

Testimony of Russell Holmes  
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Committee on Energy and Natural Resources  
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Chairman Manchin, Ranking Member Barrasso, and Members of the Senate Committee on Energy and Natural Resources, thank you for the opportunity to testify. My name is Russell Holmes, and I am the Director of the Center for Offshore Safety (COS).<sup>1</sup> Prior to joining COS last year, I served for 27 years in the U.S. Coast Guard where I had the privilege of facilitating commerce while ensuring the marine transportation system operated safely, reliably, and securely. And in my last assignment, I was the Coast Guard's lead regulator, overseeing offshore oil and gas safety, security, and environmental compliance.

In today's modern world, security of our critical energy infrastructure also includes cybersecurity. With the recent cyberattack on the Colonial Pipeline, it is important to note that our industry is closely monitoring this ongoing situation. Cybersecurity is a top priority, and our industry leaders are engaged on a continuous basis with government agencies to mitigate risk and fully understand the evolving threat landscape. The offshore industry continuously invests in new technologies and practices to best prevent and mitigate these types of threats. The industry also actively participates in the U.S. Coast Guard led Gulf of Mexico Area Maritime Security Committee, in which companies meet and conduct annual security exercises which focus on both physical and cyber security.

The Gulf of Mexico has long been a key producing region for the United States. Prior to the growth of onshore production from the Permian, Bakken, and other shale plays, the Gulf of Mexico provided almost 30 percent of U.S. production. In 2020, a challenging year for the industry with impacts from COVID-19 and production shut-ins due to hurricanes, Gulf of Mexico production accounted for 15 percent of U.S. oil production<sup>2</sup> and 2 percent of gas production<sup>3</sup>. Importantly, during the oil price decline a few years ago, when shale production was curtailed, Gulf of Mexico production increased as long lead-time projects that had been in the works for years were finally brought online. This highlights the importance of a robust offshore leasing, exploration, and development program that serves as a backbone of domestic production and my role centers on advancing safety and environmental protection in these critical operations.

In addition to reducing our dependence on foreign sources, offshore operations bring substantial economic benefits to the Gulf region and the country. Offshore exploration and production support hundreds of thousands of good paying jobs,<sup>4</sup> and are conducted under some of the most stringent safety and environmental regulations in the world. In my previous role, I worked daily with the Bureau of Safety and Environmental Enforcement (BSEE), U.S.

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<sup>1</sup> <https://www.centerforoffshoresafety.org/>

<sup>2</sup> EIA, [https://www.eia.gov/dnav/pet/pet\\_crd\\_crpdn\\_adc\\_mbbldpd\\_a.htm](https://www.eia.gov/dnav/pet/pet_crd_crpdn_adc_mbbldpd_a.htm)

<sup>3</sup> EIA, [https://www.eia.gov/dnav/ng/ng\\_prod\\_sum\\_a\\_EPG0\\_VGM\\_mmcfa.htm](https://www.eia.gov/dnav/ng/ng_prod_sum_a_EPG0_VGM_mmcfa.htm)

<sup>4</sup> National Ocean Industries Association. "The Economic Impacts of the Gulf of Mexico Oil and Natural Gas Industry" <https://www.noia.org/gulfimpact2020/> 2020.

Coast Guard Headquarters and participated with the National Offshore Safety Advisory Committee to ensure a holistic unified offshore regulatory compliance approach and framework to ensure the right mix of regulations, policy, and industry standards. Offshore exploration and production also contribute billions of dollars to federal and state governments every year, which support important programs like education, infrastructure, and conservation efforts. In 2019 alone, the Department of the Interior (DOI) disbursed nearly \$12 billion dollars from energy production on federal lands and waters to the U.S. and state governments.<sup>5</sup> In 2021, the Land and Water Conservation Fund, which is funded almost entirely by offshore oil and gas revenues, distributed \$302 million to states across the country for outdoor recreation and conservation programs to in all 50 states, five U.S. territories and the District of Columbia.<sup>6</sup> In addition, earlier this month DOI announced \$1.6 billion to address critical deferred maintenance projects and improve transportation and recreation infrastructure in national parks, national wildlife refuges and recreation areas, and at Bureau of Indian Education schools. This funding, through the [Great American Outdoors Act](#), advanced through this committee, is provided by energy development on federal lands and water.

