



Southern Shrimp Alliance

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TO: Tershara Matthews
Chief, Emerging Programs
Office of Emerging Programs
Bureau of Ocean Energy Management
1201 Elmwood Park Boulevard
New Orleans, Louisiana 70123

RE: Request for Interest; commercial leasing for wind power development on the Gulf of Mexico OCS. BOEM-2021-0041 86 FR 31339 6/11/2021

The Southern Shrimp Alliance (SSA) appreciates the opportunity to provide comments on this Request for Interest (RFI) which are in specific response to the RFI section entitled "Requested Information from Interested or Affected Parties".

The Shrimp Industry in the Gulf of Mexico (GOM)

SSA's membership is comprised of many small, family-owned businesses in the shrimp fisheries and associated shoreside enterprises operating in numerous coastal communities in all eight warm-water shrimp-producing states from Texas to North Carolina.

Shrimp fishing vessels operating from ports throughout all five GOM states and from some Atlantic-coast ports conduct extensive fishing operations within the Central and Western Planning Areas of the RFI Area of the U.S. Outer Continental Shelf (OCS). These vessels primarily deploy otter trawl nets that are in continuous contact with the bottom.

Because fisheries operating in these federal GOM OCS waters are subject to the management authority of the National Oceanic and Atmospheric Administration (NOAA) pursuant to the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and other applicable law,

all shrimp fishing vessels operating in these federal waters must possess a valid or renewable federal permit.

As of July 9, 2021, there were 1,358 federally permitted shrimp fishing vessels authorized to conduct shrimp fishing operations in these federal OCS waters in the GOM RFI Area.¹ In 2018, 215.4 million pounds of shrimp were landed in the GOM with an ex-vessel value of \$393.6 million.²

In addition, as of November 4, 2019, there were approximately 9,711 full and part time shrimp fishing vessels authorized by GOM states to conduct shrimp fishing operations within GOM state waters.³

Further, many shoreside businesses are dependent on providing goods and services to vessels fishing within the RFI Area, including shrimp dealers, processors and marine chandlers, in communities located in all five GOM states. In 2014, there were 627 shrimp dealers and 51 shrimp processors based in GOM ports, and the value of shrimp processed by those processors in that year was \$749.98 million.⁴

The shrimp fishery is the most valuable fishery in the GOM and the shrimp industry is at the core of the economies of numerous coastal communities throughout the region.

With this brief snapshot of the GOM shrimp industry in mind, the shrimp industry has several specific interests in the process and outcome of BOEM's evaluation of possible commercial wind energy leasing and permitting on the GOM OCS.

As presented in the following comments, the shrimp industry's specific interests include the siting of commercial wind energy facilities and transmission lines, risks to navigation and the safety of human life at sea, risks to sea turtle populations, and the prevention and remediation of adverse impacts on shrimp fishing grounds and operations. Following that are comments with respect to what the shrimp industry looks forward to as BOEM's consultations with the fishing industry including with fishing organizations such as the Southern Shrimp Alliance.

Siting

The GOM shrimp industry's interests include both the siting of wind energy facilities and the siting of transmission lines.

¹ NOAA, Gulf Shrimp Permit data bank, <https://portal.southeast.fisheries.noaa.gov/reports/foia/SPGM.htm>

² NOAA, Fisheries of the United States, 2018, 8 <https://www.fisheries.noaa.gov/feature-story/fisheries-united-states-2018>

³ NOAA, ENVIRONMENTAL IMPACT STATEMENT TO REDUCE THE INCIDENTAL BYCATCH AND MORTALITY OF SEA TURTLES IN THE SOUTHEASTERN U.S. SHRIMP FISHERIES, November 4, 2019, Table 1, ix <https://media.fisheries.noaa.gov/dam-migration/99187727.pdf>

⁴ Id. at Tables 12, 13 and 103.

Because wind energy facilities would be located in federal OCS waters, the potential impacts of both the facilities and the associated transmission lines would be to federally permitted shrimp vessels operating in those waters, and to the shoreside enterprises that depend on providing goods and services to those fishing operations including the processing of the shrimp caught by those federally permitted shrimp fishing vessels.

