

Scoping Report

Programmatic Environmental Impact Statement for the Gulf of Mexico OCS Geological and Geophysical Activities

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Prepared for:

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1.0 INTRODUCTION

As a bureau of the U.S. Department of the Interior (USDOI), the Bureau of Ocean Energy Management's (BOEM's) primary responsibilities are to manage the exploration and development of oil and gas, renewable energy, and marine minerals resources located on the Nation's Outer Continental Shelf (OCS). BOEM seeks to appropriately balance economic development, energy independence, and environmental protection through oil and gas leases, renewable energy development, and environmental reviews and studies. The National Oceanic and Atmospheric Administration's (NOAA's) National Marine Fisheries Service (NMFS) is responsible for the stewardship of the Nation's living marine resources and their habitat. The NMFS statutory responsibilities under the Marine Mammal Protection Act (MMPA) ensures that the taking ("to harass, hunt, capture, kill or collect, or attempt to harass, hunt, capture, kill or collect") of marine mammals without a permit or exemption is prohibited.

As Co-Lead Agencies, BOEM and NMFS are preparing a Programmatic Environmental Impact Statement (Programmatic EIS). The Programmatic EIS will describe and evaluate the potential environmental impacts related to reasonably foreseeable geological and geophysical (G&G) survey activities in Federal waters of the U.S. Gulf of Mexico and adjacent State waters (**Figure 1**). The Programmatic EIS will examine G&G survey activities for three program areas: oil and gas, renewable energy, and marine minerals. The Programmatic EIS determines whether significant impacts to Gulf of Mexico resources could occur as a result of G&G activities and, where needed, specifies mitigation and monitoring measures to avoid, reduce, or minimize impacts.

The Programmatic EIS will be prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 United States Code [U.S.C.] 4321 et seq.); the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (Title 40 Code of Federal Regulations [CFR] 1500-1508); USDOI Manual Part 516; the USDOI Implementation of NEPA (43 CFR 46); Executive Order (EO) 12114, *Environmental Effects Abroad of Major Federal Actions*; and NOAA Administrative Order Series (NAO) 216-6, *Environmental Review Procedures for Implementing NEPA* (May 20, 1999). The NEPA process is intended to incorporate the best available information and stakeholder input to help public officials make informed decisions based on an understanding of potential environmental consequences and take actions that protect, restore, and enhance the human and natural environment for authorized federal actions.

BOEM and NMFS intend for this Programmatic EIS to provide the necessary documentation and analyses to support informed decisions regarding future Outer Continental Shelf Lands Act (OCSLA) Permit and MMPA Authorization actions related to G&G activities on the OCS. In addition, the preparation of this Programmatic EIS will help to ensure compliance with other applicable laws and statutes such as the Endangered Species Act (ESA), Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA), Coastal Zone Management Act (CZMA), and the National Historic Preservation Act (NHPA).

G&G surveys provide information on the potential location, extent, and properties of hydrocarbons and other minerals resources as well as information on shallow geologic hazards and seafloor geotechnical properties. Industry uses this information to explore, develop, produce, and transport hydrocarbons and non-energy minerals safely and economically and for the siting of facilities on the OCS. These G&G activities provide operators with the needed information to make business decisions about acquiring leases and the G&G activities that can take place on-lease. The G&G data are also used to assess the suitability of seafloor sediments for renewable energy facilities and to evaluate the quantity and quality of marine minerals, primarily sand and gravel, for beach nourishment, wetland restoration, and other federally authorized projects. BOEM needs this information to fulfill its statutory responsibilities under the OCSLA to ensure safe operations, protect environmental and archaeological resources, ensure fair market value for leases, make royalty relief determinations, and conserve oil and gas and other mineral resources on the OCS.