While the benefits of the U.S. offshore oil and gas program are unquestionably many, it is a balance to produce these natural resources while ensuring the safety of the offshore workforce and protecting the environment. Today, offshore energy development occurs using state-of-the-art standards and a safety management culture, due in large part to industry leadership and the lessons learned a decade ago. Industry has remained focus on enhancing its ability to:

- protect workers;
- prevent spills;
- intervene to halt any spill that does occur; and,
- respond to any spill with the most effective mitigation measures possible.

Areas in which the industry has made significant advancements include:

- promoting safety culture;
- minimizing accidents and preventing spills by developing and revising industry standards;
- tracking, reporting and learning from incidents;
- developing and improving subsea containment and intervention capabilities;
- mitigating environmental impacts of spills through greater spill response technology and practices;
- enhancing safety and environmental management systems, and,
- creating and being part of the Center for Offshore Safety.

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<sup>5</sup> U.S. Department of the Interior, "Natural Resources Revenue Data" <https://revenue.data.doi.gov/query-data/?dataType=Disbursements>

<sup>6</sup> U.S. Department of the Interior, <https://www.nps.gov/orgs/1207/01-19-21-land-water-conservation-funding.htm>

By using the American Petroleum Institute's (API) accredited standards development process, the oil and gas industry has published over 250 new and revised offshore safety standards in the last 11 years, with over 100 of those now included in federal regulations. These industry standards provide a foundation for safe and environmentally responsible operations not only in the Gulf of Mexico, but around the world. New and revised standards, developed through collaborative efforts of industry experts, regulators and other experts, address issues related to:

- Well design, cementing and operator/ contractor interaction;
- Blowout prevention equipment design, operation, repair and maintenance, and associated control systems;
- Subsea equipment interfaces with remotely operated vehicles and well capping equipment;
- Protective equipment for oil spill response workers; and
- Integrity Management and Safety and Environmental Management Systems.

For the needed subsea containment and intervention capabilities, the Marine Well Containment Company (MWCC) and the HWCG, LLC were founded in 2010, and provide containment technology and response capabilities for the unique challenges of capping a well that is releasing oil in deep water. These companies employ a mix of experienced engineers and crisis response specialists well-versed in offshore operations and incident response, maintain quickly deployable systems that are designed to stem any uncontrolled flow of hydrocarbons from a subsea well, and facilitate training of their member companies on the installation and operation of these systems.

The industry has built on its already strong base to establish one of the world's most sophisticated and well-coordinated spill response networks, administered by the National Contingency Plan (NCP). By bringing together the resources and expertise of private industry, government agencies, and academia, the industry continually collaborates to ensure they learn everything they can from past incidents. Oil spill response organizations have increased their capabilities with more training opportunities while updating their suites of spill response equipment. API has helped to establish a robust oil spill response research and development program, that focuses on: planning; mechanical recovery; dispersants; in-situ burning; remote sensing; shoreline protection; alternative technologies; and inland spill response.<sup>7</sup> Industry's existing spill planning and response preparations also include regularly scheduled drills and exercises that include government agencies participating as they would in a real event. These drills allow all participants to learn effective response techniques, combine the skillsets of various disciplines, and enhance communication between the respective organizations.

A Safety and Environmental Management System, or "SEMS", is a performance-focused tool for integrating, mitigating, and managing safety and environmental risks in offshore operations. In my role as Director of the Center for Offshore Safety, promoting a robust systems-based approach to safety and environmental protection by implementing SEMS is one of my primary

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<sup>7</sup> <http://www.oilspillprevention.org>

roles. *API Recommended Practice for Development of a Safety and Environmental Management Program for Offshore Operations and Facilities (API RP 75)* is incorporated into federal regulations with the purpose of enhancing the safety of offshore operations by reducing the frequency and severity of accidents. SEMS is a proactive, risk-based performance approach that outlines the various key elements needed for an effective SEMS program, such as leadership and safety culture, the completion of a thorough hazards analysis and the implementation of effective management of change procedures.

The Center for Offshore Safety (COS) was formed in 2011 based on recommendations from the Presidential Commission and industry study teams to drive continuous improvement in the implementation and effectiveness of SEMS throughout the U.S. offshore oil and gas industry. The COS is playing a central role in both advancing a culture of safety in offshore operations and providing an important interface with government regulators.

