



US Oil & Gas Association



30 March 2015

Mr. Geoffrey L. Wikel  
Acting Chief, Division of Environmental  
Assessment, Office of Environmental Program,  
Bureau of Ocean Energy Management (HM 3107)  
381 Elden Street  
Herndon, VA 20170-4817

**Subject: Notice of Availability (NOA) of and Request for Comments  
on the Draft Proposed Outer Continental Shelf (OCS) Oil  
and Gas Leasing Program for 2017-2022 (DPP)**

Dear Mr. Wikel:

**INTRODUCTION**

The American Petroleum Institute (API), National Ocean Industries Association (NOIA), Independent Petroleum Association of America (IPAA), U.S. Oil and Gas Association (USOGA), American Exploration & Production Council (AXPC), International Association Of Geophysical Contractors (IAGC), Alaska Oil and Gas Association (AOGA), and the Institute for 21<sup>st</sup> Century Energy, U.S Chamber of Commerce (U.S. Chamber) (the Associations) are pleased to provide comments on the Notice of Intent (NOI) to prepare a draft Programmatic Environmental Impact Statement (PEIS) to inform the decisions that will be taken during the preparation and implementation of the 2012-2017 Outer Continental Shelf (OCS) Leasing Program. The NOI was published in conjunction with the release of the Draft Proposed Program (DPP) on January 29, 2015 (80 Federal Register 4941.) The Associations support the Bureau of Ocean Energy Management’s (BOEM or the Bureau) Draft Proposed Program (DPP), and its plan to authorize exploratory activities on the OCS consistent with the Outer Continental Shelf Lands Act (OCS Lands Act).

API is a national trade association representing over 640 member companies involved in all aspects of the oil and natural gas industry. API’s members include producers, refiners, suppliers, pipeline operators, and marine transporters, as well as service and supply companies. Each company is committed to safely and responsibly exploring the OCS 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. The industry stands ready to invest in additional exploration of the OCS.

NOIA is the only national trade association representing all segments of the offshore industry with an interest in the exploration and production of both traditional and renewable energy resources on the U.S. OCS. The NOIA membership comprises more than 325 companies engaged in a variety of business activities, including production, drilling, engineering, marine and air transport, offshore construction, equipment manufacture and supply, telecommunications, finance and insurance, and renewable energy.

IPAA is a national trade association representing the thousands of independent oil and natural gas explorers and producers, as well as the service and supply industries that support their efforts. Independent producers drill about 95 percent of American oil and natural gas wells, produce more than 50 percent of American oil, and more than 85 percent of American natural gas. IPAA is dedicated to ensuring a strong, viable domestic oil and natural gas industry, recognizing that an adequate and secure supply of energy developed in an environmentally responsible manner is essential to the national economy.

USOGA is a strong advocate for the petroleum industry and its contribution to our country's economic and strategic stability.

AXPC is a national trade association representing 34 of America's largest and most active independent oil and natural gas exploration and production companies. AXPC members are "independent" in that their operations are limited to exploration for and production of oil and natural gas. Moreover, our members operate autonomously, unlike their fully integrated counterparts, which operate in additional segments of the energy business, such as downstream refining and marketing. AXPC members are leaders in developing and applying innovative and advanced technologies necessary to explore for and produce oil and natural gas, both offshore and onshore, from unconventional sources.

IAGC is the international trade association representing the industry that provides geophysical services (geophysical data acquisition, processing and interpretation, geophysical information ownership and licensing, and associated services and product providers) to the oil and natural gas industry. IAGC member companies play an integral role in the successful exploration and development of offshore hydrocarbon resources through the acquisition and processing of geophysical data

AOGA is a non-profit trade association located in Anchorage, Alaska. AOGA's 15 member companies account for the majority of oil and gas exploration, development, production, transportation, refining, and marketing activities in Alaska. AOGA's members are the principal oil and gas industry stakeholders that operate within the range of marine mammals in Alaskan waters and in the adjacent waters of the OCS. AOGA and its members are longstanding supporters of wildlife conservation, management, and research in the Arctic, and also support the continued issuance of incidental take authorizations in the Arctic. AOGA has for many years successfully petitioned for, and defended in court, incidental take regulations applicable to offshore oil and gas activities.

The Institute for 21<sup>st</sup> Century Energy, U.S Chamber of Commerce mission is to unify policymakers, regulators, business leaders, and the American public behind common sense energy strategy to help keep America secure, prosperous, and clean. The Institute believes that domestically produced oil and natural gas is, and will remain, essential to America's economy and global competitiveness.

