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On Behalf of the EnerGeo Alliance

Written Testimony

Before the

U.S. House of Representatives Natural Resources Committee

Subcommittee on Energy and Mineral Resources

"Comprehensive Offshore Resource Evaluation Act (CORE Act)"

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Chairman Stauber, Ranking Member Ocasio-Cortez, and Members of the Subcommittee:

For the record, my name is Dustin Van Liew, and I am the Vice President of Global Policy & Government Affairs at EnerGeo Alliance. I spearhead EnerGeo's legislative and regulatory engagement efforts at national and international levels. Our membership base includes 60 companies spanning 50 countries. EnerGeo's mission is to advance the energy geoscience and exploration industry through global governmental, regulatory, and legal advocacy, communications, environmental and scientific research, and standard development. We aim to drive excellence in health, safety, environmental performance, and sustainability.

I joined EnerGeo (then IAGC) in 2015 and have extensive experience and background in policy and government affairs. Before joining EnerGeo, I served as the Executive Director for the Public Lands Council and National Cattlemen's Beef Association – Federal Lands. Since 2014, I have served as Board Member of the Western Resources Legal Center, having recently served as Board Chair from 2018 to 2023. I am well-versed in navigating the challenges that face natural resources-based industries and am a leading authority on public and government lands and international natural resource policy issues.

I present this testimony as Vice President of Global Policy & Government Affairs at EnerGeo Alliance. Founded in 1971, EnerGeo is the non-profit global trade alliance for the energy geoscience and exploration industry. EnerGeo member companies include onshore and offshore geoscience survey operators and acquisition companies, energy data and processing providers, energy exploration and development companies, equipment and software manufacturers, industry suppliers, service providers, and consultancies. EnerGeo advocates for connecting more people and communities with access to energy around the world – by communicating factually, securing science-based policies, and promoting the geoscience companies, innovators and energy developers that use earth science to discover, develop and deliver energy, sustainably, to our world. Together, we are Making Energy Possible. Many EnerGeo member companies operate in the U.S., both onshore and offshore across the Outer Continental Shelf (OCS), and extensively within the Gulf of Mexico (GOM). These companies play an integral role in the successful exploration and development of offshore hydrocarbon, wind, and low-carbon solutions such as carbon capture and storage (CCS) resources through the acquisition and processing of geophysical and geological data.

Through reliable science- and data-based regulatory advocacy, credible resources and expertise, and future-focused leadership, EnerGeo continuously works to develop and promote informed government policies that advance responsible energy exploration, production, and operations. As the U.S. and global energy demand evolves, we believe that all policymakers and energy companies pursuing mainstay, alternative, and low-carbon solutions should have access to reliable data and analysis to support their forward-moving efforts.

At EnerGeo, we are proud of our unique collaborations among industry, scientists, and governments to support sustainable energy access. In the U.S., this includes EnerGeo's Gulf of Mexico Proactive Regulatory Observational Program (GOM-PROP) to provide a self-sustaining structure for the continued successful implementation of, and compliance with, both present and future Incidental Take Regulations (ITRs) applicable to geoscience surveys in the Gulf of Mexico, and to provide comprehensive marine mammal monitoring data.

Energy Demand: The global economy and oil demand are set to achieve consecutive record highs in 2024 and 2025, alongside record lows in oil intensity and consecutive global oil supply records, per U.S. Energy Information Administration (EIA) projections.

Natural gas experienced record-breaking global demand, production, and consumption levels in 2023 – and these records are expected to be broken again this year and in 2025 per the International Energy Agency (IEA).

Global natural gas demand is also predicted to reach record highs in 2024 and 2025 with natural gas remaining an integral and competitive source for global electricity generation, heating, cooking, and industrial demands, as well as environmental progress.¹

Exploration will continue to play a critical role in ensuring global access to energy in the future and now in the midst of the energy evolution. By 2050, the world population is estimated to increase to almost 9.8 billion.² Total energy use is expected to increase 34%, with an expected steady growth in mainstay sources of energy (petroleum and natural gas constituting 50%) and faster growth anticipated in all other sources.³ In this scenario, exploration will be critical for the energy evolution. While about 5 billion barrels of oil were discovered in 2023, by 2050 we will need to discover 17.56 billion barrels per year to match the global energy demand.⁴

