability of the market to another country.

Mr. APPLEGATE. Thank you for that question. And this is a really important point, we don't just look at those minerals that fall within those very specific criteria that were identified for that list, because there are so many other minerals that are essential, and there are so many factors going into this.

So, when we are thinking about this in our National Minerals Information Center, we are thinking about that whole range of minerals, that whole range of uses. We don't sort of stop looking at it, whether it is on that list or not on that list, and along the lines you identified, it is very much a continuum. So, that just underscores the importance of our continuing to review and assess the importance of these minerals, understand the supply chains, understand the resources.

Dr. GOSAR. You would be very supportive of a dynamic score that you are constantly watching and inventorying these types of minerals.

Mr. APPLEGATE. Well, right now, we are operating under specific direction through the Energy Act and so forth, to provide that critical minerals list. And I will just say that we do that within a context of a much broader assessment of the whole range of minerals, the whole range of supply chain issues, the resource assessments, and will continue to do that to try to provide the best information we can——

Dr. GOSAR. I have one more question, so I am going to cut you off a little bit there.

Mr. APPLEGATE. Yes.

Dr. GOSAR. So, the other part is not just the mining of this, it is the smelting and recovery of that that we are so dependent upon.

There are new technologies that I am understanding that have now gone through proof of concept, and they are now looking at scale, they are finishing up scale, that actually would do that procedure or process from the ore by pulverizing it, electrifying it, and

then stripping it, and you are given a silicate matrix as a leftover, and then you get a bar of everything else that you can separate. I think this ought to be something that we ought to really look at. It is very green, it is a very waterless process.

But we tend to have the technology to do this better than anywhere else in the world. I would really like to see us really make a move to be less dependent upon China, even with our own ore.

I yield back.

Mr. STAUBER. Thank you very much. Next up, the Representative from New Jersey, Mr. Van Drew.

Dr. VAN DREW. Mr. Chairman, I thank you for having me here today.

I don't know how to say it, but I guess just to say it, Director Klein, I don't agree with what you and your company is doing. And while BOEM continues to approve offshore wind lease areas at what I would call blinding rates, we have seen a wide array of those involved in the offshore wind process continue to express concerns about its current implementation.

And you don't have to take that from me. I have my own sense of what it is going to do to tourism, what it is going to do to so many aspects of the economy, so many aspects of the environment, but let's hear what a few people say—direct quotes, no editorial work done by me. BOEM, NOAA, and RODA came out with a report, and I am sure you know about it. In their own report they released a report that said there is "an enormous amount of research that is still needed in order to understand the impact of offshore wind on our environment and our fisheries."

And by the way, does anybody care about the fishermen? The people, I think, do.

Maritime Transit, who worry of offshore wind's impacts when BOEM's own EISs claim impacts of industrial offshore wind on navigation and vessel traffic would be—quote, I am not editorializing—"it would be major, that it would increase the risk of collisions," which could result in "personal injury or loss of life."

The Pentagon recently came out with a report. They revealed how multiple offshore wind leases lie directly on top of "highly problematic areas that might harm our national security." You can't make this stuff up. And I haven't even done a completely thorough investigation into this.

The Coast Guard, who warn of radar interference from turbines and its potential impact on search and rescue operations; fishermen who worry that their entire industry is at risk of being eliminated, which it has been in many parts of Europe due to offshore wind; the weather sector, people are concerned what is going to happen, know that where these windmills are now you don't have hurricanes. We have some pretty good hurricanes out here on—I will just talk about the area I know best, the east coast of the United States of America, the area where I live, right along the shore. Coastal communities who are worried about the destruction of their pristine coastlines and impacts to the tourism industry.

I want the Committee to understand there are going to be over, just in the beginning, 2 million acres of these things. There are going to be thousands of them. And this is just the beginning. It is just the start.

Now, you would have to know New Jersey, and New York, and our whole coastal area a little better to know how important tourism is. It is the main industry that we have. And when you have thousand-foot-high windmills with lights on top of them that actually make noise when they are all whirring together, and the loss to the birds; I am sure you saw, maybe you didn't, you should have seen it, the eviscerated bald eagles that got sucked up into the wind turbines.

We used to care about those things. That used to be what the environment was. And environmentalists, many of the ones that haven't gotten special funding, who are alarmed at the rate at which marine mammals are washing ashore near our offshore wind surveying sites where the surveys were done, and people say, oh, it just happens. No. We once in a while have had a whale that beached on our shores, but not dozens of whales, not dozens of porpoises. We don't even know why. They haven't even really started yet. They are going to be digging trenches on the ocean floor. They are going to be in the cold pool, which is one of the most environmentally sensitive areas there are.

And the hundreds of thousands of coastal citizens. You ought to see it where I live, because I am telling you, people are getting mad. They are getting mad. You see signs everywhere to stop the windmills. You see people talk about the fact that they just don't want this in their communities. Some are as close as 9 miles away.

So, my first question is simple, because I don't want to go on and on. If all these stakeholders in your own agency, your own agency, continue to express numerous concerns about offshore wind, do you believe BOEM has done due diligence in properly assessing the impacts of offshore wind? Do you really believe they have done due diligence?

