



GOMGGEIS, BOEM <gomggeis@boem.gov>

G&G Environmental Impact Statement meeting June 19th at Elmwood BOEM office.

1 message

Behrens, Kerry <KBehrens@fugro.com>
To: "gomggeis@boem.gov" <gomggeis@boem.gov>

Wed, May 29, 2013 at 12:16 PM

To whom it may concern.

I would like to attend the June 19th meeting regarding the proposed G&G EIS. The notice I received shows open to the public, but I was concerned that there still might be a need to register for the meeting. Can you confirm that the meeting is open, or inform me of a proper registration process?

I have found instructions for submitting questions if I cannot attend, which is where I found this email address.

Thanks for your help.

Respectfully, Kerry

Fugro GeoServices, Inc.

Representative: **Kerry Behrens**
Sr. Geoscience Mgr.

Address: **200 Dulles Drive**
Lafayette, LA 70506

Office / Cell: **(337) 268-3241 / (337) 962-0129**

Email: kbehrens@fugro.com



GOMGGEIS, BOEM <gomggeis@boem.gov>

OCS G&G Exploration Activities in the GOM

1 message

John Mims <jmims@bellgeo.com>

Mon, Jun 3, 2013 at 4:57 PM

To: gomggeis@boem.gov

Dear Mr. Geoke, Chief, Environmental Assessment Section, BEOM, GOM OCS Region

Upon reviewing information about "Gulf of Mexico Geological and Geophysical (G&G) Activities Programmatic Environmental Impact Statement (EIS)" on <http://www.boem.gov/GOM-G-G-PEIS/> and Federal Register Vol. 78. No. 91. P. 27427-47430 we noticed that the project includes not only potential impact of active source geophysical surveys such as seismic and bottom sampling, but also for acquiring passive geophysical data such as gravity and magnetic surveys.

As a leading provider of airborne and ship-borne full tensor gravity gradiometry (FTG)/gravity/magnetic surveys, Bell Geospace believes that high resolution gravity gradiometry and magnetic data can be used to provide detailed information about geological structures that may or may not be associated with oil and gas deposits with little or no risk to the environment. Although the data would not eliminate the need for seismic acquisition, it could be used to better plan future seismic programs, potentially minimizing the overall seismic footprint and minimizing the time of exposure for seismic sources.

Bell Geospace, therefore, would be more than willing to provide information to BOEM and NOAA that could help determine any potential environmental, safety, or archaeological risks that may be encountered during offshore FTG/gravity/magnetic data acquisition.

Regards,

John H. Mims

Director of Sales



BellGeospace World leaders in Gravity Gradiometry™

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GOMGGEIS, BOEM <gomggeis@boem.gov>

RE: Scope for PEIS for G&G Activities on the GoM

1 message

Brian Brookshire <brian.brookshire@ncs-subsea.com>

Mon, Jun 3, 2013 at 4:57 PM

To: gomggeis@boem.gov

Cc: Al Hise <al.hise@ncs-subsea.com>

To whom it may concern,

Attached are our comments regarding the scope of the Programmatic Environmental Impact Statement for Geological and Geophysical Activities on the Gulf of Mexico. Please do not hesitate to contact me with any questions that may stem from our comments.

Best Regards,

Brian

Brian N. Brookshire Jr., Ph.D.

Survey Manager

NCS SubSea

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3928 Bluebonnet Dr., Stafford, TX 77477, USA

**NCS SubSea RE GoM GGA PEIS.pdf**

170K



Mr. Gary D. Goeke
Chief, Environmental Assessment Section,
Office of Environment (GM 623E)
Bureau of Ocean Energy Management
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, LA 70123-2394

RE: Scope for the Programmatic Environmental Impact Statement for Geological and Geophysical Activities on the Gulf of Mexico

Dear Gary,

We have recently been party to the implementation of a new type of ultra-high-resolution 3D seismic system. The "P-Cable" system is comprised on an instrumented (compasses and depth sensors) cross cable from which multiple (typically 12 – 24) solid seismic streamers are towed. The nominal streamer spacing is typically 6.25 or 12.5 meters, and the streamer receiver group interval is typically between 3.125 and 12.5 meters. Streamer length is variable, and typically held between 25 and 100 meters. In recent surveys, both triple-plate boomer and point source GI gun cluster (e.g. – 80 in³ in total) energy sources have been used. The intended, and vetted, purpose of the system is to accurately image subsurface geohazards (typically ≤ 1.5 seconds vertical range) in 3D with a resolution and accuracy (both vertical and horizontal) that has only previously been achieved via 2D techniques.