The COS is a group of dedicated companies and organizations involved in offshore production with a shared commitment to promoting continual safety improvement for offshore operations through effective leadership, communication, teamwork, disciplined management systems, and independent third-party auditing and certification. Through the COS, participants work actively to improving safety performance and subscribe to the following principles:

- A visible commitment to safe operations.
- Share learnings and work collaboratively to drive safe operations and create a culture of safety.
- Decision making at all levels actively to promote safe operations.
- Ongoing examination and improvement to safety processes, equipment, training, and technology.
- application of industry standards and good practices to promote continual improvement.
- Responsibility for safety and empowerment of employees to take action.

The COS is focused on delivering SEMS tools, good practices, and implementation techniques based on API RP 75, as well as identified needs from annually collected safety data. The work continues as part of COS's commitment to learn and continually improve SEMS, safety, and safety culture via SEMS. Furthermore, COS's work is broken down into the following areas:

- Safety and SEMS Data Collection, Analysis and Reporting
- Good Practice Development
- Sharing Industry Knowledge
- Audit Service Provider (ASP) Accreditation

The COS staff works with numerous industry committees, subcommittees and work groups organized by COS to address specific SEMS concerns and opportunities. Safety and Environmental Management Systems Audits, Learning from Incidents (LFI), and Safety Performance Indicators (SPI) data are collected and analyzed. From this effort, good practice

recommendations are developed and shared to help companies continually improve SEMS effectiveness. The data and analyses are used to generate an annual report that is publicly available on the COS website and supplied to regulators. The LFI data is also used to generate “Safety Shares” which communicate directly with offshore workers. These one-page incident reports review the details of incidents and near-misses, and the lessons learned from them, to prompt discussions amongst offshore workers for how a similar incident might be prevented. The COS Annual Performance Report reflects the industry’s commitment to open communication and transparency of safety information, and to building collaboration and sharing safety and SEMS learnings in the industry.

The COS also uses safety and SEMS data, along with SEMS audit results submitted to BSEE to drive the development of good practice documents and SEMS implementation techniques. This includes developing resources to promote leadership engagement, self-assess SEMS maturity and effectiveness, and improve safety culture. The good practices, enhancements to SEMS implementation and auditing, and other tools from COS also contribute to reducing the likelihood of major incidents through the continual improvement in risk management which results in the identification and correction of weaknesses in the barriers that prevent their occurrence. The COS has published myriad number of robust guidelines and good practices for promoting safety in offshore operations that are available to anyone for free on the COS website. A few examples include the following COS documents:

- COS-3-01 Guidelines for Leadership Site Engagement
- COS-3-03 Guidelines for SEMS Maturity Self-Assessment
- COS-3-04 Guidelines for a Robust Safety Culture
- COS 3-05 Guidance for Developing and Managing Procedures

The COS works closely with members and other trade associations to share knowledge with and facilitate collaboration between all stakeholders. In addition to coordinating multiple member work groups, COS organizes and participates in various industry workshops, webinars, and conferences to promote good practices in offshore SEMS performance. Improved performance – and more specifically improved performance in safety – occurs effectively through a process of learning, collaborating, and taking action through good practices. The COS operates as a “center of excellence” for making that happen.

The COS also interfaces with government regulators, including both BSEE and USCG. SEMS implementation by operators is required in the BSEE SEMS Regulation. As part of compliance with the BSEE regulations, operators are required to conduct third-party audits of their SEMS every three years by accredited Audit Service Providers (ASP’s). COS serves as the accreditation body for these ASP’s and therefore focuses on enhancing SEMS auditing to support an independent third-party auditing process. The development of uniform COS audit tools, processes, and audit documents assists in implementing SEMS and creating uniformity that enhances sharing and learning from audit results.

From its inception, COS has provided a place for the industry to come together, share lessons learned, collaborate, and continually improve SEMS performance. COS enables industry

to continually improve safety and environmental performance through auditing of safety and environmental management systems, developing and implementing good practices, and capturing and sharing industry learnings. The COS helps to convene subject matter experts from multiple stakeholder organizations to develop these practices and stimulate cooperation among all stakeholders to share and learn from the best of each other.

Industry's and COS' work has led to continued advancements in technology, new and improved industry standards and enhanced best practices, advances in risk management, smarter regulations, and innovative approaches to addressing offshore safety. Continuous improvements occur through learning, collaborating, and innovating, and the offshore oil and gas industry remains committed to following through on its responsibility to operate in a safe and environmentally sound manner. Together with changes being made by federal regulators, the collective action has served to improve and will continually improve the safety of offshore energy development.

Thank you for the opportunity to address the committee today, and I am happy to answer any questions you might have.