## **OVERVIEW**

The Associations recognize that BOEM must comply with numerous environmental statutes, regulations, and executive orders to carry out its mission. Section 18(a)(3) of the OCS Lands Act, requires that the OCS program is managed to ensure a proper balance between oil and gas production,

environmental protection, and impacts to the coastal zone. The scope and magnitude of the economic activity in the OCS are significant to which the oil and gas industry contributes a noteworthy amount. BOEM must implement its management requirements under the OCS Lands Act for the leasing, exploration, and development of the nation's offshore oil and gas resources in a manner consistent with the regulations implementing the National Environmental Policy Act (NEPA, 42 U.S.C. 4371 et seq.). The development of the 2017-2022 OCS Oil and Gas Leasing Program triggers the need for a Programmatic Environmental Impact Statement (PEIS) pursuant to NEPA. This Draft PEIS (PEIS) is a needed first step to begin the process of generating the data that will allow for additional production in the OCS during the 2017-2022 period.

The Associations are longstanding supporters of the NEPA process as an effective means of identifying and analyzing the potential environmental impacts of proposed federal actions and mitigation measures. We appreciate consideration of the comments set forth below on the Bureau's request for scoping comments on the Draft Proposed Oil and Gas Leasing Program for 2017-2022 DPP and associated PEIS to evaluate potential lease sales in eight OCS planning areas in waters of the United States. The Associations have been active participants in BOEM's earlier NEPA scoping and public comment periods on previous PEISs including the Atlantic OCS Geological and Geophysical (G&G) Exploration among others. Details from earlier API and joint industry letters are incorporated here by reference, including specifically the comments on the 2014 Final PEIS on Atlantic OCS G&G Exploration.

Finally, the Associations would like to note that offshore and marine resources do not stop at state lines, administrative boundaries or arbitrarily created buffer zones. The notion that the scope of the PEIS will only cover areas included in the DPP is fundamentally flawed. A truly adaptive and comprehensive PEIS must include all areas to provide a true analysis of the ecosystem. Excluding the areas offshore three Atlantic states (Delaware, Maryland, and Florida) in the Mid- and South Atlantic Planning Areas and a 50-mile buffer zone off the remaining states (Virginia, North Carolina, South Carolina, and Georgia) from the scope of the PEIS will not provide a robust analysis of the ecosystem in those areas. By the same token, the eastern Gulf of Mexico needs to be included in the PEIS scope to fully examine the Gulf of Mexico. We encourage BOEM to include the areas noted above in the PEIS scope and to reconsider their premature removal from consideration as part of the 2017-2022 Five Year OCS Leasing Program.

### **'Reasonable Range' of Alternatives and Satisfying NEPA's Hard Look Standard**

BOEM is required by NEPA to take a 'hard look' at the potential effects of a 'reasonable range' of alternatives to the proposed lease sale schedule and mitigation measures that may reduce or eliminate any potential impacts. As a Programmatic document, the PEIS establishes a framework for subsequent environmental documents for site-specific actions while identifying and analyzing appropriate mitigation measures to be used for future lease sales in the U.S. OCS. The impacts of future site-specific actions will be addressed in subsequent NEPA evaluations, per the U.S. Council on Environmental Quality (CEQ) regulations (40 CFR §1502.20), by tiering from this programmatic evaluation. Section 1508.28 of CEQ Regulations references tiering as "*Coverage of general matters in broader program, plan, or policy EISs with subsequent more narrow EISs or Environmental Assessments for site-specific projects or actions.*"

In this case, the 2017-2022 OCS PEIS must offer a range of alternatives that represent alternative strategies for conducting oil and gas lease sales in the OCS as well as the No Action alternative. The alternatives should provide options for an overarching framework to allow oil and gas exploration commensurate with the OCS Lands Act. BOEM's approach to designing these programmatic alternatives should set a distinct course for decision-making whereby future NEPA compliance can effectively tier from the PEIS as more site-specific actions are considered. By incorporating principles of adaptive management and following through on those principles with specific actions, BOEM will maintain flexibility in the decision-making process and satisfy statutory obligations under the OCS Lands Act,

NEPA and other applicable federal statutes such as the Marine Mammal Protection Act (MMPA) while balancing the need for additional energy sources.