It is our goal to use this technology not only for single site survey purposes, but to also collect multi-client, and in some cases speculative, regional data to be presented to the geohazards community. It is our conviction that this technique, and the subsequent data generated, will unambiguously improve geoscientists' ability to accurately identify, delineate and characterize geohazards in the Gulf of Mexico. With this in mind, we suggest that a new type of geological and geophysical activity, ultra-high-resolution regional geohazard surveys, be addressed in the upcoming Programmatic Environmental Impact Statement. Please do not hesitate to contact me with any questions, or to request further information and references about this technology/methodology.

Best Regards,

Dr. Brian N. Brookshire, Jr.
Survey Manager
NCS SubSea
281-491-3123
brian.brookshire@ncs-subsea.com



GOMGGEIS, BOEM <gomggeis@boem.gov>

Follow up from Galveston Scoping Meeting

1 message

John Mims <jmims@bellgeo.com>

Thu, Jun 20, 2013 at 1:40 PM

To: gomggeis@boem.gov

Dear Mr. Goeke,

It was a pleasure meeting you recently at the public scoping meeting in Galveston.

Should the EIS find that seismic survey may cause harm to marine wildlife then BOEM, seismic contractors, and oil companies may consider acquiring airborne high resolution potential field data *prior to* seismic data acquisition as a possible mitigation option.

Since potential field surveys passively measure changes in naturally occurring gravity and magnetic fields, no external signal is transmitted that might cause harm to wildlife. Being an airborne survey, marine wildlife would not come into direct contact with the vessel. During your presentation, you had mentioned that airborne magnetic data acquisition would be expected to be a low impact geophysical survey method. Large areas can be surveyed within days or weeks compared to months for regional 3D seismic.

Modern magnetic and gravity gradiometry data provides high resolution information that can be used to help target more prospective areas and help design more efficient seismic surveys, thereby reducing the footprint and duration of seismic acquisition.

John Mims

Bell Geospace, Inc.

John H. Mims

Director of Sales



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PUBLIC SUBMISSION

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Outer Continental Shelf Geological and Geophysical Exploration Activities in the Gulf of Mexico

Comment On: BOEM-2013-0034-0001

Outer Continental Shelf Geological and Geophysical Exploration Activities in the Gulf of Mexico

Document: BOEM-2013-0034-0006

Comment from Brian Gregson, Spyglass Technologies, Inc.

Submitter Information

Name: Brian Gregson

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101

Suite 4A

St. Petersburg, FL, 33701

Email: brian.gregson@spyglasswater.com

Phone: 727-289-7269 x102

Organization: Spyglass Technologies, Inc.

General Comment

Spyglass Technologies, Inc. (STI) is an environmental technologies solutions provider that specializes in the development and manufacture of autonomous instrumentation for non-invasive remote monitoring of water quality. STI instrumentation is optimized for monitoring of both biological and chemical targets of interest, including hydrocarbons and hydrocarbon-relevant microorganisms, both of which have significant relevance for G&G activities. Moreover, Spyglass offers a comprehensive, user-friendly, web portal for remote real-time data aggregation, visualization and analysis. Spyglass Technologies' instrument packages are useful as G&G survey techniques because they are capable of gathering, analyzing and visualizing highly complex rich data for hydrocarbon exploration and production. As such, Spyglass instrumentation should be considered in the PIEs under the category of "Remote Sensing Methods" in support of oil & gas exploration and development.

<http://spyglasswater.com>



GOMGGEIS, BOEM <gomggeis@boem.gov>

Comments on Scoping for the Gulf of Mexico G&G PEIS

1 message

Nicolette Nye <nnye@noia.org>

Mon, Jul 8, 2013 at 11:42 AM

To: "gomggeis@boem.gov" <gomggeis@boem.gov>

The National Ocean Industries Association (NOIA) is pleased to submit the attached comments on the Scoping of the Draft Programmatic Environmental Impact Statement (DPEIS) for Geological and Geophysical (Seismic) studies in the Gulf of Mexico OCS areas. A hard copy is also being mailed to Mr. Gary Goeke.

Thank you,

Nicolette Nye

VP Communications & External Relations

National Ocean Industries Association

1120 G Street NW, Suite 900, Washington, DC 20005

Direct: 202-465-8463 Main: 202-347-6900 Cell: 703-732-0801 Fax: 202-347-8650



NOIA Written Comments on Scoping for the Gulf of Mexico G&G PEIS.pdf
1160K



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July 8, 2013

Mr. Gary D. Goeke
Chief, Regional Assessment Section
Office of Environment (MS 5410)
Bureau of Ocean Energy Management Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394

RE: Comments on Scoping for the Gulf of Mexico G&G PEIS

Dear Mr. Goeke:

The National Ocean Industries Association (NOIA) is pleased to submit the following comments on the Scoping of the Draft Programmatic Environmental Impact Statement (DPEIS) for Geological and Geophysical (Seismic) studies in the Gulf of Mexico OCS areas.