The potential impacts to fishing operations would include the displacement of shrimp fishing operations from traditional productive fishing grounds as well as damage or loss of their fishing gear, and the potential impacts to shoreside enterprises would include the consequent reduction in vessel operations (fishing effort) and total shrimp catch which require their goods and services.

To facilitate an understanding of the potential impacts of wind energy facility and transmission line siting, Figure 1 presents precise shrimp fishing effort data collected by NOAA using on-board Electronic Logbooks (ELBs) for the purposes of managing the federally permitted shrimp fishery. The data is plotted on the BOEM RFI map within each of the BOEM OCS lease blocks within the RFI Area. It should be noted that this shrimp effort data is collected from only a random statistically significant subsample of the entire fleet- which is approximately one-half of the total number of federally permitted shrimp vessels currently operating.

These same ELB data are used extensively by NOAA and the Gulf of Mexico Fishery Management Council (“Gulf Council”) in several highly effective spatial management applications involving red snapper, sea turtle and coral habitat conservation as well as for precision-siting decisions relative to artificial reefs, OCS oil and gas activities, and offshore aquaculture activities.

The level of precision of this ELB data presented in Figure 1 is for the purpose of providing BOEM with an initial “big picture” snapshot of shrimp fishing activity in the RFI Area over a 5-year period. The full data set goes back more than 15 years. In general, it should be clear that the displacement of shrimp fishing operations by wind energy facilities and/or transmission from those areas would have substantial economic impacts on the GOM shrimp industry including both the fishing and shoreside operations described above.

With that in mind, we request BOEM consider restricting leases for wind energy facilities to areas seaward of these traditional shrimp fishing grounds. Consistent with our previous inputs to NOAA with respect to their Aquaculture Opportunity Area initiative in the GOM, we note there is a relatively sharp demarcation of shrimp fishing effort seaward of the 90-100 m depth contour and so request that leasing for wind energy facilities be limited to those areas seaward of at least the 90-100 m depth contour in the RFI Area.

If and when BOEM engages in any precision-siting evaluations and decisions, this same data is available at a much higher resolution. An example of that is presented in Figure 2 taken from the Gulf Council’s evaluation of the impacts on shrimp fishing of the designation of Habitat Areas of Particular Concern (HACP) for protecting corals. The result of that evaluation was that

the impacts of these HACP designations on shrimp fishing activity were minimized. This level of resolution has also proved to be extremely valuable in artificial reef, oil and gas, and offshore aquaculture spatial management applications.

In addition to their impacts in federal waters, the potential impacts of transmission lines, particularly if not buried, would be to the approximately 9,711 non-federally permitted shrimp fishing vessels operating within GOM state waters, and to the shoreside enterprises that depend on providing goods and services to those fishing operations including the processing of shrimp catch by those state-authorized shrimp fishing vessels. Given the large number of active shrimp fishing vessels operating in the comparatively small area of state waters, the density of shrimp fishing operations in state waters is high and so will be the impacts of transmission lines.

Finally, further consideration must be given to the fact that the potential future exclusion and displacement of other OCS users such as offshore aquaculture operations from wind energy production and transmission sites onto traditional shrimp fishing grounds presents additional potential impacts to federally permitted shrimp vessels operating in those waters, and to the shoreside enterprises that depend on providing goods and services to those fishing operations. The GOM is becoming increasingly crowded for both historic (shrimp fishery) and new activities competing for the same space.

Risks to Navigation and Safety of Human Life At Sea

The potential future exclusion and displacement of vessel traffic and the activities of other OCS users from wind energy production and transmission sites present several risks to navigation and human safety. This vessel traffic includes commercial and recreational fishing vessels, commercial cargo/tanker vessels, vessels supporting OCS oil and gas activities, military vessels and vessels supporting other OCS users such as offshore aquaculture operations, among others.

The displacement of this vessel traffic into smaller or less safe areas of the GOM including into established shipping/transit lanes - or further from ports of call - has the potential to increase vessel traffic congestion and present consequent risks to navigational and human safety.