Ms. KLEIN. Thank you for the question. I think, from the very beginning of the process that BOEM uses to identify places that seem ripe for this type of development, they ensure that they are identifying areas for lease that would minimize the amount of impacts to the environment and to other ocean users. And, really, throughout the process, we have——

Dr. VAN DREW. I only have a few seconds left, so I want to say this to you. I spoke to you folks a long time ago. I originally thought it sounded like a really neat idea. Not you, not you all, but others. So, I said, "Will you at least try to work with the fishermen who are going to lose their business?" It is always bad to destroy another business to create another one. It is wrong. And I asked afterward, "Did you speak with them?"

"Yes."

"Did you have a good conversation?"

"Yes, we worked everything out."

We had a hearing—not the recent one—we had a hearing years ago in our area, 150 fishermen there. I asked how many people did BOEM speak to. These were the major commercial fishermen in the area. Three people raised their hand, and those three people actually worked for Orsted, the company itself.

So, I will, I guess—do I have time, or do I have to yield back my time? Mr. Chairman, do I still have some more time?

Mr. STAUBER. I would quickly wrap it up.

Dr. VAN DREW. OK. That is your nice way of saying it.

So, I think you are going to hear more from me. I think you are going to hear not from hundreds, but tens of thousands of residents who don't want this. I think you are going to hear from leaders. We currently have dozens upon dozens of mayors who have even been offered money not to shut up, but still have put their mouth where the truth is, and have actually said that this is wrong, and it is bad for our area. We have people that are standing up and telling the truth. This is going to cause way more harm than good. It is not good for our area, and we don't want it in New Jersey, particularly.

Thank you, Mr. Chairman.

Mr. STAUBER. You are welcome. Next up, Mr. Graves from Louisiana for 5 minutes.

Mr. HUFFMAN. Mr. Chairman, before Mr. Graves gets going, could I ask unanimous consent to enter a couple of things in the record?

Mr. STAUBER. Yes.

Mr. HUFFMAN. The first would be an article about a Brown University report showing how some of these Astroturf fossil fuel-funded organizations opposing offshore wind on the East Coast are using disinformation, logical fallacies, conspiracy theories, fake experts, and cherry-picked facts.

Mr. STAUBER. Without objection.

[The information follows:]

Brown Report Claims Anti-Wind Group Uses Deceit, Delay, Denial and Chicanery to Sabotage Crucial Renewable Energy

Green Oceans' persuasion methods echo those of national climate change deniers

ecoRI, April 11, 2023 by Mary Lhowe/ecoRI News contributor

https://ecori.org/brown-report-claims-anti-wind-group-uses-deceit-delay-denial-and-chicanery-to-sabotage-crucial-renewable-energy/

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Green Oceans, a Little Compton, R.I.-based citizens group that lobbies against offshore wind projects, bases its arguments on techniques of disinformation—skewed and cherry-picked facts, obstruction, denial, delay, fake experts, conspiracy theories, and logical fallacies—that are taken directly from the playbook of national climate change denial organizations and obstructionists funded by the fossil fuel industry.

That's the conclusion of a 22-page report by the Climate and Development Lab at Brown University.

The Lab released the report today under the formal title "Discourses of Climate Delay in the Campaign Against Offshore Wind: A Case Study from Rhode Island." Climate Jobs Rhode Island collaborated on the report.

The report opens by restating the urgency of global warming, which threatens Rhode Island with deadly high temperatures and coastal flooding. It states, "Rhode Island needs to rapidly transition to renewable energy and eliminate its dependency on fossil fuels," and calls offshore wind "the most viable renewable technology to meet our state's energy demands."

J. Timmons Roberts, professor of environmental studies and of environment and society and sociology at Brown University, said, "For Rhode Island to do its share in fighting climate change, offshore wind is the most viable and abundant resource we have. There has been a decade of planning and negotiation and biological studies, and now it is time to get building because we are already behind if we want to save a livable future for our children."

It then launches into 16 pages, followed by references, of scathing analysis about the ways Green Oceans replicates the disinformation methods used by oil industry-funded think tanks such as the Texas Public Policy Foundation and the Caesar Rodney Institute. The anti-wind rhetoric of these groups "often disguises itself as pro-environmental," the report notes.

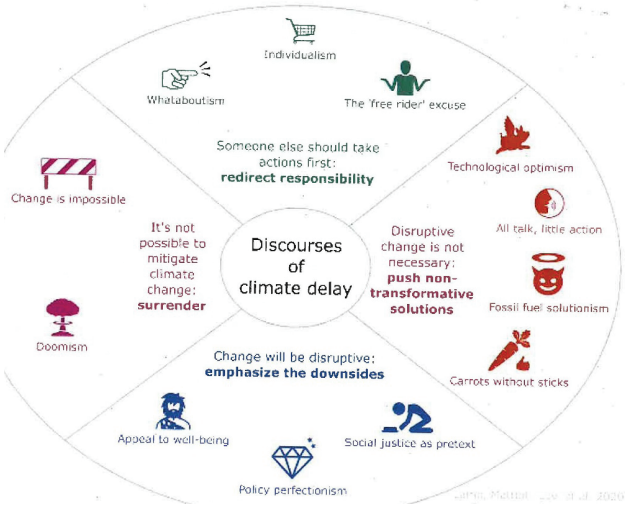
Green Oceans members say they fear the environmental consequences of building hundreds of wind turbines on the Outer Continental Shelf, but the report says the group is using arguments designed, ultimately, to keep the fossil fuel industry rich.