Specifically, the Associations request that BOEM include as a chapter in the PEIS that describes:

- Detailed procedures for future NEPA compliance on oil and gas lease sale activities in terms of the level of detail expected in future NEPA documents (i.e., local scale or regional scale) as well as whether there is additional opportunity for stakeholder engagement, etc.;
- Actions planned or underway to address concerns raised during the PEIS scoping such as closure areas, exemptions, or stakeholder coordination; and
- Provide an overview of additional activities related to evaluation of mitigation measures and monitoring to support successful management to “...ensure a proper balance between oil and gas production, environmental protection, and impacts to the coastal zone” consistent with the OCS Lands Act.

## SPECIFIC ISSUES

### Data Quality and Use of BOEM’s *GeoPortal* to Receive Public Comment

Generally, the scope of the DPP is challenging due to its size and diversity of issues that need be addressed in each of the BOEM sub-regions identified in the document. BOEM’s new geospatial platform (*GeoPortal*) makes this process more efficient by allowing information submitted to be depicted in a mapping format. While quite innovative, the Associations are concerned about the quality and consistency of data being submitted as comments through this system. We recognize that any form of public comment may include anecdotal data that may be outdated and may or may not be standardized, peer reviewed or subjected to quality assurance procedures. We request that BOEM consider instituting a quality assurance, quality control system whereby data received through the new *GeoPortal* are reviewed for validity and scientific integrity prior to consideration during the PEIS process. BOEM should take any other necessary steps to make sure data are not biased or improperly interpreted.

As described by Schreider *et al.* (2010<sup>1</sup>), the validity and credibility of scientific data is central to decision-making. While the Associations commend BOEM for making the data sharing process transparent through the new *GeoPortal*, a transparent process does not necessarily ensure data quality (McCarty *et al.* 2012<sup>2</sup>). We have concerns about the use of inconsistent or questionable data sources and the implication that BOEM will use those data to develop alternatives or mitigation measures for consideration in the PEIS. We suggest that BOEM not use raw data or information that has not been vetted or reviewed through a scientific process. As stated in the CEQ regulations implementing NEPA (40 CFR 1500.1(b)):

*“The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA. Most important, NEPA documents must concentrate on the issues that are truly significant to the action in question, rather than amassing needless detail.”*

This is not to say the Associations discourage the use of the *GeoPortal*, rather, we recommend that any data submitted undergo quality assurance procedures to minimize the potential for misinterpretation or inappropriate use of anecdotal information that may or may not be accurate or relevant.

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<sup>1</sup> Schreider J, Barrow C, Birchfield N, Dearfield K, Devlin D, Henry S, et al. 2010. Enhancing the credibility of decisions based on scientific conclusions: Transparency is imperative. *Toxicol Sci* 116:5-7.

<sup>2</sup> McCarty, L.S., Borgert, C.J., Mihaich, E.M. 2012. Information Quality in Regulatory Decision Making: Peer Review versus Good Laboratory Practice.

Further, the premise that underlies this geospatial approach is that where multiple uses or users overlap spatially there may be a need to restrict one or more activity to minimize potential conflict. While it is important for BOEM to conduct scoping to gain insight into overall use of the project area and where different uses need to co-exist, an overlap does not mean that one or more activities using the same physical space are mutually exclusive. In fact, oil and gas exploration and development programs underway in the GOM and Alaska provide strong evidence that oil and gas industry can successfully co-exist with other marine uses including but not limited to commercial and recreational fishing, tourism, recreational boating, Marine Protected Areas, ESA species protection, military activities, shipping and others. The Associations request that in the 2017-2022 OCS PEIS, BOEM refer to these examples as evidence that issues encountered in other OCS Planning areas such as the Atlantic, are not new environmental and social risks and that these activities can co-exist.

Experts have noted that it is important that BOEM use caution when synthesizing these data into one or more geospatial mapping efforts. Industry members have examined the data used in the *GeoPortal* base maps and found that some of it is over 20 years old. Section 1502.24 of the CEQ regulations implementing NEPA state that agencies:

*“Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement. An agency may place discussion of methodology in an appendix.”*

Commensurate with CEQ regulations (Section 1502.24), we recommend that BOEM consider using more recent data for base maps on the *GeoPortal* and in the PEIS to ensure that the quality is consistent with ‘best available’ standards. Specifically, the Associations request that BOEM look to State GIS databases such as the Commonwealth of Virginia, to update the information in the *GeoPortal*. In addition, BOEM must describe in the PEIS whether raw data versus ‘interpreted’ data were used to create these maps and what methods were applied. The Bureau’s approach must be outlined in the Draft PEIS such that the process used can be duplicated and maps can be reviewed. In order for this process to be considered a good scientific tool, the process must be reproducible so other users can regenerate BOEM’s mapping or modeling results used in the PEIS.