There can also be expected to be an increase in the current level of recreational fishing vessel activity on the OCS in close proximity to wind energy facilities due to the fact that such structures have the effect of attracting and concentrating fish species that are the target of recreational fisheries in the GOM. Again, more vessels, more traffic, less space, less safety.

As part of its ongoing Aquaculture Opportunity Areas initiative for the GOM, NOAA's National Centers for Coastal Ocean Science has collected and analyzed extensive, high-resolution data on a range of activities for evaluating offshore aquaculture facility sites in the GOM. These include vessel traffic and other OCS user activities including commercial fishing, oil and gas wells and pipelines, submarine cables and wastewater discharge facilities. They also evaluate precise spatial data on ecologically sensitive habitats including marine protected areas such as National Marine Sanctuaries and Habitat Areas of Particular Concern (HACPs) and other unsuitable siting locations including shipwrecks and unexploded ordinances. They use a

suitability modeling approach integrating this data in order to rank potential locations based on common criteria before proceeding to the precision siting process.

SSA strongly recommends that BOEM apply a comparable suitability modeling approach for wind energy facility and transmission line siting evaluations while utilizing NOAA's shrimp fishing effort data presented in Figure 1 as one of those key data inputs.

It is also our understanding that wind energy production facilities may interfere with the functionality of radar equipment including vessel navigation radar as well as NEXRAD weather radar on which all vessels including shrimp vessels depend for their safety. This would, of course, seriously exacerbate the risks to navigation and human life associated with increased vessel displacement and congestion discussed above, as well as any vessel operations in the vicinity of these facilities. BOEM must take such radar inference into full account in any decisions regarding the siting and operations of wind energy facilities in the Gulf and must consult with the shrimp industry on preventing threats to their safety of navigation and human life at sea.

A further potential impact related to vessel traffic that must be considered is the safety risks presented by increases in port congestion associated with vessels servicing wind energy activities. And still further, the impacts of the potential displacement by wind energy related operations of shrimp fishing vessels and associated shoreside enterprises from space and facilities in ports of call needed to support the GOM shrimp industry must be considered. The shrimp industry cannot exist without safe and cost-efficient access to sufficient working waterfront.

BOEM must develop and implement, in consultation with the shrimp industry, a risk management policy and program for addressing these and other risks associated with wind energy in the GOM.

Prevention and Remediation of Adverse Impacts on Shrimp Fishing Grounds

The GOM presents unique challenges to any OCS facilities in the form of increasingly frequent Category 5 (or higher) hurricanes. Few *if any* structures known to man have yet proved to be capable of fully withstanding those forces of wind and waves. It is a reasonable assumption that wind energy facility damage and destruction is inevitable. BOEM must consider these risks and the wisdom of permitting wind energy development in such a hostile physical environment as the GOM in the first place.

One consequence of the damage to or destruction of a wind energy facility on the GOM OCS would be the depositing of debris on productive shrimp fishing grounds and otherwise ecologically sensitive habitat, and the consequent displacement of shrimp fishing from the affected areas with the associated economic impacts on fishing vessels and shoreside enterprises. There are many examples of this involving OCS oil and gas facilities in history.

Thus, a key solution to this inevitable problem is *prevention*.

BOEM must ensure that every wind energy facility and transmission line operating in the GOM is designed and constructed in a manner that has been demonstrated to prevent damage or destruction by such high winds and waves. It seems likely that such design and construction standards will need to be higher than applied in other regions of the U.S. It will also be essential that all transmission lines be completely buried at a depth sufficient to prevent impacts on traditional shrimp fishing grounds and the loss or damage of shrimp fishing gear.

While SSA strongly favors prioritizing prevention over the remediation of damages done, BOEM must further ensure that when a wind energy facility or transmission line in the GOM is inevitably damaged or destroyed, that the operator is sufficiently indemnified and has sufficient financial resources and technical capabilities to remediate any impacts on shrimp fishing grounds and the marine ecosystem, including the clean-up all such debris in a timely manner.