The report emphasizes the need "to understand the . . . networks of mis/disinformation that are seeking to obstruct . . . renewable energy, as a strategy to maintain fossil fuels as a dominant energy (and profit) resource."

Green Oceans was founded last December and some of its core members own property in seaside Little Compton. It has promoted its anti-offshore wind views through newspaper opinion pieces, public forums, a PowerPoint presentation, and a white paper. It has focused its opposition on Revolution Wind, which expects to receive final permission this summer to build up to 100 wind turbines off the southeasterly coast of Rhode Island.

Roberts said, "It is important for people to have their own perspective about whether they want energy infrastructure in their neighborhoods, but they don't get to make up their own facts."

ecoRI News asked Green Oceans on April 11 to read the Brown University report and offer its reactions and rebuttals. Elizabeth Knight, the main spokesperson for the group, said no one would be available today to speak to a reporter about the report. She said, "It is too bad they are focusing on 'technique' as opposed to addressing the actual issues about which we are concerned. That sadly diverts the conversation away from facts and the truth and squanders the effort to actually try to do the right thing."



The 'Discourses of Climate Delay' framework. (Brown University)

The first framework is Discourses of Climate Delay (Lamb et al. 2020), which offers four categories of obstructionism—three of which are heavily used by Green Oceans—and includes several specific examples that apply to Green Oceans' communications.

The first category, "Emphasize the Downsides," presents the costs of mitigating climate change, such as harms to sea life, as worse than the costs of doing nothing. "Redirect Responsibility" implies that others—but not the historically biggest polluters, like the United States—should take the lead in solving climate change. The third category, "Push Non-Transformative Solutions," refers to rejecting wind power in favor of technologies that are not viable now, such as hydrogen and fusion, and those that are not welcome in peoples' backyards, like nuclear.

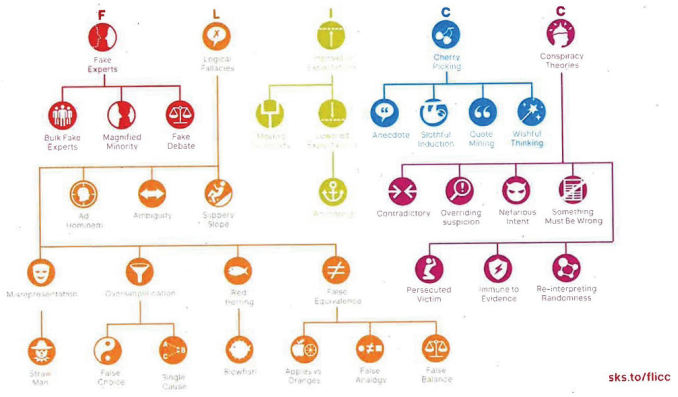
The second framework, named FLICC (Cook 2020), describes five techniques of science disinformation and gives examples of how these are used by Green Oceans.

The five techniques are **fake experts**, spokespeople who convey the impression of expertise on a topic when they have none; **logical fallacies**, which occur in arguments where the starting assumptions do not logically lead to the conclusion; **impossible expectations**, described as unrealistic or unattainable standards of scientific proof; **cherry-picking**, meaning selectively choosing data that lead to a conclusion different from the conclusion from all available data; and, finally, **conspiracy theories**, or suggestions of secret plans to implement nefarious schemes.

The Brown report gives several examples of Green Oceans' arguments against offshore wind and shows how the arguments track with the disinformation techniques of "Discourses" and "FLICC."

Emphasize the Downsides/Policy Perfectionism

CO2 Emissions: Green Oceans says wind turbine structures would provide habitat for invasive filter feeders that eat phytoplankton and release CO2. The Brown report says this example of policy perfectionism portrays offshore wind as imperfect technology with hidden forms of harm, thus introducing doubt and distraction, and encouraging inaction. Here, Green Oceans is using "blowfishing"—focusing on an inconsequential aspect of scientific research, blowing it out of proportion to distract or cast doubt—to exaggerate the scale of filter-feeder emissions. The report says various studies show the life-cycle emissions of offshore wind facilities at about 6 to 13 pounds of CO2 per kilowatt-hour (kWh), whereas natural gas-fueled electricity generation releases about 500 pounds per kWh, making wind energy nearly 50 times better for the climate. (Techniques used: logical fallacies and blowfishing).