Although the U.S has been blessed with energy abundance, roughly 10% of the world does not have reliable access to electricity. According to the Rockefeller Foundation, more than

¹ TXOGA Quarterly Energy Economics Outlook

² Source: 2023 Population Data Sheet - <u>https://www.prb.org/wp-content/uploads/2023/12/2023-World-Population-Data-Sheet-Booklet.pdf</u>

³ Source: EIA International Energy Outlook – October 2023 <u>https://www.eia.gov/outlooks/ieo/</u>

⁴ Source: RystadEnergy UCube; Rystad Energy U.CubeExploration; Rystad Energy research and analysis

840 million people lack access to electricity and over 3 billion people currently live in countries with per capita energy consumption below the <u>Modern Energy Minimum</u> – 1,000kwh per year. Together, it is estimated that over 3.5 billion people do not have reasonably reliable access to electricity, meaning that they spend more than 56 days per year without power.⁵

Currently, 30% of the world does not have access to clean fuels for cooking. Cooking with kerosene, coal, or biomass is directly linked to over 3 million premature deaths per year with women and children disproportionately impacted.⁶ Removing access to unfavored energy sources has disproportionate impacts on marginalized populations.

Populations around the world will need greater access to reliable and affordable energy to not only thrive, but for the movement of goods and people and for climate resilience, providing the necessary feedstock for fertilization, refrigeration for foods and medicine, irrigation, heating and cooling, and more. As a top priority of UN Sustainable Development Goals, we need all sources of energy at the table, to meet skyrocketing demand for energy security and energy accessibility.

While we are at the start of what is being called an "international upcycle," where the industry invests now will be influenced by where it has access to insight through geoscience data, infrastructure, and supportive regulatory and policy structures. Unfortunately, the United States is falling behind due to unnecessary bureaucratic delays and shortsighted policies that elevate certain forms of energy over others.

Our Surveys: Meeting growing demand for energy that is more accessible, affordable, reliable, and cleaner will require greater collaboration and geoscience-driven energy policies. The reality is, no matter the preferred or prioritized energy source, virtually all sources of energy needed to support the world's energy evolution require "eyes" on something going in, out, or through the ground. That sight is only made possible through the innovation and insight of the energy geoscience industry.

Mainstay energy sources such as petroleum and natural gas, and the lower carbon energy solutions such as offshore and onshore wind, depend on geoscience. Similarly, carbon capture, utilization, and storage projects are simply not possible without geoscience surveys to ensure that those projects are properly sited, designed, and managed. Energy literally starts with the geoscience industry.

By providing invaluable information about the resources beneath us, energy companies and policymakers can identify and prioritize high-density, lower-carbon-intensive energy sources, locate where offshore wind facilities are best suited for harnessing the energy from

⁵ John Ayaburi, Morgan Bazilian, Jacob Kincer, Todd Moss, Measuring "Reasonably Reliable" access to electricity services, The Electricity Journal, Volume 33, Issue 7, 2020, 106828, ISSN 1040-6190, https://doi.org/10.1016/j.tej.2020.106828.

⁶ World Health Organization, "Household air pollution", <u>https://www.who.int/news-room/fact-sheets/detail/household-air-pollution-and-</u>

health#:~:text=Each%20year%2C%203.2%20million%20people,air%20pollution%20data%20for%20details)

wind, prolong the life of existing natural gas and petroleum assets, make it possible to store carbon beneath the surface, and more.

As nations develop and implement their energy evolution goals to make reliable, affordable energy available to their citizens and meet Net Zero Emissions (NZE) policy ambitions, it is essential to understand that those goals cannot and will not be realized without the critical data and technology the geoscience industry provides.

Even though, by current market cap, geosciences are a small part of the energy supply chain, when it comes to whether energy can be accessed in any given region, we are the first and most pivotal part.

Resource Evaluation in the United States

The only viable process for the U.S. government to understand the country's resource potential is through geoscience surveys conducted by advanced technology companies like those that comprise EnerGeo's membership. According to the Bureau of Ocean Energy Management's (BOEM) website, regarding resource evaluation, "Every five years BOEM provides a comprehensive assessment of undiscovered oil and gas resources on the OCS. The results are presented as both Undiscovered Technically Recoverable Resources (UTRR) and Undiscovered Economically Recoverable Resources (UERR). The assessment utilizes a geologic play-based approach that incorporates a complete analysis of geologic and petroleum system elements for the UTRR, and an assessment of engineering and economic considerations for the calculation of the UERR. DOI has released an Assessment of Undiscovered Oil and Gas Resources on the US OCS regularly since 1975."