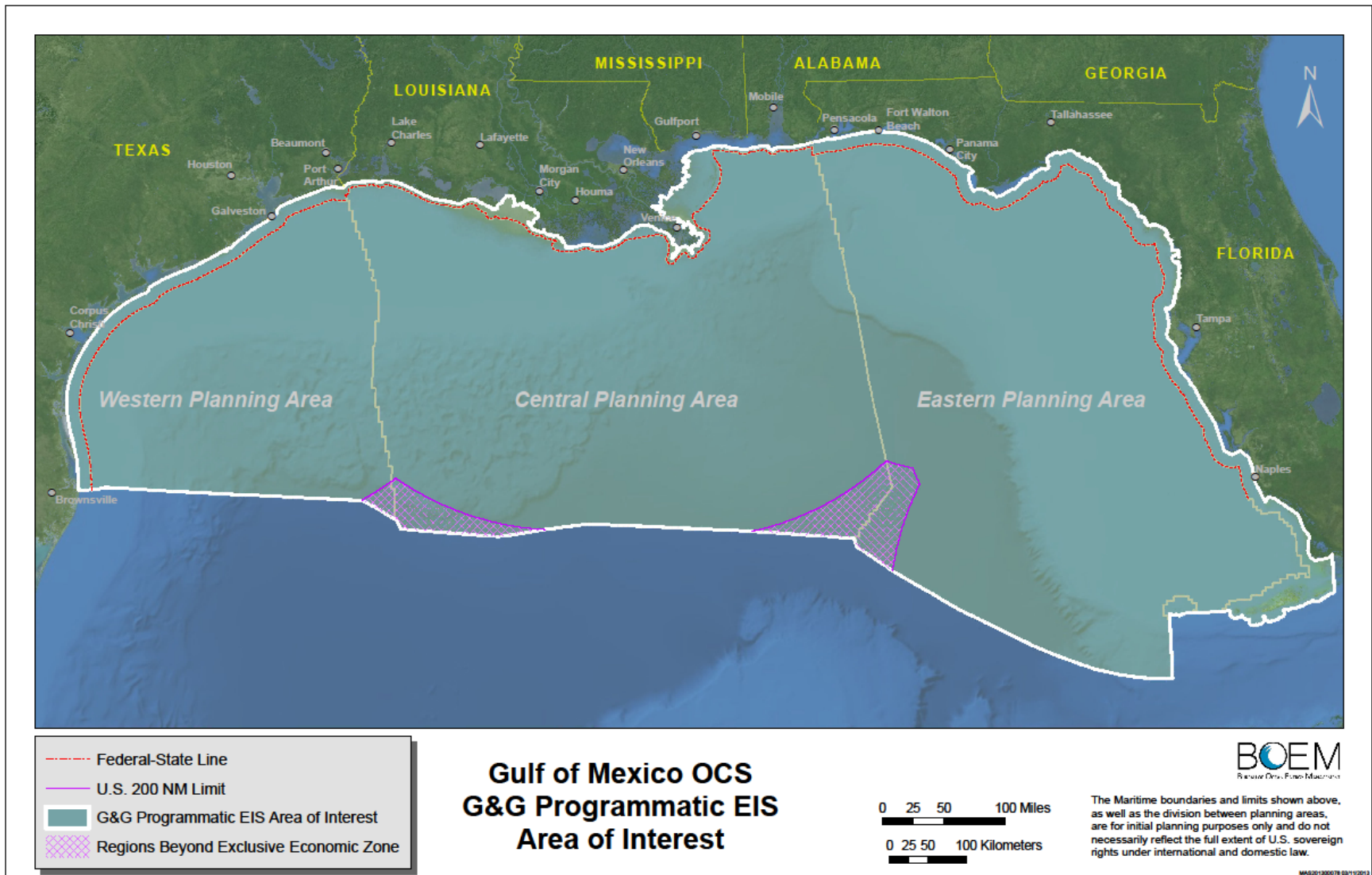


Figure 1. Study area for the Programmatic Environmental Impact Statement.

2.0 SCOPING PROCESS

The NEPA process began with the Notice of Intent (NOI) to prepare a Programmatic EIS, which was published in the *Federal Register* on May 10, 2013 (78 FR 27427) and a correction was published on June 5, 2013 (78 FR 33859) to extend the comment period, closing it on July 9, 2013. Public scoping meetings were held at seven locations on the following dates:

- Tampa, Florida – June 10, 2013
- Fort Walton Beach, Florida – June 11, 2013
- Mobile, Alabama – June 12, 2013
- Gulfport, Mississippi – June 13, 2013
- Galveston, Texas – June 17, 2013
- New Orleans, Louisiana – June 19, 2013
- Silver Spring, Maryland – June 20, 2013