Further, BOEM must take the necessary steps to establish programs to compensate shrimp fishermen for the full range of any impacts caused by wind energy development in the GOM. Among others, one such step should be to expand the Fishermen's Contingency Fund (FCF) established pursuant to section 402 of the Outer Continental Shelf Lands Act Amendments of 1978 (P.L. 95-372) to include the inevitable loss or damages to bottom tending fishing gear (otter trawls) used by the shrimp fleet that will be caused by offshore wind facilities, transmission lines or associated debris. The program is operated by NOAA and has been of benefit to the GOM shrimp industry for many years.

(<https://www.fisheries.noaa.gov/national/funding-and-financial-services/fishermens-contingency-fund-program>)

The FCF is currently capitalized through fees paid by the oil and gas industry which should be expanded to include the offshore wind energy industry. Consideration should also be given to expanding the FCF program to compensate shrimp fishermen for the full range of any impacts caused by wind energy development in the GOM, not just gear damage or loss. In any case, whether provided through the FCF or a new program, impact compensation programs must be developed in consultation with the shrimp industry, cover the full range of any impacts caused by wind energy development in the GOM, and be capitalized through fees on the wind energy industry.

BOEM must also ensure that a wind energy facility operator has the financial resources needed to decommission such facilities and the associated transmission lines in a timely manner. This must include application of the same regulatory standards applied by the Bureau of Safety and Environmental Enforcement (BSEE) with respect to OCS oil and gas facility and pipeline decommissioning set forth in 30 C.F.R. part 250, Subpart Q to return the seafloor to a condition that existed prior to installation. BOEM should use its Risk Management Policy Group to develop financial risk policy, and work with BSEE to design appropriate regulatory requirements for the OCS wind energy industry with respect to remediation.

Those BSEE regulations include the following provisions that should provide the model for application to wind energy facilities and transmission lines (emphasis added in bold):

§250.1700 What do the terms “decommissioning”, “obstructions”, and “facility” mean?

(a) Decommissioning means:

- (1) Ending oil, gas, or sulphur operations; and*
- (2) Returning the lease or pipeline right-of-way to a condition that meets the requirements of regulations of BSEE and other agencies that have jurisdiction over decommissioning activities.*

(b) Obstructions mean structures, equipment, or objects that were used in oil, gas, or sulphur operations or marine growth that, if left in place, would hinder other users of the OCS. Obstructions may include, but are not limited to, shell mounds, wellheads, casing stubs, mud line suspensions, well protection devices, subsea trees, jumper assemblies, umbilicals, manifolds, termination skids, production and pipeline risers, platforms, templates, pilings, pipelines, pipeline valves, and power cables.

(c) Facility means any installation other than a pipeline used for oil, gas, or sulphur activities that is permanently or temporarily attached to the seabed on the OCS. Facilities include production and pipeline risers, templates, pilings, and any other facility or equipment that constitutes an obstruction such as jumper assemblies, termination skids, umbilicals, anchors, and mooring lines.

§250.1703 What are the general requirements for decommissioning?

When your facilities are no longer useful for operations, you must:

(a) Get approval from the appropriate District Manager before decommissioning wells and from the Regional Supervisor before decommissioning platforms and pipelines or other facilities;

(b) Permanently plug all wells. Packers and bridge plugs used as qualified mechanical barriers must comply with ANSI/API Spec. 11D1 (as incorporated by reference in §250.198). You must have two independent barriers, one being an ANSI/API Spec. 11D1 qualified mechanical barrier, in the exposed center wellbore prior to removing the tree and/or well control equipment;

(c) Remove all platforms and other facilities, except as provided in §§250.1725(a) and 250.1730.

(d) Decommission all pipelines;

(e) Clear the seafloor of all obstructions created by your lease and pipeline right-of-way operations;

(f) Follow all applicable requirements of subpart G of this part; and

(g) Conduct all decommissioning activities in a manner that is safe, does not unreasonably interfere with other uses of the OCS, and does not cause undue or serious harm or damage to the human, marine, or coastal environment.