The 'FLICC' framework. (Brown University)

Endangered Species: Green Oceans claims offshore wind would threaten the North Atlantic right whale and other species, partly due to acoustic soundings on the seafloor to determine locations for turbines. The report says Green Oceans cited two "highly speculative" articles to claim dangers of wind facilities, one of them published by the Committee for a Constructive Tomorrow, which denied the existence of human-caused climate change until 2016 and received substantial funding from ExxonMobil, Peabody Energy, and the Charles Koch Foundation. The second article included false claims about offshore wind's harms to marine mammals that were later debunked by scientists from the federal Bureau of Ocean Energy Management (BOEM) and oceanographers at the University of Rhode Island. The National Oceanic and Atmospheric Administration supports wind energy while saying that continued data collection about ocean life impacts is needed and ongoing. NOAA also recently issued a final opinion that said an offshore wind project near New Jersey was likely to adversely affect, but not jeopardize, sea life, include right whales. Also, according to NOAA and the Marine Mammal Commission, there is no evidence that offshore wind construction leads to whale deaths. (Techniques: fake experts, conspiracy theory, cherry-picking, logical fallacies, blowfishing, and misrepresentation).

Appeal to Social Justice

Jobs and Economic Development: In its PowerPoint, Green Oceans said Revolution Wind would create 800 to 1,200 jobs for two years and 50 permanent jobs, but it dropped the mention of 800 to 1,200 jobs from its white paper. Orsted, co-developer of Revolution Wind, said the project would create 1,660 construction jobs and thousands of other "indirect or induced jobs." Climate Jobs Rhode Island, working with Cornell University, has predicted tens of thousands of new jobs for Rhode Island if the state installs 3,000 megawatts of wind power by 2040. Revolution Wind is designed to produce 700 megawatts; other offshore wind projects are in planning stages. (Techniques: cherry-picking and "slothful induction," defined as ignoring relevant evidence when coming to a conclusion).

Impact on Fishing: NOAA and BOEM have strongly asserted that research on the impacts of offshore wind on ecosystems must continue, in collaboration with the fishing industry. Green Oceans, the report says, "focuses on specific studies without contextualizing larger efforts to understand the issue." Green Oceans also fails to acknowledge how warming waters and ocean acidification caused by climate change are harming fish and other sea life. Green Oceans also claims that "wind farms can increase water and air temperatures . . . rising ambient temperatures can affect fish larvae." However, the report says, "the article the group cites to support this argument makes no reference to offshore wind development."

Green Oceans argues that toxic heavy metals coating turbine towers would contaminate the ocean, but the very detailed Construction and Operation Plan for Revolution Wind makes no mention of heavy metals in coatings. Conversely Orsted, the co-developer of Revolution Wind, presents ways to mitigate environmental harm during construction with methods like bubble curtains, noise mitigation screens, hydro sound dampers, and suction bucket jackets. 0rsted is funding research on environmental impacts and best mitigation practices by New England Aquarium and Inspire Environmental. The report says, Green Oceans ignore these efforts and "fails to acknowledge information published by developers and regulators that describes their efforts to minimize infrastructure impacts on marine ecosystems." (Techniques: logical fallacies, misrepresentation, cherry-picking, slothful induction).

Redirect Responsibility/Whataboutism

Offsetting Carbon Emissions: Green Oceans says Rhode Island can offset only the amount of CO2 that it emits, which is the second lowest of any state. The report says this is false. Rhode Island is part of a New England-wide electricity grid, and the 400 MW of electricity it intends to buy from Revolution Wind would account for 40% of the state's anticipated 2030 electricity demand. In an example of "whataboutism," Green Oceans says other countries and states produce more greenhouse gas emissions than Rhode Island, so those have greater responsibility for the problem of global warming.

The Brown report says, "Rhode Island is complicit in the climate crisis and its size . . . is not an excuse for inaction." Viewed globally, between 2000 and 2019, Rhode Island produced an average of 10 tons of energy-related CO2 emissions per person, which was double the global average over the same period. Green Oceans' attempt to portray the state's emissions as insignificant is a red herring—or logical fallacy—that overemphasizes one point—the state's small size—to distract from the larger issue of global climate change. (Technique: logical fallacies, red herring).

Push Non-Transformative Solutions/Technological Optimism

Fusion: Green Oceans suggests nuclear fusion as an alternative to offshore wind, even as it acknowledges that this technology is a decade or more from commercial feasibility. "Technological optimism" is used here to offer a technology that does not yet exist as superior to one—offshore wind power—that has been commercially available for 30 years. Also, Green Oceans cites a 2022 New York Times article that discussed nuclear fusion, but The Times said this was not a viable option in the near future. The Brown report says, "Green Oceans cherry-picks information from this article and ignores relevant evidence in order to present a false conclusion—a textbook example of slothful induction." (Techniques: cherry picking, wishful thinking).

Dismissing Current Wind Technologies: Green Oceans says the electrical output of offshore wind projects, specifically Revolution Wind, would not significantly offset greenhouse gas emissions. "Here, Green Oceans deploys the discourse of 'oversimplification' by drawing conclusions . . . based only on the minimum requirements," the report says. Discussing technical and economic costs of offshore

wind, Green Oceans cited the Manhattan Institute, a think tank connected to the fossil fuel industry that published climate denial statements as recently as last month. (Techniques: logical fallacies, oversimplification, fake experts).

