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Chairman Murkowski, Ranking Member Manchin and members of the Committee, I am pleased to appear before you today to discuss BOEM's role in developing America's renewable energy resources on the Outer Continental Shelf.

My name is Walter Cruickshank and I am the Acting Director of the Bureau of Ocean Energy Management (BOEM). BOEM is responsible for managing the development of our Nation's offshore energy and mineral resources in an economically and environmentally responsible manner. BOEM accomplishes this mission through its oil and gas, renewable energy, and marine minerals programs, all of which are guided by rigorous, science-based environmental review and analysis. BOEM helps support the Administration's goal to increase domestic energy production by providing access to Outer Continental Shelf (OCS) resources through programs that enable exploration and production of offshore oil and gas resources and facilitate renewable energy development. As a result, BOEM plays an important role in advancing the Administration's comprehensive approach to expanding responsible domestic energy development as part of a broader effort to secure the Nation's energy future, benefit the economy, and create jobs.

A hallmark of BOEM's approach to offshore energy development is striking the right balance to protect our coasts and communities while still allowing the United States to remain a global energy leader.

Wind

BOEM works diligently to oversee responsible offshore wind development along the OCS by identifying wind energy areas, using a transparent leasing process with extensive environmental analysis, stakeholder outreach and public participation. BOEM is committed to working with all our stakeholders – which includes state and local governments, the U.S. military, other federal government agencies, fishing and maritime communities, federally recognized Tribes, and the offshore wind industry – to ensure any potential development takes all ocean uses into account. BOEM coordinates OCS renewable energy activities with its federal, state, local, and tribal government partners through mechanisms such as Intergovernmental Renewable Energy Task Forces for each interested State and partnerships, such as a partnership with the Department of Energy's National Renewable Energy Laboratory, which provided invaluable insight to BOEM by providing the 2016 Wind Resource Assessments for the United States. BOEM also

coordinates public information meetings to help keep interested stakeholders updated on major renewable energy milestones.

To date, BOEM has issued 16 active commercial offshore wind energy leases generating over $470 million in bonus bids for 1.7 million acres.

BOEM's Offshore Renewable Energy Program has issued at least one wind energy lease off every state on the Atlantic Coast from Massachusetts to North Carolina. We are examining additional offshore wind planning activities in the Gulf of Maine, the New York Bight, North Carolina, California, Hawaii and Oregon. BOEM has approved 10 Site Assessment Plans (SAPs) and received 10 Construction and Operations Plans (COPs) for specific Atlantic wind energy projects in areas that have already been leased and anticipates receiving up to five more COPs over the next year. We also note that the first wind turbines in Federal waters were installed offshore Virginia in June 2020.

In addition, BOEM is in the planning stages for areas offshore the Pacific Coast as well, including working with partners in the States of California, Oregon, and Hawaii.

Marine Hydrokinetic

BOEM is committed to advancing innovative technologies for both wind and marine hydrokinetic energy offshore the United States. Marine hydrokinetic (MHK) technology harnesses energy from ocean waves, tides and currents, and converts it into electricity to power our homes, buildings and cities. Jurisdiction for grid connected MHK projects on the OCS is shared by BOEM and the Federal Energy Regulatory Commission (FERC). BOEM has authority to issue leases, easements, and rights-of way and FERC has authority to issue licenses for the construction and operations of MHK projects on the OCS. Lease issuance by BOEM is a prerequisite for a license from FERC.

We are excited for the possibilities these new technologies bring and expect to learn more as projects develop.

Marine Hydrates

Over the course of the past several years, BOEM has made significant advances in our effort to assess the resource potential of gas hydrates located on the floor of the OCS. Gas hydrates are ice-like crystalline substances occurring in nature where a solid water lattice accommodates gas molecules (primarily methane, the major component of natural gas) in a cage-like structure. These form under conditions of relatively high pressure and low temperatures, such as those found in the shallow subsurface under many of the world's deep-water oceans. One cubic foot of hydrate at reservoir temperature and pressure yields approximately 160 cubic feet of gas at atmospheric temperature and pressure. The amount of natural gas in methane hydrates worldwide is estimated to be far greater than the entire world's conventional natural gas resources.

BOEM, in cooperation with the United States Geological Survey, the Department of Energy, and other government agencies, is working to research and develop models that would identify resource locations and quantities on the OCS. The technology that would recover hydrates for energy production is in its infancy, and the sustained production of energy from gas hydrates has yet to be demonstrated anywhere in the world. Nevertheless, BOEM continues to work with both its public and private partners to create and adapt models of marine hydrate resources for all four regions of the OCS to better understand the potential viability of our nation's gas hydrate resources.

Conclusion

An energy strategy that advances the Administration's goal of expanding domestic energy production includes the development of the emerging offshore energy resources that have a role in our Nation's long-term economic development. These resources include wind, marine hydrokinetic energy, and the potential recovery of gas hydrates from the ocean floor. Securing these sources of energy creates American jobs and promotes innovation in the United States.

Offshore energy, in all its forms, will play an important role in this country's energy portfolio, and BOEM stands ready to work with the Committee as we move ahead. I look forward to our continued work together and to answering your questions today.