Risks to Sea Turtle Populations

There are five species of sea turtles endemic to the Gulf of Mexico – Loggerhead (*Caretta caretta*), Green (*Chelonia mydas*), Leatherback (*Dermochelys coriacea*), Hawksbill (*Eretmochelys imbricata*) and Kemp’s Ridley (*Lepidochelys kempfi*). All of these species are listed as either threatened or endangered under the Endangered Species Act (ESA). Each of these species migrate widely throughout the Atlantic Ocean, and all return to nest on beaches located in the GOM. The status of each of these populations is determined primarily by monitoring the magnitude and success of their nesting activity.

Because the GOM shrimp fishery interacts with threatened and endangered sea turtles, its authorization to operate in the GOM is subject to intensive operational regulations and measures to monitor the fishery pursuant to the ESA.⁵ These include limits on the number of allowable “takes” (interactions) for the GOM shrimp fishery. If those limits are exceeded, the fishery is subject to additional regulatory measures which may include spatial/temporal closures or even the complete loss of its authorization to operate in the GOM pursuant to the ESA. In these respects, the very existence of the GOM shrimp fishery is closely tied to the health of sea turtle populations including the magnitude and success of their migrations to nesting sites in the GOM.

The electricity generated by wind energy sources will be transported to shore through cables that create electromagnetic fields (EMFs). Even when such cables are shielded, induced magnetic fields penetrate the water column producing anomalies in the earth's main field. There is a growing body of scientific research confirming that such anomalies disrupt the migrations of a range of marine species that rely on magnetic cues for orientation or navigation, including sea turtle migrations to natal nesting beaches.⁶

Anything that interferes with sea turtle natal homing behavior and the magnitude and success of sea turtle nesting activity in the GOM presents a serious threat to the existence of these species and, in turn, to the shrimp industry which is held accountable for the status of these populations.

Thus, the transmission lines from wind energy facilities may pose an existential threat to endangered and threatened sea turtle populations and, consequently, the GOM shrimp fishery. These risks need to be further investigated and the implications better understood by BOEM and the offshore wind energy industry before leasing or development can proceed.

⁵ NOAA, Endangered Species Act (ESA) Section 7 Consultation, Biological Opinion, SERO-2021-00087, April 26, 2021

⁶ Klimley, A. Peter et al., *A call to assess the impacts of electromagnetic fields from subsea cables on the movement ecology of marine migrants*, Conservation Science and Practice, May 22, 2021, 1.

Consultations with the Shrimp Industry

Taking into account the substantial interests of the GOM shrimp industry in wind energy development in the GOM described above, BOEM must develop and subsequently implement best management practices including prevention and compensation measures and programs for the purpose of minimizing adverse impacts to the shrimp industry.

As presented in Figure 1, traditional shrimp fishing grounds in the GOM cover extensive areas within the RFI Area – far more than any other GOM commercial or recreational fishery. Shrimp fishing activity within state waters is also intensive. Given the significant risks that wind energy development in the GOM pose, these best management practices and programs must be developed in close consultation with the shrimp industry from the very start of this process.

With this in mind, it is requested that BOEM move quickly to establish a formal GOM shrimp industry advisory body of representatives from all affected sectors of the GOM shrimp industry, including shrimp fishermen and the associated shoreside enterprises, to facilitate such consultations and the development and implementation of best management practices and other measures and programs necessary to minimize the impacts to the GOM shrimp industry. As a useful precedent to consider, the Gulf Council has established a Shrimp Advisory Panel of industry participants that has for many years been highly effective in serving the purpose of advising the Council and NOAA on various complex spatial management activities.

Thank you for your consideration. Please let me know if you have any questions or would like to discuss these comments.

Sincerely,



John Williams,
Executive Director

Figure 2.