This information is not possible and would not be available to policymakers and U.S. citizens without the geoscience industry conducting surveys. By conducting surveys that image the subsurface below the ocean floor, geoscience surveys provide the information governments and policymakers need to make informed decisions in the best interest of their citizens regarding accessing and developing energy sources of all types, as well as developing low-carbon strategies.

Based on information compiled by the subcommittee, BOEM last updated its reserves report in December 2019, with their 2023 Comprehensive Inventory still relying on this outdated data for Gulf of Mexico. Notably, there is a lack of reserves information for Alaska and the Atlantic on their website.

Seismic and geoscience surveying is a well-understood and safe industry practice, and informed policy decisions regarding offshore energy development *of any type* can only be made with the evaluation provided by modern seismic survey technology. In the more than 60 years of geoscience surveys in the Gulf of Mexico, there has not been a single reported incidence of sound from survey operations injuring marine life. Tens of thousands of offshore geoscience surveys have occurred throughout the world over the last 60 years using conventional compressed-air arrays. In all that time, and across millions of kilometres, there is no credible scientific evidence that sound from geoscience surveys has had any significant impacts on marine life populations or the marine environment.

Unfortunately, the permitting of this activity, critical to identifying the nation's energy supplies, is too often stalled within regulatory agencies without accountable deadlines or timelines for review, or impeded by extreme environmental advocacy organizations exploiting existing regulatory and litigation processes.

Policy Challenges

Because the energy geoscience industry provides access to develop energy through its imaging, it is very often the first presence of energy development or exploration in a geographic area. As a result, our members often encounter obstacles and opposition to their operations that are aimed at preventing the development of a certain energy source—whether that's petroleum, natural gas, or even wind.

In some regions, extreme environmental advocacy groups prioritize preventing any energy geoscience surveys from occurring and even label geoscience research as "the gateway drug to oil and gas." Policymakers and energy companies consequently are unable to access important data needed to make informed decisions about future energy development.

This has led to increased regulatory scrutiny and misinformation about what geoscience research is and its impacts in frontier areas and even in mature basins. Recent eNGO advocacy focuses on geoscience as the linchpin to not only exploration but also increasing production in mature basins includes the Gulf of Mexico.⁷ This short-sighted advocacy ignores both the undisputed energy needs of the world and the fact that geoscience surveys allow for the identification of both the presence and absence of energy sources and, thus, more efficient and less-impactful development.

In order to stimulate new geoscience activity, policymakers must prioritize geosciencedriven energy policies and regulatory frameworks that remove uncertainty and delay, promote timely permitting decisions, and support a quick pace of return on investment. Regulations should provide predictability, promote competition, and provide fiscal certainty, through risk-and science-based processes.

BOEM Permitting & NMFS Authorization Delays

In the Outer Continental Shelf Lands Act (OCSLA), Congress expressly mandated the "expeditious and orderly development" of the Outer Continental Shelf (OCS) "subject to environmental safeguards." 43 U.S.C. § 1332(3). Courts have confirmed that "the expeditious development of OCS resources" is OCSLA's primary purpose. *California v. Watt*, 668 F.2d 1290, 1316 (D.C. Cir. 1981). Congress enacted OCSLA to "achieve national economic and energy policy goals, assure national security, reduce dependence on foreign sources, and maintain a favorable balance of payments in world trade." 43 U.S.C. § 1802(1). Congress expressly intended to "make [OCS] resources available to meet the Nation's energy needs as rapidly as possible." *Id.* § 1802(2)(A).

⁷ <u>https://www.nrdc.org/stories/offshore-drilling-101#environmental</u>

Geoscience surveying has been and continues to be essential to achieving OCSLA's requirements because it is the only feasible technology available to accurately image the subsurface of the OCS before a single well is drilled or a single energy source is developed.

