Testimony of Dr. Walter D. Cruickshank Deputy Director Bureau of Ocean Energy Management U.S. Department of the Interior Before the House Natural Resources Subcommittee on Energy and Mineral Resources March 20, 2024

Chairman Stauber, Ranking Member Ocasio-Cortez, and members of the Subcommittee, I am pleased to appear before you today to discuss the Bureau of Ocean Energy Management's ongoing responsibility to assess existing oil and natural gas resources on the Outer Continental Shelf (OCS). My name is Walter Cruickshank, and I am the Deputy Director of BOEM, a bureau within the Department of the Interior (DOI).

Comprehensive Inventory of U.S. Outer Continental Shelf Oil and Natural Gas Resources

Resource evaluations have been carried out by geologists, statisticians, and economists for decades to offer insights into petroleum supply. To tackle the challenge, increasingly complex quantitative techniques and procedures have been developed in response to the needs and uses for these assessments. Resource estimates provide critical input to decision-makers and inform various policy alternatives.

Section 357 of the Energy Policy Act of 2005 (EPAct) directs the Secretary of the Interior to conduct an inventory and analysis of oil and natural gas resources contained within the submerged lands of the U.S. OCS. The Secretary is required to submit this analysis to Congress every 5 years.

The statute mandates that the inventory and report meet the following criteria:

- 1. incorporate available data on oil and natural gas resources in areas offshore of Mexico and Canada that are relevant to estimate the resource potential of the OCS;
- 2. use any available technology except drilling to obtain accurate resource estimates;
- 3. analyze how OCS resource estimates have changed over time in relation to available data and exploration and development activities;
- 4. estimate the effect of understated oil and natural gas resource estimates on domestic energy investments; and
- 5. identify and explain how legislative, regulatory, and administrative programs or processes restrict or impede resource development and affect domestic supply.

As directed by the statute, BOEM prepared and delivered *The Comprehensive Inventory of OCS Oil and Natural Gas Resources: 2023 Update* (Comprehensive Inventory Report) to Congress on January 17, 2024. The Comprehensive Inventory Report covered the years 2018 to 2023.

National Assessment of Undiscovered Technically Recoverable Resources and Undiscovered Economically Recoverable Resources

BOEM publishes a formal national assessment of Undiscovered Technically Recoverable Resources (UTRR) and Undiscovered Economically Recoverable Resources (UERR) every 5 years. These National Assessments inform the Comprehensive Inventory Reports to Congress. UTRR are estimates of oil and gas resources that could be produced from the subsurface using conventional extraction techniques. UERR are a subset of UTRR that are assessed to be commercially recoverable under particular economic and technologic conditions.

BOEM's most recent National Assessment of undiscovered resources was finalized in 2021. The National Assessment is a component of energy policy analysis and provides important information about the potential of oil and gas resources on the OCS. Work is underway to prepare for the 2026 National Assessment.

In developing the National Assessment, BOEM considers recent geophysical, geological, and technological information to estimate potentially recoverable oil and gas resources. This information comes from multiple sources, including OCS operator subsurface geologic and wellbore data, OCS geophysical and seismic data, and geologic play information from domestic and global analogs. Economic parameters, such as exploration and development costs and oil and gas prices, are also factored into the assessment.

Improved Technology and Methodology

The 2023 Comprehensive Inventory Report assesses only technically recoverable hydrocarbon resources, both discovered and undiscovered. The interplay of technological advancement and changing economic conditions has an important role in assessing discovered and undiscovered technically recoverable resources, as well as the extent of the commercial frontier of hydrocarbon resources.

Since 1975, DOI has completed 11 National Assessments of OCS undiscovered oil and natural gas resources. During this period, the geological and geophysical information available to BOEM assessors has dramatically increased. These data have increased BOEM's knowledge regarding OCS resource potential, particularly in the more mature areas of the central and western Gulf of Mexico.

Over the period that the National Assessments have been conducted, industry's technological capabilities expanded considerably. Today, the oil and gas industry possesses the ability to drill both exploration and production wells in water depths exceeding 10,000 feet. The use of three-dimensional (3-D) and other advanced seismic data and interpretation techniques has served as a catalyst to transform the geosciences and the petroleum industry by providing more accurate subsurface imaging. Resource assessment techniques have also become more sophisticated during this period.

Each National Assessment reflects a snapshot in time that should not be viewed as either understated or overstated when compared to later assessments that will reflect additional information, changed circumstances, and a better understanding of the OCS subsurface.

2023 Comprehensive Inventory Report Findings

The 2021 National Assessment contains BOEM's most recent oil and gas resource estimates and served as a key input to the 2023 Comprehensive Inventory Report. Compared to the 2018 Comprehensive Inventory Report, BOEM's estimate for undiscovered technically recoverable OCS oil resources has decreased more than 23%, and the volume estimate of undiscovered technically recoverable gas resources decreased 30%.

The overall decrease reflects recent exploration results and is due, in part, to improvements in BOEM's assessment practices, as well as advances in technological capabilities for resource assessment, which continue to align with industry standards. These advances have allowed BOEM to generate a clearer picture of the OCS subsurface geology, particularly in the Gulf of Mexico region. As a result, BOEM refined the number and size of oil and gas prospects within the 2021 National Assessment, resulting in decreases of UTRR and UERR estimates.

Informing Decisions

BOEM's National Assessment is one of a number of information sources used by policymakers for program planning and considering energy policy options. A primary example is the development of the National OCS Oil and Gas Leasing Program (National OCS Program). Under Section 18 of the OCS Lands Act, the Secretary of the Interior is responsible for establishing a schedule of oil and gas lease sales for a five-year period by evaluating specified attributes of OCS areas. The Secretary is authorized to select the size, timing, and location of proposed OCS lease sales that best meet national energy needs while balancing, to the maximum extent practicable, the potential for environmental damage, discovery of oil and gas, and adverse impact on the coastal zone.

Conclusion

Thank you again for the opportunity to be here today to discuss BOEM's efforts to responsibly manage our nation's energy resources on the OCS to meet the Nation's energy needs while minimizing impacts to the ocean, ocean users, and marine life. BOEM's programs are essential for the Administration's continued commitment to ensuring a clean and secure energy future -- one that is sustainable and benefits all Americans. I look forward to answering any questions that this Committee may have.