

Edisto Island



Community  
Association

*The Edisto Island Community Association, Inc.*

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[HTTP://EICANOW.ORG](http://EICANOW.ORG)

*"Providing information about the political, social, economic and environmental issues that directly relate to the development of Edisto Island."*

July 20, 2017

Jolie Harrison, Chief  
Permits and Conservation Division  
Office of Protected Resources  
National Marine Fisheries Service  
1315 East-West Highway  
Silver Spring, MD 20910

By Email: ITP.Laws@noaa.gov

**Federal Offshore Oil and Gas Development  
of the Outer Atlantic Continental Shelf**

Dear Ms. Harrison:

Edisto Island is a barrier sea island along the coast of South Carolina. It is a vital part of the ACE Basin Project whose mission is "to maintain the natural character of the basin by promoting wise resource management on private lands and protecting strategic tracts by conservation agencies". A major goal of the protection efforts is to ensure that traditional uses such as farming, forestry, **recreational and commercial fishing** and hunting will continue in the area (emphasis added).

The Edisto Island Community Association (EICA) which consists of over 250 memberships, strongly opposes seismic testing and the BOEM authorizations for oil and gas exploration in the Mid-Atlantic and South Atlantic Outer Continental Shelf regions. The reasons for our opposition will become clear as you read through our letter.

The concern is the use of airgun technology. The vessels used for this process pull large arrays of airguns that fire every 10 to 12 seconds, 24 hours a day for months and each firing creates the loudest noise in the ocean - 246 to 253 decibels. This is violent and the effects of this disruption are unknown.

**The energy sector is not expressing the need for more product.**

The price of oil in the United States is generally low. Offshore drilling is an expensive endeavor so the increased cost for a less valuable resource is not currently justified. Your Secretary has indicated that the Trump Administration has not been approached by any companies who are interested in off-shore drilling in the Mid to South Atlantic Outer Continental Shelf regions.

**The world's policy direction is toward renewable energy.**

The conclusion of the international climate agreement in Paris in December 2015, despite the recent withdrawal of the United States, has provided momentum for countries to promote policy incentives for clean energy development. These developments will likely lessen the demand for new oil and gas reserve identification.

The share of energy production by wind, hydro and solar means continues to increase, resulting in the consequent decrease in energy production by petroleum based fuels.

The recently developed stacked solar cell captures almost the entire visible light spectrum and is 44% efficient, a previously unheard of achievement. Recently published research finds that the power grids are just as reliable with renewable fuels as with carbon based fuels. These developments suggest even less reliance on petroleum based fuels in the future.

**The coastal ocean life is very fragile.**

Seismic blasting and offshore oil extraction on the Southeast coast could hasten the decline of marine species, particularly those in the path of the blasting. Birds and other forms of wildlife would also be adversely affected. By your own estimate, up to 138,000 whales and dolphins could be injured or harassed if seismic air gun blasting was allowed in the Atlantic Basin. The ocean-going vessel containing the seismic testing equipment places a human observer with binoculars on the deck to spot whale or dolphin; this supposedly results in the airguns being stopped. The impact of the air gun method of seismic testing extends for hundreds of miles. This makes it impossible for a human spotter to identify the sea life at risk.

Seismic blasts may also have wide-ranging effects on some of the most critical ocean life-forms: the zooplankton - marine organisms that live on the surface of ocean that can be plants or animals. Healthy populations of fish, top predators, and marine mammals are not possible without viable planktonic productivity. Zooplankton support the health and productivity of the marine ecosystems. Seismic testing could cause significant disruption to their population levels. Areas exposed to the air gun seismic testing saw a median catch decrease of 64 percent. Impacts were observed as far as 4,000 feet from the air gun blasting. This is over one hundred times farther than the previously estimated impact reach of 32 feet. A robust strategy to assess the impact on the sea life food chain needs to be employed.

