Sponsor Briefing for the Committee Progress and Opportunities toward Decreasing the Risk of Offshore Energy Operations

Lauren Alexander Augustine Executive Director, Gulf Research Program



Let me start by saying...



A Quick Presentation...

- 1. A Little Bit about the GRP
- 2. The Committee's Statement of Task
- 3. Why Does the GRP Want This Study?
- 4. GRP Expectations and Uses for this Report

A Little Bit About the GRP

What is the context for our study?

\bigcirc

The Gulf Research Program

What: In 2013, the National Academies of Sciences, Engineering, and Medicine were endowed with \$500 million from criminal settlement fees from the Deepwater Horizon explosion and oil spill.

Purpose: carry out studies, projects, and other activities in the public interest that enhance offshore safety, environmental protection, and human health and community resilience

Timeline: Endowment to be expended completely over 30-years (2013-2043)

How: Guided by the GRP's new Strategic Plan (2020-2024) and advisory Division Committee





THE GULF RESEARCH PROGRAM

Purpose: carry out studies, projects, and other activities in the public interest that enhance offshore safety, environmental protection, and human health and community resilience

The manner in which the studies, projects, and other activities are to be conducted will be determined solely by NAS.



GRP Division Committee

GRP EXECUTIVE OFFICE

	_	RP EXECUTIVE OFFICE		
Communications	Administration	Program Evaluation	n Finance	Monitoring
GRP Program Boards				
OFFSHORE ENERGY SAFETY	HEALTH & RESILIENCE	ENVIRONMENT	EDUCATION	DATA
Integrating Initiative #1 – Offshore Situation Room				
Integrating Initiative #2 – Enhancing Community Resilience				
Integrating Initiative #3 – Understanding Gulf Ocean Systems				
Integrating Initiative #4 – Gulf Scholars Program				
Integrating Initiative #5 – Data Fellowship Program				
Integrating Initiative #6 – Consensus Study Series on Monitoring the Gulf for Progress and Change				



Integrating Initiative 6: Progress of the Gulf Study Studies -

Topics

Environmental
Stewardship and
Protection

Long-Term
Environmental Trends in
the Gulf of Mexico

Offshore Energy Safety

Progress and Opportunities
Toward Decreasing the Risk of
Offshore Energy Operations

This study



Progress Toward Human Health and Community Resilience in the Gulf of Mexico Region

Studies are the first in a series and will occur approximately every three years for the duration of the Gulf Research Program (through 2043)

\bigcirc

Putting a long-term series together

Report 4: Overarching Committee

Report 1: Environmental Trends

Report 2:
Decreasing
Offshore Risk

Report 3: Trends of Community Health and Resilience

Volume 1: 2020-2022

Volume 2: 2025 Volume 6: 2037

Volume 3: 2028 Volume 7: 2040

Volume 4: 2031 Volume 8: 2043

Volume 5: 2034 ~Fini~

Statement of Task

The Offshore Risk Committee

The National Academies of Science, Engineering, and Medicine will convene an ad-hoc committee to provide an assessment of the risk profile of offshore oil and gas operations over time. Specifically, this committee will examine issues related to and assess progress toward decreasing the systemic risks of offshore energy operations, keeping people and the environment safe as the Gulf of Mexico offshore energy industry evolves. In particular, the panel will:

- Define the current profile of systemic risks of offshore oil and gas operations in the Gulf of Mexico that could lead to disasters. By systemic risks, we mean defining risks associated with the components of the system, the system itself, and how humans interact with the system, in which a failure of any part could lead to failure of the system as a whole. The panel may consider the risks of a system failure as well as the impact of those risks to humans and natural resources.
- Assess how various technological, regulatory, environmental, organizational, and process changes have contributed to increasing or decreasing the systemic risks of the offshore oil and gas operations since the release of the report Macondo Well *Deepwater Horizon* Blowout: Lessons for Improving Offshore Drilling Safety (2012) and other relevant reports.
- Identify the numerous recommendations made from these post-Deepwater Horizon reports and detail the ones implemented and major ones that were not.
- Identify critical gaps and prioritize future needs for increased understanding, communication, and management of systemic risks related to the offshore oil and gas industry. This task could build on previous efforts by the industry and regulators.
- Consider how the regulatory structure motivates or incentivizes technological, environmental, organizational, and process changes that could decrease the systemic risks of the offshore oil and gas operations.
- If appropriate, assess how activities (including workshops and grants) funded by the GRP and other funders have contributed to a better understanding and reduction of the systemic risks in offshore oil and gas operations.

The offshore energy industry is a high-hazard industry characterized by diverse and complex operations. The panel will rely on available incident, enforcement, and management system data, and regulator and industry input, supplemented by the panel's expertise.



Committee Progress and Opportunities toward Decreasing the Risk of Offshore Energy Operations Charge:

- provide an assessment of the risk profile of offshore oil and gas operations over time
- examine issues related to and assess progress toward decreasing the systemic risks of offshore energy operations, keeping people and the environment safe as the Gulf of Mexico offshore energy industry evolves.



...but specifically...

- Define the current profile of systemic risks of offshore oil and gas operations in the Gulf of Mexico that could lead to disasters.
- Assess how various technological, regulatory, environmental, organizational, and process changes have contributed to increasing or decreasing the systemic risks of the offshore oil and gas operations since 2012
- Identify critical gaps and prioritize future needs for increased understanding, communication, and management of systemic risks related to the offshore oil and gas industry.
- Consider how the regulatory structure motivates or incentivizes technological, environmental, organizational, and process changes that could decrease the systemic risks of the offshore oil and gas operations.
- If appropriate, assess how activities (including workshops and grants) funded by the GRP and other funders have contributed to a better understanding and reduction of the systemic risks in offshore oil and gas operations.

Why does the GRP want this?

How will the GRP use this report?





Simple answer: it satisfies several of the GRP strategic approaches



GRP Expectations

- The GRP would like this committee to do its best, tell the truth, and offer your best scientific observations, findings, and recommendations
- The Committee and its stakeholders to inform the GRP of relevant changes and updates related to this study

How will the GRP Use This Report?

- The GRP would like to use this report to help us ask the right questions
- The GRP would like to use this report/series to create a scholarly contribution to the Gulf and its people of the trends, changes, and progress made in the region over the life of the GRP
- The GRP will produce this report as a scholarly, reference document for researchers, policy makers, and NGOs, including the GRP
- The GRP will use this report as a basis and a baseline for subsequent volumes
- The GRP will use these volumes and reports to keep the GRP programming current and relevant, based on the observations and findings of the report series.

Let me end where I began by saying...



Thank you!

Lauren Alexander Augustine
Executive Director, the Gulf Research Program

laugustine@nas.edu

https://www.nationalacademies.org/gulf/gulf-research-program