The purpose of the meetings was to solicit comments from stakeholders on the scope of the Programmatic EIS, identify issues to be analyzed, and identify possible alternatives and mitigation measures. The scoping meetings are part of the planning process where Federal, State, and local government agencies and other interested parties have the opportunity to aid BOEM and NMFS in determining significant issues and alternatives for analysis in the proposed Programmatic EIS. Comments received during the public scoping meetings and throughout the scoping period will assist BOEM and NMFS in developing the scope of the proposed Programmatic EIS. These early planning and consultation steps are important to ensure that interests and concerns are communicated to BOEM and NMFS as the Programmatic EIS is developed.

In addition to accepting oral and written comments at each public meeting, BOEM accepted written comments by mail and through the regulations.gov web portal (<http://www.regulations.gov>).

3.0 SCOPING COMMENTS

BOEM received a total of 66 comments through the internet/email (65%), formal letters (3%), and public meeting testimony (32%) (**Figure 2**). The latter included both oral and written comments submitted at the public meetings. Comments were received from individuals and organizations in nine U.S. states, Washington D.C., and Canada. Two comments were received from individuals from an unknown state. Each comment was read and categorized according to its source and the nature of the information provided. The scope and content of the Programmatic EIS will be formulated to ensure that the issues and concerns expressed by stakeholders during the scoping process are fully addressed.

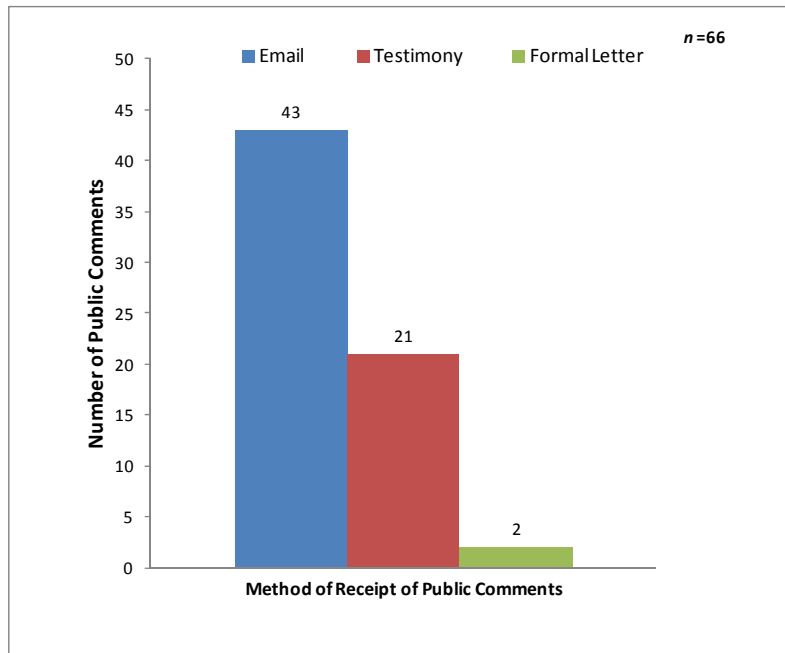


Figure 2. Total number of comments received, organized by the method of receipt.

3.1 COMMENTS SPECIFIC TO G&G ACTIVITIES

Comments were then classified as applicable specifically to G&G activities. The comments that did not mention G&G activities whatsoever, but rather focused solely on offshore drilling and/or oil and gas exploration or other offshore developments ($n = 6$), are not carried through the remainder of this scoping report because they do not directly relate to the proposed action. However, those issues and concerns will be addressed in the cumulative impact analysis in the Programmatic EIS.

Of the 60 applicable comments carried through this scoping analysis, most expressed concerns about G&G activities associated with offshore drilling, while a few comments also discussed siting of renewable energy. Of these comments, 56% were opposed to G&G activities, 27% supported them, and 17% were neutral (**Figure 3**).