Fossil Fuel Solutionism

Natural Gas: Green Oceans suggests "immediately converting coal plants in the U.S. to natural gas." The Brown report notes Rhode Island does not burn coal, and that natural gas accounted in 2021 for 87% of the state's total electrical generation. In 2020, natural gas created 5.3 million metric tons of carbon dioxide emissions in Rhode Island, for 54% of the state's total CO2 emissions. Introducing coal into discussion about reducing emissions in Rhode Island is a red herring, the report says, deployed to distract from the fact that natural gas is not a "clean" fuel. "Warming from carbon dioxide and methane emissions from natural gas production, transmission and combustion is comparable to that of other fossil fuels," the report states, adding that Green Oceans "ignores the abundance of science on the harms of natural gas." (Techniques: logical fallacies, red herring, cherry-picking).

The Brown report concludes by saying Green Oceans is not an isolated phenomenon, but, in fact, part of a "very vocal international network that attacks renewable energy development, circulates talking points rooted in misinformation, and sometimes shares lawyers, lobbyists advisors and donors" in a "web of deceit and obstruction of climate action."

Mr. HUFFMAN. And then the second is an article how some of our colleagues in Congress who have suddenly discovered an interest in protecting whales have had numerous opportunities to support legislation and other efforts to protect whales, and were not interested until a chance to oppose offshore wind came along.

Mr. STAUBER. Without objection.

[The information follows:]

Why Republicans suddenly hate offshore wind

GOP concerns about wind energy and whale deaths nearly tripped up the big energy and permitting bill. Democrats say their arguments "ring hollow."

E&E Daily, March 31, 2023 by Kelsey Brugger, Nico Portuondo

https://www.eenews.net/articles/why-republicans-suddenly-hate-offshore-wind/

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In the weeks before their massive energy package reached the House floor, some Republicans were aghast about marine mammal deaths—and blamed the burgeoning offshore wind industry.

They said the rush to build out offshore wind in the Atlantic has been killing whales at a rapid clip and they tried to use the legislation to address their concerns.

"Like the canary in the coal mine, the recent spate of tragic whale deaths shed new light and increased scrutiny to the fast-tracking of thousands of wind turbines off our coast," Rep. Chris Smith (R-N.J.) declared at a packed field hearing in New Jersey earlier this month.

The concern among Republicans was great enough that it cast some doubt on whether the energy package, H.R. 1 , the "Lower Energy Costs Act," would have enough votes to pass. In the end, concerned lawmakers got whale- and wind-focused provisions added.

Despite that resolution, the issue shows no sign of dying down. Former President Donald Trump famously railed against wind turbines. And conservative media and commentators like Fox News' Tucker Carlson, who has been running a series titled "The Biden Whale Extinction," have continued elevating the issue on the right.

Since December, 30 whales have been found dead along the Atlantic coast, many of them in New Jersey. Eight dolphins were found dead in New Jersey this week.

Though NOAA Fisheries says there is no evidence that preparations to build offshore wind facilities were the cause of the deaths, and blamed many deaths on vessel strikes, that hasn't stopped Republicans from beating the drum on the issue.

Democrats are dismissing the outrage as a blatant attempt to give fossil fuel interests an advantage. They say the sudden concern amounts to misinformation backed by oil money and the Koch network.

"Given their political track record on not supporting a lot of conservation bills, the argument does ring hollow," said Rep. Alexandria Ocasio-Cortez (D-N.Y.), ranking member of the House Natural Resources Subcommittee on Energy and Mineral Resources.

Renewable energy proponents acknowledge that all human activity in the ocean poses impacts—whether from oil and gas or wind energy.

"The fates of all sectors are intertwined," said Alex Herrgott, a former Trump administration official and president of the Permitting Institute, a nonprofit with offshore wind and oil and gas members. "You can't single out one for attack without creating a new hurdle for the sector you were trying to help."

Ultimately, he said, "whales don't care what the drilling, surveys and vessel traffic is for."

'People are really concerned'

At one point this week, the uproar over wind energy seemed big enough to threaten the "Lower Energy Costs Act." Ultimately, it passed the House on Thursday mostly along party lines.

Multiple amendments requiring the federal government to study a range of potential offshore wind turbine impacts eased concerns among Republicans—and got Democratic buy-in.

One, from Rep. Anna Paulina Luna (R-Fla.), would require the Government Accountability Office to study the impact on, among other things, military readiness (E&E Daily, March 30).

Another, from Rep. Jeff Van Drew (R-N.J.), would require the GAO to publish a report on all potential adverse effects of wind in the North Atlantic Planning Area. Those include maritime safety, the economy, the environment and endangered species.

"People are really concerned, and they're not all Republicans; they're independents, middle-of-the-roaders," Van Drew, who helped lead the field hearing, told E&E News. "People love whales and dolphins, and this gets them going."

Democrats, meanwhile, tried to offer an amendment in favor of wind, but it failed. Rep. Bill Pascrell (D-N.J.) scoffed at the Republican-led amendments, saying they gave "hot air" to the "fictions" about offshore wind.

He pointed to information from NOAA stating there is "no specific links between recent large whale mortalities and currently ongoing surveys."

The clean energy lobby argued that federal agencies have been studying an increase in whale deaths since 2016—well before any offshore wind construction began.

"Disinformation shouldn't dictate policy," American Clean Power Association CEO Jason Grumet said.