Offshore geoscience surveys require authorizations from BOEM, pursuant to OCSLA. *See id.* § 1340. There is no requirement for an applicant for an offshore survey permit under OCSLA to obtain an incidental take authorization under the Marine Mammal Protection Act (MMPA). However, unlawful "takes" of marine mammals incidental to lawful activities (such as a permitted offshore seismic survey) may nevertheless be subject to MMPA-based penalties. *See* 16 U.S.C. § 1375. Accordingly, many applicants for offshore survey permits from BOEM also request incidental (*i.e.*, unintentional) take authorization under the MMPA from the National Marine Fisheries Service (NMFS) and/or the U.S. Fish and Wildlife Service (FWS).⁸

In this context, it is important to recognize that the permit issued by BOEM authorizes the *seismic survey* and the MMPA authorization narrowly addresses the *incidental take* associated with the seismic survey. NMFS and FWS do not have jurisdiction over the survey; their authority under the MMPA extends only to the authorization of incidental take. Notwithstanding the limited role of FWS and NMFS, MMPA authorizations are often the primary cause of administrative delay in the offshore geoscience survey permitting process.

In the past decade, these problems have manifested in routinely delayed permitting processes, inconsistent and misguided analyses of potential impacts, and opportunistic advocacy litigation intended to block or impede offshore development.

For example, in the Gulf of Mexico, BOEM requires an MMPA authorization from NMFS prior to the issuance of a geoscience permit under the current ITR. During the rulemaking process, industry pointed out mathematical errors in the ITR that was originally promulgated January 2021. As discussed further below, it took BOEM and NMFS an additional three years to re-evaluate the original analysis before NMFS amended the ITR in 2024, ultimately making few changes. This revision process was just one of many delays in the history of the GOM ITR that contributed to the steady decline of geoscience surveys mapping the Gulf of Mexico since at least 2014.

In Alaska, unnecessary and unexplained delays in processing MMPA authorizations prevent planned geoscience surveys from providing the timely insight that would update resource estimates. Currently, at least one petition for MMPA authorization has stalled for more than two years preventing updated insight into the resource potential on Alaska's North Slope.

In the Atlantic, approximately 30 years have passed since the potential hydrocarbon resource base has been assessed with seismic surveys. In the meantime, seismic surveys for "scientific research" have been conducted fairly regularly in the Atlantic OCS, in addition to other geophysical surveys used to characterize the seabed and subsurface for suitability of offshore wind energy facilities. Six companies applied to BOEM for permits to conduct seismic surveying in the Atlantic OCS—a process that started in 2011, when the first permit application

⁸ FWS has jurisdiction over polar bears, walrus, sea otters, dugongs, and manatees. NMFS has jurisdiction over all other marine mammals.

was filed, and ultimately ended in 2018 after nearly six years of working to obtain MMPA authorizations from NMFS.

Support for Proposed Language

In general, EnerGeo believes that the CORE Act as drafted will advance responsible and sustainable energy exploration and production. Sections 1, 2, 3, and 5, as a whole, provide clarity and helpful action items that will support the nation's energy goals. Section 4, in particular, removes onerous procedural roadblocks and litigious obstacles that hinder domestic energy security goals. Without a more efficient regulatory framework in place to support geoscience surveys, the country will not be able to keep up with the increased demand for reliable energy.

Subsections 4(a) and 4(b)

History has shown that a five-year period of effectiveness for ITRs is counterproductive, creates an inefficient permitting process, and leads to repetitive lawsuits by advocacy organization seeking to halt energy development. Subsection 4(a) resolves these issues by eliminating the five-year expiration date and unnecessarily tedious ITR renewal process.

The ITR governing the incidental take of marine mammals in GOM associated with offshore geoscience surveys is a prime example showing why NMFS lacks the capacity and ability to timely issue ITRs every five years.⁹ The original petition to initiate the rulemaking process for the GOM ITR was submitted 22 years ago by the Minerals Management Service (MMS), an agency that no longer exists and was reorganized to now-BOEM and the Bureau of Safety and Environmental Enforcement. MMS/BOEM had to submit three revised petitions in 2004, 2011, and 2016 to account for updated information and analyses that had accumulated while NMFS lacked the resources to take meaningful action on the petitions.