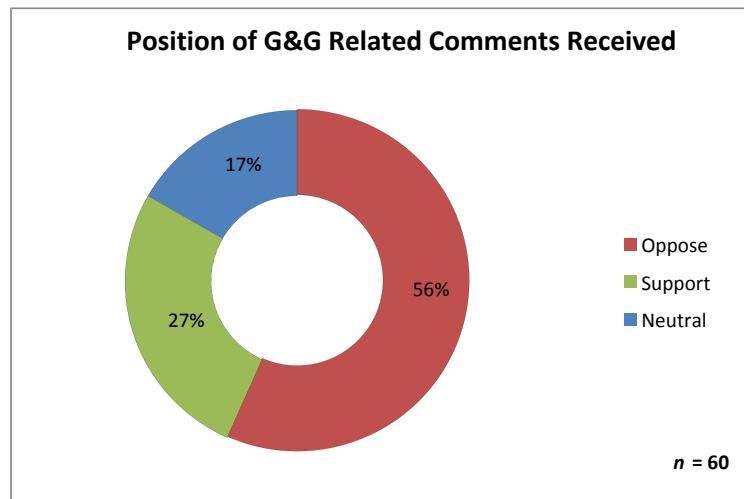


Figure 3. Position of comments with respect to G&G activities.

Most of the comments were received from private citizens (**Figure 4**). Other sources included Federal and State government agencies, non-governmental organizations (NGOs), and members of various for-profit industries. Each comment also was classified as opposed to, in support of, or neutral with respect to the proposed activities within each category (**Figure 4**).

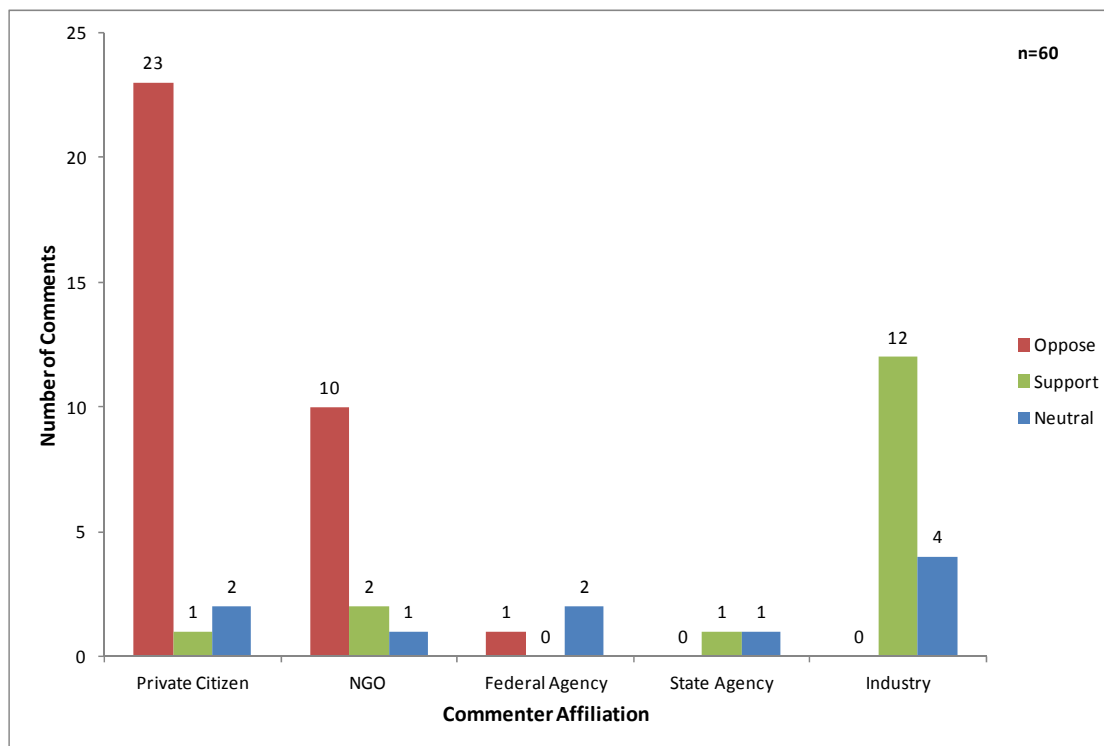


Figure 4. Number of comments received applicable to G&G activities, organized by affiliation and position towards the proposed activity.