The Associations do not expect BOEM to include all data sources as appendices to the PEIS but does ask that BOEM make those data available upon request and include a summary of all data sources and how they were used in the PEIS. By applying these accepted scientific methods for data collection, review and synthesis, BOEM will minimize the potential for legal challenge and present a transparent NEPA process. Where BOEM does draw conclusions about environmental impacts based on the presence of activities identified through *GeoPortal* map or data submissions, BOEM should clearly articulate how it reached those conclusions.

## **Joint Industry Programs and Regional Science**

The Associations recommend that BOEM include results of new science in the geospatial modeling from several of the joint industry programs that are conducting research on a near daily basis. Some of these data will be available in advance of the Final PEIS and should be included in the final analysis. For example, the Chukchi Sea Environmental Studies Program (CSESP) is a joint-industry program that is conducted specifically for the purpose of providing integrated information for use in environmental impact analysis (<https://www.chukchiscience.com/>). The results from the CSESP have been shared with federal agencies and the general public through various information-transfer meetings and symposia such as the Alaska Marine Science Symposium held in Anchorage each year. Notably, the CSESP was awarded the Arctic Technology Conference’s Distinguished Achievement Award in 2015. This is just one example of scientific results that should be included in any Programmatic EIS for activities proposed in the Alaska region.

Further, the DPP suggested that the southeast Atlantic region is data poor as compared to other regions. However, there are considerable data available in this region similar to that described above for the Chukchi Sea although some of it does not come from traditional sources. For example, data from state programs (specifically GIS data) needs to be evaluated for potential incorporation into the PEIS. These data might fill gaps in understanding that would otherwise be missing in the Final PEIS (i.e., State GIS layers). There are also data being collected outside the U.S. that could be incorporated where appropriate for example the *E&P Sound and Marine Life Joint Industry Programme* organized by the International Association of Oil and Gas Producers to improve understanding of the potential impact of Exploration and Production sound on marine life (<http://www.soundandmarinelife.org/>). Specifically in the PEIS, BOEM can use these collaborative programs as current examples of how government and industry are working together to design research, collect and analyze data, and make those data publicly available. By specifically referencing these programs in the PEIS and using them to frame alternatives that include data sharing management, stakeholders have tangible examples of how they operate and can support adaptive management of future offshore oil and gas development.

### **BOEM's Application of 'Best Available Science'**

This PEIS is being developed in concert with the 2017–2022 DPP document and is consistent with that of previous scoping processes on similar, related documents. The Associations continue to have concerns that while BOEM and other agencies may have access to the best available science it is often misapplied or ignored in the decision making process.

For example, during the scoping and subsequent comment periods on the 2014 Atlantic G&G PEIS, API and other trade organizations expressed concern regarding BOEM's approach to the analysis of abundance and distribution data for marine mammals and application of the best available science<sup>3</sup>. BOEM's analysis, by the agency's own admission, overestimates thousands of incidental takes of marine mammals and relies upon incorrect assumptions.

The 2014 Atlantic PEIS states that the acoustic and impact modeling conducted to develop these [incidental take] estimates were:

*"...purposely developed to be conservative and accumulate throughout the analysis (e.g., representative sound source is modeled at highest sound levels and always at maximum power and operation, sound levels received by an animal were calculated at the highest levels, marine mammal density values used likely exceeded actual densities, and the models did not include the effect of all mitigations in reducing take will overestimate take".*

As documented in the May 7, 2014 Joint Industry Letter on the 2014 Final G&G Mid- and South Atlantic PEIS, we specifically stated:

*"BOEM discounts observational data that contradict its modeled quantification of G&G impacts and instead relies on unrealistic assumptions regarding sound exposure that are not supported by the best science currently available."*

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<sup>3</sup> On March 7, 2014, BOEM issued a Notice and Request for Comments on its Final PEIS for Proposed Geological and Geophysical (G&G) Activities on the Mid- and South Atlantic OCS (79 FR 13074). API, the International Association of Geophysical Contractors (IAGC), and the National Ocean Industries Association (NOIA) submitted a comment letter dated May 7, 2014 (the "Joint Trades Letter") in response to the PEIS that emphasized the need to use the best available science. Prior to the Final PEIS, API, IAGC and NOIA submitted a joint letter dated July 2, 2012 stating similar comments regarding the use of best available science in the PEIS process. Those comments are incorporated here by reference as many are relevant to the current OCS Leasing Program PEIS for 2017-2022 and concerns that remain are repeated in this letter.