One of the key witnesses from the March New Jersey field hearing, David Stevenson, has been a consistent opponent of offshore wind projects (E&E Daily, March 17). The organization he works for, the Caesar Rodney Institute, has received funding from American Fuel & Petrochemical Manufacturers. CRI is also connected to the State Policy Network, which receives money from Koch network foundations.

House Natural Resources Chair Bruce Westerman (R-Ark.), one of the chief drivers of H.R. 1, laughed off the idea that dark money groups were potentially driving the anti-offshore wind push.

"I find that amazing," he said during an interview at the Republican retreat in Orlando, Fla., earlier this month. "It doesn't change the fact that there are dead whales washing up on the shore. You would think the environmental groups would be raising the red flag. But they are turning a blind eye."

Westerman and several other Republicans interviewed for this story called Democrats guilty of double standards.

"Had that happened in the Gulf of Mexico, everybody would be blaming the oil industry," he said.

"The only thing that is changing on the East Coast is the wind industry. I don't know if that's affecting the whales or not, but we should probably do some kind of a study to find out what is causing those whale deaths."

Westerman's remarks were before the energy bill hit the House floor. But by Wednesday, Rep. Byron Donalds (R-Fla.) was willing to point the finger at the energy transition.

"The Green New Deal is on the backs of marine life," he said. "It's something that, in this rush to renewables, Democrats frankly ignore."

Interest 'suddenly springs up'

The whale issue could put Democrats in a difficult spot.

At a recent hearing, Rep. Debbie Dingell (D-Mich.) pressed an oil executive whether he cared about whale deaths—specifically blaming seismic surveys.

It did not take long for offshore wind proponents to take note and worry that those arguments could come back to bite Democrats, especially since wind energy requires seafloor-penetrating surveying and pile driving during construction activities.

When asked about the whale-and-wind issue, other climate-minded Democrats downplayed concerns.

Sen. Sheldon Whitehouse (D-R.I.) said there's "no evidence" of wind activities affecting whales.

"I think this is another evidence-free effort to try to interfere with [energy] competition for their fossil fuel overlords," he said.

Rep. Jared Huffman (D-Calif.), a senior member on the House Natural Resources Committee, argued that for the last decade Democrats have authored bills to protect marine mammals, particularly the right whale—with little Republican support.

"But this interest in whales just suddenly springs up when offshore wind is starting to take off and threaten fossil fuels," he said.

Just this week, the White House put out a fact sheet detailing its advances on offshore wind. President Joe Biden has set a goal of deploying 30 gigawatts of offshore wind electricity by 2030.

Still, Democrats are beginning to press the administration on the whale deaths. In a letter this week to NOAA, five senators raised concerns on the matter, though they did not mention the offshore wind industry.

About-face for some

Republicans were more inclined to support offshore wind when it was still a futuristic energy source, said Dave Anderson of the Clean Energy Policy Institute, which advocates for renewables. Now that it stands to seriously compete with oil and gas, he argued, they oppose it.

"It's easy to say nice things about renewables when they are not actually happening," he said.

In 2019, when the Trump administration delayed the Vineyard Wind project off the coast of Massachusetts and ordered more environmental reviews, Rep. Steve Scalise (R-La.) joined Northeast Democrats to urge the administration to move ahead.

"We believe it is possible for multiple industries to coexist in mixed use regions offshore," the bipartisan group of lawmakers wrote in their letter.

But this week, the now-House majority leader was singing a different tune: "I mean, there are whales that are showing up dead on the beach," he told reporters.

Industry sources do acknowledge they have a public relations problem.

"We can complain all we want that it's not us, but there's a huge constituency out there, both on the left and the right, that believes that sound kills whales in the oceans," said one industry lobbyist, granted anonymity to speak candidly. "And we have not spent nearly enough to fight that dynamic."

Reporters Timothy Cama and Heather Richards contributed.

Dr. VAN DREW. Mr. Chairman, can I enter this into the record, please: "Pentagon Sounds Alarm Over Biden Plan for Offshore Wind." It is Green Politics.

Mr. STAUBER. Without objection.

[The information follows:]

Pentagon Sounds Alarm Over Biden Plan for Offshore Wind

Bloomberg, April 17, 2023 by Jennifer A Dlouhy

Updates with details from a senior Defense Department official from seventh paragraph.

https://www.bloomberg.com/news/articles/2023-04-17/pentagon-calls-biden-wind-farm-plans-problematic-for-us-military#xj4y7vzkg

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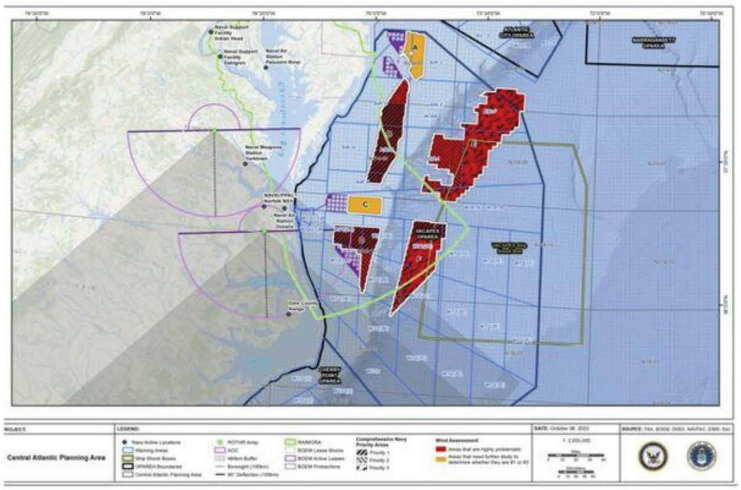
Photographer: Eric Thayer/Bloomberg

The Orsted Block Island Wind Farm off Rhode Island, the first offshore wind farm in the US, pictured in 2016.