**The economy of the marine based industry will be put at risk.**

Seismic airgun blasting reduces commercial catches of cod and haddock by 40% to 80%. Other commercial fish are similarly impacted. Seismic airgun blasting will affect the forage fish - herring, shad, menhaden and others - which spawn in the rivers and estuaries all along the East

Coast. As these species leave their spawning grounds they become part of the food chain for the great pelagic species like blue fin tuna, blue marlin and others. Seismic airgun blasting disturbing that migration would be disastrous to both the recreational and commercial fishing industries.

When the local commercial fishermen along the Atlantic coast can't deliver the fresh catch to shore, their livelihoods are affected; seafood processors have less business; seafood markets and restaurants have less to sell and what they do have will be available at significantly higher prices, placing seafood out of reach for many consumers. The commercial South Carolina sea food industry derives approximately \$75 million in sales from harvesting commercial fish in the nearby Atlantic Ocean.

Nearly three out of every four ocean economy jobs are in tourism & recreation. The Atlantic shore communities such as Edisto Island with its beaches are dependent on tourism.

There are many more jobs in the ocean economy of tourism than there are in the offshore fossil fuel sector. It should be expected that even fewer jobs will be created in the future due to automation in fossil fuel recovery.

**Emerging technologies will improve the clarity of the data developed with less impact upon sea life.**

The most immediate concern is the use of airgun technology. The vessels used for this process pull large arrays of airguns that fire every 10 to 12 seconds, 24 hours a day for months. Each firing creates the loudest noise in the ocean - 246 to 253 decibels. The data obtained from this survey technique is used to project where oil deposits might be located and how much oil may be found at the site. Then test wells are drilled to verify the data.

Alternatives to sonic boom technology are emerging. Seismic prospecting, well logging, gravity surveying, magnetic prospecting, geochemical prospecting, ambient seismic field noise correlation tomography (ASNT) and control source electromagnetism (CSEM) are those most immediately available.

Geospatial satellite technology using tens to hundreds of earth-imaging/surveying satellite systems will be circling the Earth in the next few years. Companies such as PlanetLabs, DigitalGlobe, Satellogic, Google, ViaSat, NorthStar, and Teledyne are developing and launching these networks as well as a host of companies from India, the European Union, Russia and China.

Longer term in the development cycle is the use of the emerging satellite networks to locate oil and gas deposits by control source electromagnetism (CSEM), interpretation technology and earth systems modeling. Other technologies beyond these will likely emerge but are not knowable now.

**What is our recommendation?**

Given the unexpressed need for oil and gas product exploration for new reserves at this time, we recommend a delay in this process in order to employ a better surveying technology, one without the potential for so much damage to the ocean's ecosystem and the economy of the area. Delay will not impact national security, foreign policy, the US economy or the Federal budget.

Acknowledged in the Final Environmental Impact Statement (FEIS) is the incomplete understanding about the impact of seismic data collection on sea life and that lack requires an iterative or adaptive decision making strategy to mitigate the sonic impact. Stated in the FEIS (I-26.) is:

“Through adaptive management the continued assessment of the effectiveness of mitigation measures, expansion or contraction of time-area closures could be considered in the future and would be based on the availability of new marine mammal density data or other technical information that supports the change.”

A classical control model based on an understanding of the known factors influencing the outcome is not employed. It could be employed but a thorough, more robust research program would take more time. Hence, in the proposed control strategy if there is no data observed or reported or considered valid, there will be no change in the seismic blasting operation.

The decision to move ahead with the seismic mapping using airgun blasts creates the requirement to use a management strategy with an unknown risk impact upon marine life in an indeterminate area of the sea, when delay combined with the appropriate research will give rise to a fuller understanding of the impacts on marine life. Delay coupled with a robust research program on the range of impacts on sea life would obviate the need to use the less than thorough, but at times necessary, adaptive decision making control (commonly used in situations when time is at a premium).

In summary, there is no need for haste and the best intermediate decision is to suspend the plan for seismic blasting/testing until a need for fossil fuels is anticipated or the excess or surplus inventory is expected to decline; and when there is a less invasive technology available to support discovery activities.

We stand against seismic testing at this time.

Sincerely,

Rev. Abraham Gadsden  
President, The Edisto Island Community Association