3.2 COMMENT TOPICS

Many of the comments cited broad, general concerns as summarized in **Table 1**. Because many comments provided input on multiple issues or concerns, the total number of comments in **Tables 1 to 3** is greater than or less than the total number of comments received. Comments that focused on particular resources are summarized within the following three categories:

- Biological resources (**Section 3.2.1**);
- Socioeconomics, cultural resources, and other marine uses (**Section 3.2.2**); and
- Recommendations for alternatives and mitigation to be considered in the Programmatic EIS (**Section 3.2.3**).

Table 1
Examples of general concerns expressed in public comments.

Concern or Issue	Frequency in Comments	Percent (%) of Comments*
Adequacy of environmental analyses (Programmatic EIS must adequately address environmental impacts [e.g., stock assessments or lack of scientific evidence associated with seismic activities])	8	13
Alternative Energy (Recommend alternative energy use)	7	12
Balanced Energy Policy (Recommend balanced energy policy)	9	15
Fast and Efficient Regulatory Process	2	4
Avoidance and Minimization (Current mitigation measures are inadequate)	7	12
Cumulative Impact Analysis (Programmatic EIS must adequately address cumulative impacts)	9	15

* Percentage of all G&G-related comments (n = 60 total).

3.2.1 Biological Resources

Public comments concerning biological resources varied from broad concerns about marine or terrestrial wildlife to more particular comments about specific species or habitats. Many of those who commented were concerned about impacts of G&G activities (particularly underwater noise) on marine wildlife in general, or on protected species such as marine mammals and sea turtles. Others cited concerns about impacts on critical habitats, fish and fisheries, and benthic resources (**Table 2**).

Table 2
Overview of biological resource concerns expressed in public comments.

Concern or Issue	Frequency in Comments	Percent (%) of Comments*
Biological Resources (in general) (Marine & terrestrial wildlife, etc.)	38	63
Protected Species (other/all) (General concerns)	8	13
Protected Species (marine mammals) (Noise impacts on communication, breeding, feeding; vessel strikes; concern that current distribution, behavior, and population data are insufficient)	25	42
Protected Species (turtles) (Nesting, vessel strikes)	7	12
Fish and Fisheries (Populations, economic impact due to loss of fisheries)	18	30
Marine Habitats (general) (General concerns)	13	22
Sensitive Marine Habitats (Designated critical habitat, EFH, HAPCs, MPAs)	4	7
Live Bottom, Benthic Resources, Pelagic Resources (Soft bottom biota)	2	3

* Percentage of all G&G-related comments (n = 60 total).

EFH = Essential Fish Habitat; HPAC = Habitat Area of Particular Concern; MPA = Marine Protected Area.

3.2.2 Socioeconomics, Cultural Resources, and Other Marine Uses

Within the broad category of socioeconomics, public comments focused on impacts of G&G activities on fisheries, recreation and tourism as well as economic growth and job creation (**Table 3**). It should be noted that the tally in **Table 3** is a compilation of all comments that discussed socioeconomic issues, including both supporters and opponents of the proposed seismic activities.

Table 3
Overview of socioeconomic concerns expressed in public comments.

Concern or Issue	Frequency in Comments	Percent (%) of Comments*
Socioeconomics (general) (Economic impact, job creation, etc.)	18	34
Recreation and Tourism (Impacts on recreational use of coast)	2	4
Historical and/or Cultural Resources	1	2
Fish and Fisheries (Populations, economic impact due to loss of fisheries)	18	30

* Percentage of all G&G-related comments (n = 60 total).

3.2.3 Recommendations for Alternatives and Mitigation

Comment review revealed that 23% of the comments advocated the use of alternative technologies, while 17% recommended that mitigation measures be required (**Table 4**). Specific recommendations for alternatives provided in the comments are listed in **Table 5**, and specific mitigation methods are listed in **Table 6**.

Several comments were identified that provided reference documents or other technical information that will be investigated for inclusion in the Programmatic EIS. In addition, several industry organizations and companies provided citations for technical documents that will be obtained and evaluated for use in the Programmatic EIS.

Table 4
Overview of alternatives and mitigation methods proposed in public comments.