The supposed effects of this “worst case” hypothetical scenario are then addressed in the PEIS with mitigation measures, many of which are similarly unrealistic because they mitigate inaccurately presumed effects. This approach is contrary to both the best available scientific information and applicable law.

The offshore oil and natural gas industry has demonstrated its ability to conduct seismic and other oil and gas exploration and development activities in a manner that protects marine life. *See, e.g.,* BOEM, *Final EIS for Gulf of Mexico OCS Oil and Gas Eastern Planning Area Lease Sales 225 and 226*, at 2-22 (2013) (“Within the [Central Planning Area]...there is a long-standing and well-developed OCS Program (more than 50 years); there are no data to suggest that activities from the preexisting OCS Program are significantly impacting marine mammal populations”). Four decades of worldwide geophysical surveying activity and scientific research on marine mammals have shown no evidence that sound from seismic survey activities has resulted in injury to any marine mammal or biologically significant impacts to any population. During this time, industry has employed a number of robust mitigation measures to further reduce the negligible risk of harm to marine mammals.

In general, the Associations are concerned that the same methods and fundamentally flawed measures in the 2014 Atlantic PEIS will be used as a starting point and carried over directly, without further review or discussion, into the PEIS for the Final Proposed Program for 2017-2022. It is important that the Final PEIS accurately describes the oil and gas activities taking place and any potential environmental impacts likely to occur during the 2017-2022 program.

To that end, the Associations recommend that BOEM consider the following adaptive management approach in the alternatives evaluated in the 2017-2022 OCS PEIS and implemented through the 2017-2022 Final Proposed Program.

### **Implementation of Adaptive Management through NEPA**

The concept of adaptive management is not new to BOEM and was in fact emphasized as an approach embraced by the agency in the 2014 Atlantic G&G PEIS, Appendix C Section 7 which states:

*“Once a better understanding of the effectiveness of assigned mitigations is achieved, BOEM, as the decision maker, will be able to better assess and adjust future management decisions and design more effective mitigations if warranted. This adaptation will take place by using this Programmatic EIS as a baseline; an ongoing process of BSEE examining monitoring data and periodic assessments performed on it in BOEM’s Environmental Studies Program; and using models to predict outcomes with the comparative results of these analyses feeding back into the decision-making process to produce more effective future decisions. BOEM also understands that successful adaptive management of a program and active ties within that program requires stakeholder participation.”*

The Associations generally agree with BOEM that adaptive management could provide the built-in flexibility necessary for successfully balancing ecosystem management principles with prudent oil and gas exploration and development. However, a better understanding of the systematic process BOEM will use to implement adaptive management concepts is needed to ensure that this approach is not used to create more uncertainty from a regulatory perspective. While the 2014 Atlantic G&G PEIS included adaptive management provisions to consider future data regarding the efficacy of mitigation measures and adjust requirements for individual projects, it also appeared to establish minimum standards that can only become more stringent. A true “adaptive management” program should adjust requirements to be either less restrictive or more restrictive based on project-specific information, the assessment of relevant risks, and the best available scientific information. If the program is not based on the best new science and relies instead on increasingly conservative assumptions, regulatory uncertainty will only increase.

The Associations support use of the best available science in all situations and, generally, adaptive management allows for using best available information at any time throughout a process. Currently there is an adaptive management component being considered in the scoping of the draft program. However by BOEM's own admission, and supported by the recent past, adaptive management has largely been a one-way process used only to apply more stringent mitigation measures on top of those already being applied. This is not adaptive but more prescriptive. Rarely has adaptive management been applied in the true sense of the term – *i.e.*, site-specific requirements may be adjusted to be either less restrictive or more restrictive based on the project-specific information, the species present in the project area, the assessment of relevant risks, and the best available information. Application of this term by BOEM, as well as other Federal agencies in their respective review processes, has rarely resulted in mitigation or monitoring requirements becoming less restrictive due, often, to an over-zealous application of the precautionary principal to minimize concerns of 'potential' impact or as a pre-emptive measure to avoid subsequent litigation.

We recommend that BOEM take this opportunity to develop the 2017-2022 OCS PEIS so that it will be truly adaptive by requiring that a formal feedback mechanism be established as part of the proposed alternatives for the 5-year program. This will ensure that BOEM, other Federal agencies, and affected stakeholders, have an opportunity to retrospectively review the science that was used to develop the Final PEIS. For example, in the case of geophysical and geological surveys, this could include a review of the survey results - the estimates of potential marine mammal exposure to sound levels produced by seismic sources, and the subsequent estimate of marine mammal takes - on a periodic basis to determine whether the applied mitigations are, in fact, appropriate.