NOIA is the only national association which advocates solely on behalf of the offshore energy industry. We represent about 300 member companies who are dedicated to the safe development of traditional and renewable offshore energy for the continued growth and security of the United States. NOIA members are engaged in many business activities including oil and natural gas exploration and production, equipment supply, gas transmission, navigation, research and technology, shipping and shipyards, and environmental safeguards. Our membership also includes companies involved in or branching out to pursue offshore renewable and alternative energy opportunities.

Geological and geophysical activities are integral to the development of both traditional and renewable offshore energy sources.

Offshore energy is a jobs creator and revenue generator

The oil and natural gas industry has a long history of working with the Department of the Interior to develop this country's natural resources to the benefit of the U.S. economy and all Americans. Our industry stands ready to invest in additional exploration of the Gulf of Mexico. This DPEIS is a needed first step to begin the process of generating the data that will allow for additional production in the Central and Western Gulf and the potential for future discoveries in the Eastern Gulf should that area be made available for leasing and development in the future.

The scope and magnitude of the economic activity in the Gulf of Mexico are huge and largely attributable to energy exploration and development. Currently, the Gulf accounts for over 25% of all U.S. domestic oil production. The Bureau of Ocean Energy Management has determined that over a 40-year period, the leasing, drilling and production resulting from the 2012-2017 5-year OCS Leasing Plan will create an additional 20,025 to 51,825 jobs and between \$1.1 and \$2.2 billion in additional income annually.

Seismic surveys are the first step toward science based decisions

To realize these benefits, geological and geophysical surveys – mainly in the form of seismic surveying – will be necessary. Modern offshore oil and natural gas exploration requires the use of seismic surveys to feasibly and accurately prospect for oil and natural gas reserves offshore. This technology has been used for decades to assess the location and size of potential oil and natural gas deposits, which often lay several miles beneath the ocean floor. Seismic surveys also make offshore energy production safer and more efficient by greatly reducing the drilling of “dry holes” where no oil or gas is found to be present. Seismic surveys allow industry and government to make informed, science based decisions regarding our oceans.

Safety is always our top priority

The offshore oil and natural gas industry has demonstrated the ability to conduct seismic exploration activities in a manner that protects marine life. The industry employs a number of robust mitigation measures to reduce the negligible risk of harm to marine mammals. Four decades of world-wide seismic surveying activity and scientific research on marine mammals have shown no evidence that sound from seismic activities has resulted in injury to any marine mammal species. Likewise, there is no scientific evidence demonstrating biologically significant adverse impacts on marine mammal populations.

We feel BOEM’s methodology has highly exaggerated the estimated number of incidental takes. There are simply no corroborating observable injuries, mortalities or effects on population to support the conclusions. Industry has repeatedly highlighted flaws in the agency’s methodology -- in acoustic propagation models, use of frequency weighting, and acoustic thresholds -- that result in take estimates that vary by several orders of magnitude. BOEM is simply not using the best available science. As a result, the potential impacts are being overstated.

In the face of no observable injury or mortality data and no population level behavioral effect, the DPEIS should resist the imposition of more and more unreasonable mitigation measures that require operations to be shut down. Adding dolphins to the list of animals that shut down operations would present such an unreasonable measure as dolphins will at times intentionally approach seismic vessels to bow ride in a seemingly normal behavior pattern.

Summary

Based on the absence of observed effects and supporting scientific knowledge, the alternatives studied in the DPEIS should not consider overly restrictive mitigation measures that will inhibit industry from performing seismic surveys and BOEM from meeting its goals set out in the OCS Lands Act.

Additionally, we feel that the DPEIS must explicitly address the OCS Lands Act's programmatic goal of ensuring the "*expedited exploration and development of the Outer Continental Shelf*," and that the DPEIS fully address and quantify the potential interference with the achievement of that goal posed by any alternative or mitigation measure being considered. For example, if the DPEIS addresses the potential for extending shut down requirements to mammals other than whales and manatees, or expanding the shutdown zone from the current 500 meters, BOEM needs to quantify the number of hours or shutdown that would result, and the implications for the efficacy and timeliness of the seismic survey.