Concern or Issue	Frequency in Comments	Percent (%) of Comments*
Develop and use alternative G&G technologies	14	23
Restrict G&G activities with time-area closures	4	7
General recommendation for mitigation measures	7	17
Expand seismic survey shutdown requirements	3	5

Table 5
List of Alternatives recommended in public comments.

Alternatives Recommendations
Ban seismic acquisition in all areas of the Eastern Planning Area that are not scheduled for lease.
Separate the Western, Central, and Eastern Planning Areas in separate EISs.
Allow G&G activities in support of renewable energy development but not oil and gas activities.
The Programmatic EIS should not move forward until more scientific knowledge is obtained, specifically related to availability of post-Deepwater Horizon spill data.
The Programmatic EIS should not move forward until an updated marine assessment program is conducted to evaluate the distribution of protected species in the Gulf of Mexico.
Monitoring the long-term effects of G&G activities on marine mammals should be undertaken on a Gulf-wide scale.
Consider restricting seismic surveys geographically from certain areas or restricting surveys temporally from certain areas at particular times of the year.
Prohibit duplicative or overlapping seismic surveys; or consider ways to consolidate and coordinate surveys through one private or federal entity; or establish an independent panel of experts to compile applications into a survey plan that eliminates duplication of survey effort.
Investigate/develop technological alternatives to seismic airguns for G&G exploration.

Table 6
List of Mitigation recommended in public comments.

Mitigation Recommendations
Mandate the use of passive acoustic monitoring (PAM) to detect marine mammals prior to and during seismic surveys.
Restrict seismic activities from occurring in low-visibility conditions without the use of PAM.
Consider developing exclusion areas and associated buffers geographically or restricting surveys temporally (time area closures) from habitats or species of particular concern.
Reduce the effective source level to lowest practical level.
Consider all “best practices” for safety zone distances, maintenance, and monitoring set forth in recent literature.
Evaluate standard mitigation measures for effectiveness in minimizing impacts to the marine environment.
Collect data using gravity and gravity gradiometry surveys to target specific areas for further seismic exploration in order to reduce the footprint and duration of seismic surveys.
Establish activity caps to lower cumulative sound exposure.
Field/sound source verification
Adaptive management and long-term monitoring plan of the effects to marine mammals from seismic noise

4.0 SUMMARY

BOEM is preparing a Programmatic EIS to evaluate the potential environmental effects of G&G exploration activities on the Gulf of Mexico OCS. BOEM conducted a public scoping process that extended from May 10 to July 9, 2013. Public scoping meetings were held in seven cities (Tampa, Florida; Fort Walton Beach, Florida; Mobile, Alabama; Gulfport, Mississippi; Galveston, Texas; New Orleans, Louisiana; and Silver Spring, Maryland).

In addition to accepting oral and written comments at each public meeting, BOEM accepted written comments by mail and through the regulations.gov web portal (<http://www.regulations.gov>).

BOEM received a total of 66 comments; 65% were received through the regulations.gov web portal, 32% were received via oral and pre-written testimonies at the public meetings, and 3% were mailed formal letters. Each comment was read and categorized according to its source and the nature of the

information included. The scope and content of the Programmatic EIS will be formulated to ensure that the issues and concerns expressed by stakeholders during the scoping process are fully addressed.

Comments that did not mention G&G activities whatsoever, but rather focused solely on offshore drilling and/or oil and gas exploration or other offshore developments (n = 6), were not carried through the remainder of this scoping report. Of the 60 comments relevant to G&G activities (n = 60), 56% expressed opposition to G&G activities, 27% supported them, and 17% were neutral or did not specify.

Many of the G&G comments cited broad environmental concerns or specific concern about impacts of G&G activities (particularly underwater noise) on marine wildlife in general or on protected species such as marine mammals and sea turtles. Others cited concerns about impacts to critical habitats, fish and fisheries, sensitive benthic communities, and pelagic resources. Within the broad category of socioeconomics, many of the comments focused on impacts of G&G activities on fisheries, recreation, tourism, and local jobs. Many comments provided recommendations for inclusion of particular alternatives or mitigation in the Programmatic EIS analysis. Some comments recommended the implementation of specific avoidance and mitigation methods, while others recommended that specific technologies be evaluated.