Meetings and workshops between the Federal agencies and the industry do occur on a fairly regular basis. However there currently is no formalized mechanism that BOEM or NMFS is committed to for using feedback from industry to check-back and adjust existing management or mitigation. Neither is there a mechanism to ground-truth an activity or results of an activity to compare actual results with predicted results.

By incorporating a formal feedback process for BOEM and industry to annually evaluate, at a minimum: 1) reporting requirements; 2) the effectiveness of mitigation measures; 3) marine mammal behavior in response to seismic surveys; and 4) PSO data compared to permitted 'take' levels (*i.e.*, IHAs), BOEM and industry would have a systematic and transparent process to adaptively manage these programs more effectively. In so doing, the potential risk of legal challenge to BOEM's and NMFS's offshore management programs can be minimized.

A principal NEPA obligation is that BOEM 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.' A federal agency may therefore – and should – eliminate alternatives and mitigation measures that do not meet the purposes and needs of the project. The Associations believe that an adaptive process to incorporate feedback and best scientific evidence as described would result in a positive effort by BOEM to ensure that reasonable and appropriate mitigation measures will be applied in the 2017-2022 program.

## **SUMMARY OF KEY COMMENTS**

The Associations appreciate this opportunity to comment on the scope of the PEIS for the Final 2017-2022 program. The 2017-2022 OCS PEIS will address NEPA requirements by assessing the contribution of BOEMs activities resulting from these authorizations to the direct, indirect and cumulative effects on species and resources, including effects from past, present, and reasonably foreseeable future events and activities. This will provide BOEM decision-makers, and the public an evaluation of the environmental, social, and economic effects of the activities and alternatives being considered for the upcoming years. We also believe that this PEIS pursuant to NEPA will also assist BOEM in carrying out



statutory responsibilities related to the agencies' role(s) and responsibilities under other Federal statutes (i.e., assessing and minimizing environmental impacts on marine mammals under the MMPA and ESA).

We would like to reiterate our views regarding the use of best available science and the importance of instituting high data quality standards. With BOEM's increasing reliance on the new *GeoPortal* as a means of collecting data, a quality assurance, quality control system that provides a thorough review of data received through the *GeoPortal* is imperative. BOEM should take steps to reviewing data for validity and scientific integrity prior to consideration during the PEIS analysis process.


Generally, the Associations support BOEM's long-term plan to authorize exploratory activities on the OCS. It is widely believed that modern seismic imaging using the latest technology will enable BOEM to more accurately evaluate the OCS resource base. The industry's advancements in geophysical technology will provide more realistic estimates of the potential resource. We recognize, as does BOEM, that seismic and other geophysical surveys are the only feasible technology available to accurately image the subsurface.

While the Associations support BOEM's plan to authorize exploratory activities on the OCS we believe that recommendations by industry organizations in the past have been largely ignored (see the May 7, 2014 Joint Industry Letter on the Atlantic PEIS). Mitigation measures that will have little effect on the conservation of marine mammals and other listed species have been applied with indifference to their real benefit to the species and indifference to the impact on the industry. Further, while BOEM states that it will consider future data regarding the efficacy of mitigation measures and will adjust requirements for individual surveys, this review generally results in additional measures being applied, and the existing measures becoming more stringent through a skewed adaptive management process.

The Associations believe that BOEM now has the opportunity to develop a Final PEIS for 2017-2022 that will truly be adaptive by requiring that alternatives consider a feedback mechanism that will allow BOEM, other Federal agencies, and affected stakeholders an opportunity to retrospectively review the results of the program on a periodic basis. This feedback mechanism will ensure that the best available science is being implemented and that monitoring, mitigation and scope of the program are adjusted appropriately. The intent is not to pre-judge or alter an outcome but rather to provide an adaptive, rigorous scientific review to a NEPA implementation process that the Associations believe has become flawed due to more and more incorrect or unsupported assumptions being incorporated as 'fact' into the analysis of effects and, as a result, the final decision documents fail, or at a minimum are challenged, by the lack of scientific integrity in the outcome.

We appreciate the opportunity to provide these comments and would be pleased to discuss them further as appropriate. Should you have any questions, please contact me at (202) 682-8584 or [radforda@api.org](mailto:radforda@api.org).

Sincerely,



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