The oil and natural gas industry has a long history of working with DOI to develop this country's natural resources to the benefit of the U.S. economy and all Americans. Once again, seismic surveys allow industry and government to make informed, science based decisions regarding our oceans. NOIA appreciates the opportunity to provide these comments on behalf of our member companies.

Sincerely,



Nicolette Nye
VP, Communications and External Relations
National Ocean Industries Association



GOMGGEIS, BOEM <gomggeis@boem.gov>

API Comments on Scoping for the GOM G&G PEIS

1 message

Andy Radford <Radforda@api.org>
To: "gomggeis@boem.gov" <gomggeis@boem.gov>

Tue, Jul 9, 2013 at 1:28 PM

Gary,

Here are API's comments on scoping the GOM G&G PEIS. Let me know if you have any questions.

Andy Radford

American Petroleum Institute

Sr. Policy Advisor - Offshore

1220 L Street, NW

Washington, DC 20005

P: (202) 682-8584

radforda@api.org



130709 - API Comments - GOM G-G DPEIS SCOPING-Final.pdf
197K



July 9, 2013

Mr. Gary Goeke
Chief, Regional Assessment Section, Office of Environment (MS 5410),
Bureau of Ocean Energy Management
Gulf of Mexico OCS Region
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123-2394

Submitted via email

Subject: Scoping for the Gulf of Mexico G&G PEIS

The American Petroleum Institute (API) offers the following comments on the U.S. Department of Interior Bureau of Ocean Energy Management's (BOEM's) request for scoping comments on the Draft Programmatic Environmental Impact Statement (DPEIS) to evaluate potential environmental effects of multiple geological and geophysical (G&G) activities in OCS waters of the Gulf of Mexico (GOM).

The API is a national trade association that represents over 550 members involved in all aspects of the oil and natural gas industry, including exploring for and developing oil and natural gas resources in the GOM – a vital part of our nation's economy – and our members remain committed to safely and responsibly exploring the GOM for additional oil and natural gas resources to improve our nation's energy security.

The oil and natural gas industry has a long history of working with the Department of the Interior to develop this country's natural resources to the benefit of the U.S. economy and all Americans. Our industry stands ready to invest in additional exploration of the Gulf of Mexico. This DPEIS is a needed first step to begin the process of generating the data that will allow for additional production in the Central and Western Gulf and the potential for future discoveries in the Eastern Gulf should that area be made available for leasing and development in the future.

The scope and magnitude of the economic activity in the Gulf of Mexico are huge and largely attributable to energy exploration and development. Currently, the Gulf accounts for over 25% of all U.S. domestic oil production. The BOEM has determined that over a 40-year period, the leasing, drilling and production resulting from the 2012-2017 5-year OCS Leasing Plan will create an additional 20,025 to 51,825 jobs and between \$1.1 and \$2.2 billion in additional income annually.

To realize these benefits, geological and geophysical surveys – mainly in the form of seismic surveying – will be necessary. Modern offshore oil and natural gas exploration requires the use of seismic surveys to feasibly and accurately prospect for oil and natural gas reserves offshore. This technology has been used for decades to assess the location and size of potential oil and natural gas deposits, which often lay several miles beneath the ocean floor. Seismic surveys also make offshore energy production safer and more efficient by greatly reducing the drilling of “dry holes” where no oil or gas is found to be present thereby reducing the environmental footprint of drilling activities.

The offshore oil and natural gas industry has demonstrated the ability to conduct seismic exploration activities in a manner that protects marine life. Four decades of world-wide seismic surveying activity and scientific research on marine mammals have shown no evidence that sound from seismic activities has resulted in injury to any marine mammal species. Likewise, there is no scientific evidence demonstrating biologically significant adverse impacts on marine mammal populations. Nevertheless, the industry employs a number of robust mitigation measures to further reduce the negligible risk of harm to marine mammals.

Since the DPEIS will help to form the basis of the anticipated Marine Mammal Protection Act incidental take regulation (or incidental harassment authorization), it is important that the DPEIS accurately describes the G&G activities taking place and any potential impacts to marine mammals. The incidental take regulation (or incidental harassment authorization) will be issued only if the activity will result in the incidental take of no more than a “small number” of marine mammals. Setting the proper NEPA framework for the future regulation is therefore critical.