The Pentagon is sounding alarms over Biden administration plans to advance offshore wind projects along the central Atlantic US coast, warning that almost all of the new terrain eyed for development conflicts with military operations.

Maps shared with industry stakeholders and seen by Bloomberg News show vast red areas that the Navy and Air Force have deemed "highly problematic," covering prime real estate the Interior Department last year earmarked for leasing off the coasts of North Carolina, Virginia, Maryland and Delaware.



The Defense Department's concerns, which come on top of other conflicts identified by the US Coast Guard, have spooked renewable power developers and US East Coast states counting on mid-Atlantic wind farms to meet clean energy and climate goals.

The breadth of the Pentagon's opposition could imperil President Joe Biden's bid to install 30 gigawatts of offshore wind power—equivalent to 30 nuclear reactors—by the end of the decade, newly bolstered state goals for the development and planned manufacturing facilities in Maryland and Virginia tied to the nascent US industry.

The clash represents the latest threat to the fledgling industry that is already grappling with supply chain challenges, inflation-stoked prices and opposition from coastal communities.

Interior's Bureau of Ocean Energy Management emphasized in an emailed statement that the US "is well positioned to satisfy state and federal offshore wind goals as we develop the clean energy economy."

A senior Defense Department official stressed that the maps represent an initial stage of discussions with the ocean energy bureau and that the Pentagon is committed to finding ways to accommodate leasing in the region.

The Pentagon has identified challenges operating around wind turbines that would be installed into the seabed in Atlantic waters near many of its operations and facilities, including North Carolina's Dare County bombing range, used for training fighter jet crews, and a weapons station in Yorktown, Virginia. They are documented vividly on a map of Navy and Air Force concerns, dated Oct. 6, 2022, and circulated with industry and state stakeholders this month.

Four of six potential wind lease areas outlined by the ocean energy bureau last November are completely shaded red, including two deep-water parcels that might require floating turbines. The remaining two tracts, in yellow, are identified as requiring further study. The areas deemed highest priority by the Pentagon span a large portion of potential lease areas off the Maryland and North Carolina coasts.

The Defense Department official said the representations were designed to pinpoint areas that present the most challenges—generally where the Pentagon would be unable to continue its mission as currently conducted in the space. The focus going forward is on finding ways to accommodate wind development, including by adjusting operations to allow the activity, the official said. That could take the form of shifting the location of military exercises and other steps—such as optimizing radar processing systems—to minimize interference from turbines.

The two tracts marked in yellow are the least problematic, with concerns the Pentagon views as solvable, the Defense Department official said.

Similar Defense Department concerns helped derail plans for offshore oil leasing in waters near Virginia's coast roughly a decade ago. And after the Pentagon warned the Interior Department against offshore wind leasing near the California coast in 2019, it took roughly three years to resolve the matter. The Interior Department had been on track to sell new offshore wind rights in the mid-Atlantic early next year—and significant delays could make it harder for developers to claim newly expanded tax credits for the multibillion-dollar ventures that can take years to permit and build.

The ocean energy bureau expressed confidence it could resolve the dispute. The agency "has a long working relationship" with the Defense Department "and together we have successfully deconflicted and identified areas that have resulted in 27 leases along the Atlantic coast, covering over 2.1 million acres," it said in its statement. "We will continue this collaboration as we seek to identify new lease areas in the central Atlantic."

When asked for comment, JC Sandberg, the American Clean Power Association's chief advocacy officer, said that the industry is "fully committed to national security" and co-existing with other ocean users.

"Leasing in the central Atlantic is critical to growing the offshore wind industry to meet state and federal clean energy goals," and to sustaining supply chain investments in the region, Sandberg said. "The Department of Defense staff's maps serve as a stark reminder that there's work to do. We need a coordinated, all-of-government approach to offshore wind to ensure that the industry can grow while protecting national security interests at the same time."

The maps have inspired a frenzy of calls and meetings as alarmed offshore wind advocates ask top administration officials to referee the dispute and broker a compromise. Just last week, Maryland lawmakers passed legislation setting a state goal to derive 8.5 gigawatts of power from offshore wind by 2031—but under the Pentagon's vision, the state could struggle to find roughly half of that.

Already, most of Maryland's congressional delegation had implored the Defense Department, Coast Guard and other government agencies to "maximize the acreage available for offshore wind development in the central Atlantic" and work to expand the potential areas for leasing.

Robust offshore wind leasing along the US mid-Atlantic is seen as essential to filling a pipeline of projects that can support planned investments in manufacturing facilities in the region, including the planned Sparrows Point Steel factory near Baltimore.