NMFS eventually issued a final rule in 2021 in response to BOEM's 2016 revised petition. But that final agency action was short-lived, as the 2021 final rule was reassessed to correct certain mathematical errors, as described above. Over the course of three years, NMFS considered and incorporated newly available information and issued the 2024 final rule, affirming the same regulations, mitigation, monitoring, and reporting requirements promulgated pursuant to the 2021 final rule. The timeline leading up to the current GOM ITR therefore provides little assurance that NMFS is capable of issuing ITRs every five years. A better approach would be to eliminate the arbitrary five-year limit on ITRs and to instead allow for the targeted amendment of ITRs, as necessary, to update mitigation measures or other findings, based on the best available scientific information.

Eliminating the arbitrary five-year limit will also help to decrease opportunities for advocacy groups to challenge ITRs in misguided attempts to prevent U.S. energy development.

⁹ See BOEM Request to the National Oceanic and Atmospheric Administration for Incidental Take Regulations Governing Geophysical Surveys on the Outer Continental Shelf of the Gulf of Mexico at 5 (Oct. 14, 2016), available at https://media.fisheries.noaa.gov/dam-migration/boem_2016rule_app_opr1.pdf.

Indeed, numerous meritless lawsuits have been filed over two decades challenging ITRs applicable to Alaska North Slope oil and gas activities—wasting the resources of federal agencies and the courts. Again, new agency actions, which can be challenged in court, should only occur if there is a substantive need—not based on an arbitrary five-year termination period for what may be an otherwise valid ITR.

For the same reasons stated above, EnerGeo similarly supports the language of subsection 4(b), which applies the logic described in Subsection 4(a) and prevents the existing GOM ITR from expiring on April 19, 2026. By prolonging the period of effectiveness, the geoscience and exploration industry can continue to make long-term plans for meaningful geoscience surveys that will inform forward-looking policies and help diversify energy sources.

Subsection 4(*c*)

Even after ITRs are issued, the current regulatory framework requires NMFS to jump through an additional procedural hoop and issue Letters of Authorizations (LOAs) to survey operators before they can move forward with the geoscience activities described and analyzed in their respective ITRs. Subsection 4(c) seeks to streamline this onerous procedural process and offers a more pragmatic and beneficial approach that both conserves agency resources and maintains the integrity of the substantive mitigation and monitoring requirements to remain in compliance with the MMPA and the Endangered Species Act.

For example, after the 2021 ITR was issued for geoscience activities in GOM, NMFS incurred a significant backlog of applications for LOAs. The delays in permitting continued to snowball when the 2021 ITR was revised and reissued in 2024 to fix agency mathematical errors. Although NMFS has recently been more expedient in approving LOA applications, history shows that the LOA approval process is unduly time consuming and detrimental to the timely conduct of otherwise-lawful geoscience activities.

Subsection 4(c) simply relieves an administrative burden and provides a clear and predictable timetable for surveys to proceed under BOEM permits without the delay caused by waiting for an untimely LOA. There would be no significant change in protection as a result of this modification because operators would still be required to comply with almost all of the existing mitigation and monitoring measures prescribed in the GOM ITR.

Conclusion

The energy geoscience industry is in the business of minimizing the footprint of energy activity by pinpointing where the resource is and importantly where it is not. Armed with reliable data and analysis, companies and policymakers are able to identify and prioritize high-density, low-carbon-intensive energy sources closer to existing infrastructure and the end user, locating where offshore wind facilities are best suited for harnessing the energy from wind, prolonging the life of existing natural gas and petroleum assets, and making it possible to store carbon beneath the surface. Geoscience surveys provide the information governments and policymakers need to make informed decisions in the best interest of their citizens regarding accessing mainstay energy and alternative sources, as well as developing low-carbon strategies. Currently,

those data acquired by our members make it possible for BOEM to publish resource assessments. Nations cannot develop and provide opportunities for energizing their economies without the geoscience industry, let alone implement their energy evolution goals to make reliable, affordable energy available to their citizens and meet Net Zero Emissions (NZE) policy ambitions.

We strongly support the proposed legislation, which will help to ensure more rigorous and comprehensive assessments of U.S. energy supplies and a more efficient and predictable process for permitting geoscience surveys. The energy geoscience and exploration industry stands ready to partner in the discovery and development of low carbon solutions and of energy dense, low emissions sources of energy to power the world. Streamlining the permitting process along with reducing the ability for outside special interest groups to obstruct energy geoscience exploration is a necessary step to ensure our continued development of energy resources and low-carbon solutions for future generations in the U.S.

Thank you for the opportunity to testify today.