In the past, the methodology BOEM has used to estimate numbers of incidental takes has resulted in highly exaggerated estimates, especially considering the lack of any observable injuries, mortalities or population level behavioral effects. BOEM has relied on models that have not been validated against field data; this has created unrealistic estimates of incidental takes that could be expected to occur during industry geological and geophysical activities. Compounding this problem are the agency’s previous take number estimates, which are only achievable by using acoustic threshold criteria based on obsolete data that does not meet the NEPA requirement to use the best available science. Industry has highlighted a variety of methodological flaws where the agency’s choices in acoustic propagation models, the use of frequency weighting, and acoustic thresholds can result in differences in take estimates that vary by several orders of magnitude. Therefore, we strongly believe – and we encourage BOEM to ensure – that the DPEIS must be based on the best available science and make appropriate use of models to estimate incidental takes.

Furthermore, the criteria used to determine Level B Harassment should be revised. BOEM should not use 160 dB as *per se* evidence of Level B harassment, but should take a more flexible approach in keeping with the relevant regulations and case law. In the case of Level B harassment, the disturbance must potentially cause a significant disruption in behavioral patterns, not just behavioral change. Thus, there is both a “significance” requirement and a “behavioral pattern change” requirement. As the National Marine Fisheries Service (NMFS) further expounded when it adopted the MMPA regulations:

[T]he activity would need to disrupt an animal's normal pattern of biological traits or behavior, not just cause a momentary reaction on the part of a marine mammal. Furthermore, if the only reaction to an activity on the part of the marine mammal is within the normal repertoire of actions that are required to carry out the behavioral pattern for that species of marine mammal, NMFS considers the activity not to have caused an incidental disruption of the behavioral pattern, provided the animal's reaction is not otherwise significant enough to be considered disruptive due to length or severity. For example, if there is a short-term change in breathing rates or a somewhat shortened or lengthened diving sequence that is within the animal's normal range of breathing patterns and diving cycles but there is not a disruption to the animal's overall behavioral pattern (i.e., the changes are not biologically significant), then these responses do not rise to a level requiring a small take authorization or, if under a small take authorization, does not constitute an incidental take.

This NMFS interpretation of "harassment" was upheld in *Natural Resources Defense Council, Inc. v. Evans*, 279 F. Supp. 2d 1129 (N. D. Cal. 2003).

Accordingly, API urges that any purported calculation of the number of anticipated Level B harassments be limited to those exposures to seismic sound that will cause significant reactions of the nature described above. API also cannot overemphasize the importance of context when determining if level B harassment is possible and, if so, in determining any appropriate proposed mitigations. For purposes of any environmental review (particularly under the MMPA and ESA), the primary emphasis in considering any projected disturbance or impact should be its environmental context (i.e., the acoustic and physical attributes of the specific surrounding environment and affected species). Physical context could play an important role in the Gulf of Mexico with regard to issues such as minimum separation distances; the observation that the Gulf's depth and soft bottoms may help to limit propagation distances (and thus the range of behavioral disturbance); and the other sound sources to which marine mammals are already exposed. Therefore, BOEM should take these factors into account when determining proposed alternatives and mitigations and fully consider the environmental and physical context when making any determination of environmental consequences.

Based on the absence of observed effects and supporting scientific knowledge, the alternatives studied in the DPEIS should not consider overly restrictive mitigation measures that will inhibit industry from performing seismic surveys and BOEM from meeting its goals set out in the Outer Continental Shelf Lands Act (OCSLA). An agency's only NEPA obligation is to evaluate "reasonable alternatives," and a "proposed alternative is reasonable only if it will bring about the ends of the federal action measured by whether it achieves the goals the agency sets out to achieve." A federal agency may therefore – and should – eliminate alternatives and mitigation measures that do not meet the purposes and needs of the project. In the face of no observable injury or mortality data and no population level behavioral effect, the DPEIS should resist the

imposition of more and more unreasonable mitigation measures. This is especially true with respect to the addition of dolphins, which at times intentionally approach seismic vessels to bow ride in a seemingly normal behavior pattern, to the list of animals that require operations to shut down.

Finally, we feel that the DPEIS must explicitly address the OCSLA's programmatic goal of ensuring the "*expedited exploration* and development of the Outer Continental Shelf," and that the DPEIS must fully address and quantify the potential interference with the achievement of that goal posed by any alternative or mitigation measure being considered. For example, if the DPEIS addresses the potential for extending shut down requirements to mammals other than whales and manatees, or expanding the shutdown zone from the current 500 meters, BOEM needs to quantify the number of hours or shutdown that would result, and the implications for the efficacy and timeliness of the seismic survey.

We appreciate the opportunity to provide these comments. Should you have any questions, please contact me at 202-682-8584 or radforda@api.org.

Sincerely

A handwritten signature in blue ink that reads "Andy Radford". The signature is written in a cursive, flowing style.

Andy Radford, Sr. Policy advisor
American Petroleum Institute