Supporters argue the work is also critical to hitting the nation's climate targets. Because of its massive scale and high generating capacity, offshore wind is viewed as a particularly important source of renewable power.

And now, offshore wind advocates are throwing the military's own warnings back at the Pentagon. A shift to renewable power sources helps shrink US reliance on volatile commodities for energy, thereby strengthening national security, they say. The Defense Department and US intelligence agencies also have repeatedly cast climate change as a threat to American military assets and global security.

"Offshore wind can enhance national security," Sandberg said, "by providing a clean and affordable source of energy protected from the whims of global commodity prices."

Mr. STAUBER. The Chair will now recognize Mr. Graves from Louisiana for 5 minutes.

Mr. GRAVES. I just didn't know why my friend from California decided to UC right before I spoke. I feel like that was intentional. Mr. Chairman, thank you, and I want to thank my friend from California.

Thank you all for being here today. Here is what I want to understand. In the President's budget request, you are showing revenue in FY24 from OCS production, right? Let me clarify: bonus bids, which would mean from new leases in FY24.

[Pause.]

Mr. GRAVES. Can I get an amen?

Ms. KLEIN. Thank you for the question. I think that is accurate, although I would have to go back and have my staff confirm.

Mr. GRAVES. Well, it is. So, you all are showing bonus bids in FY24. But as the Chairman noted earlier, there is a lead time that is required to actually go to lease sale. You can't just make it pop up. You actually have to do a good bit of lead work in order to move toward lease sale. And when I look at the activities that the Department has taken thus far, I don't see you hitting an FY24 lease sale—which, I will make note, is actually mandated—so I am curious if you can help me understand how you are going to hit an FY24 target on a lease sale when you haven't taken pre-leasing activities that are necessary to actually lease.

Ms. KLEIN. Thank you for the question. At BOEM we are working very hard to get the proposed final program out in September, which, as you know, identifies lease sales that may happen over the next 5-year period. The Secretary expects to make a decision before the end of the year.

I am not in a position to predict at this point what the Secretary will decide before the end of the year. But, certainly, whatever is

in the program, we will move forward to implement it and follow the law.

Mr. GRAVES. So, when you talk about the Secretary's discretion that she may or may not exercise, where do you view her authority to exercise discretion whenever the law mandates a lease sale?

Ms. KLEIN. Thank you. If I am understanding the question correctly, certainly in the 5-year program, which is a schedule of lease sales, we are working hard to put out the next version of that, the proposed final. We put out the proposed program in 2022. The proposed final program is the next step in the development of the OCS national program. She expects to issue the final decision on that program before the end of the year.

Mr. GRAVES. So, just for clarification purposes for the Committee, are you suggesting that the Secretary may decide to not move forward with the lease sale that is mandated under law?

Ms. KLEIN. Thank you for the question. The national program, of course, identifies whatever lease sales will take place in a 5-year period. I can't predict what her decision will be in terms of the next national program for the next 5 years, but we expect her to make that decision before the end of the year.

Of course, part of my job as Director of BOEM is to implement the President's priorities and follow the law.

I was just in the Gulf of Mexico last month during Lease Sale 259, and we are on track to have Lease Sale 261 in September.

Mr. GRAVES. OK. I am going to take that as a yes, maybe.

So, last question for you. Under the Gulf of Mexico Energy Security Act, the Gulf states share in revenues from offshore energy production. And under my home state's constitution in Louisiana, we require that those funds be used for coastal restoration, for hurricane protection-type activities. So, whenever the Administration decides unilaterally that they are not going to issue lease sales, as this Administration has done—and reminding you, the first 20 months of the Administration, you would have to go back to the Carter administration to get anywhere even close in terms of proximity to leasing, and Jimmy Carter leased 100 times more acres of lands and waters for energy production, so it really isn't even close, how much production is not happening under this Administration, new production is not happening.

But Walter Cruickshank came here, sat right exactly where you are a few years ago, and testified that whenever we stop producing domestically, it doesn't have any impact on demand, all it does is make us get supply from foreign sources.

So, I guess I am watching as the actions this Administration is taking: (1) you are cutting off a critical revenue stream to protect our citizens from hurricanes; (2) you are taking actions that actually make us more dependent upon foreign energy sources; and (3) as we sit here and deal with a debt ceiling, it actually takes money away that could be a revenue stream for the United States Treasury.

And I just ask, as you move forward and potentially plan to exercise discretion contrary to what law says, that you all please take those things into consideration, because I don't know what in the world you all would say if we have another hurricane and you have

effectively cut off revenue streams for resiliency for our coastal communities.

So, thank you, I yield back.

Mr. STAUBER. Thank you. The Chair thanks the Representatives and their questions, and I also thank the witnesses for your valuable testimony this afternoon.

The members of the Subcommittee may have some additional questions for the witnesses, and we will ask you to respond to these in writing. Under Committee Rule 3, members of the Committee must submit questions to the Committee Clerk by 5 p.m. on Friday, March 3. The hearing record will be open for 10 business days for these responses.

If there is no further business, without objection, the Committee stands adjourned.

[Whereupon, at 4:10 p.m., the Subcommittee was adjourned.]