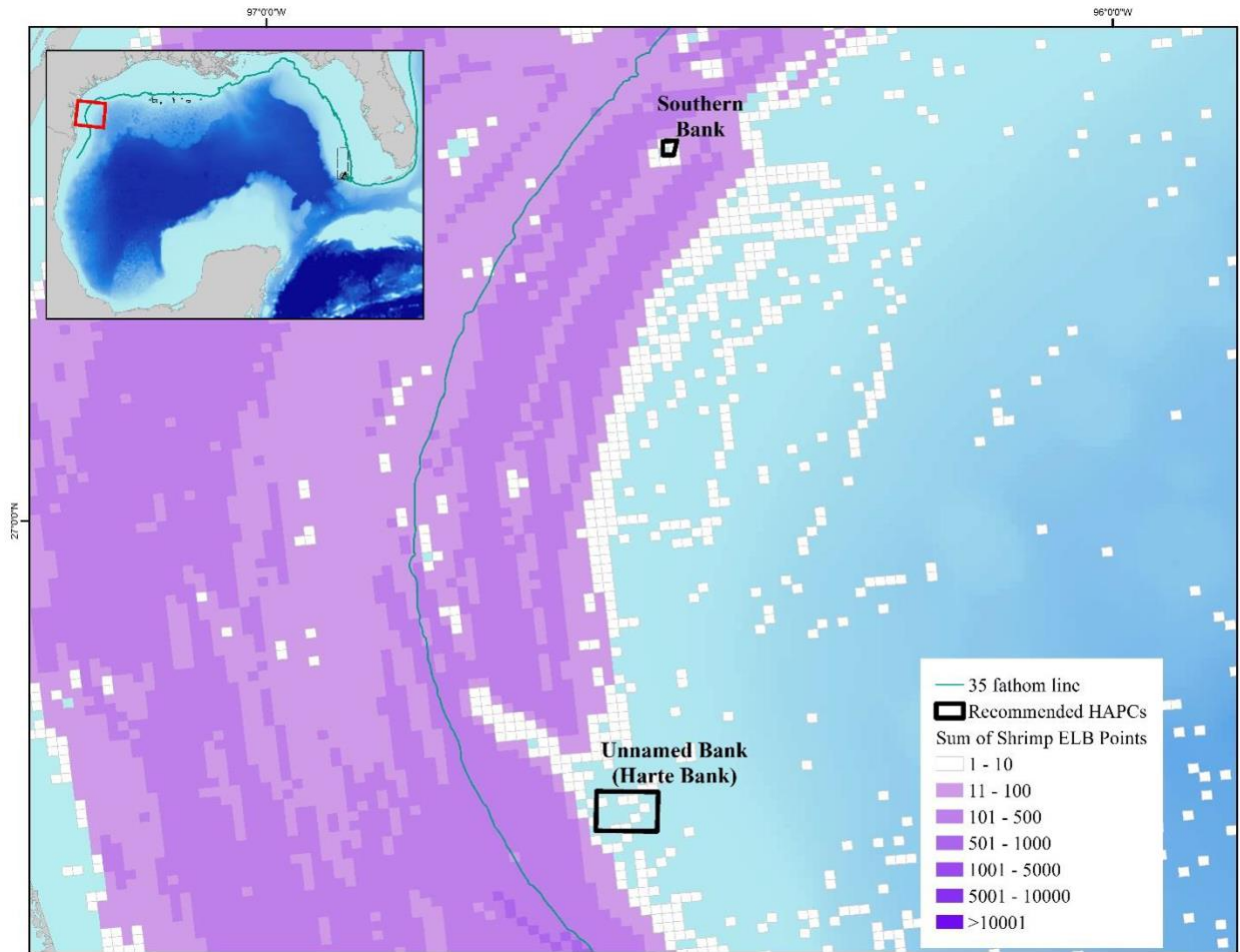


Figure 2.5.2. ELB data on the proposed HAPCs Harte Bank and Southern Bank. These data include all points from 2004 to 2013 and are aggregated on 0.65 nm by 0.65 nm gridded cells. ELB data are collected once every 10 minutes and have been filtered to only include data from active fishing. Interactive maps and data are provided at the Council’s Coral Portal.¹⁰ Any ELB cell that is not white indicates shrimping activity (see description of data used in Section 1.1).

¹⁰ <http://portal.gulfcouncil.org/coralhapc.html>

Source: Gulf of Mexico Fishery Management Council, “Final Amendment 9 to the Fishery Management Plan for the Coral and Coral Reefs of the Gulf of Mexico, U.S. Waters, Including Final Environmental Impacts Statement”, November 2018, 44 https://gulfcouncil.org/wp-content/uploads/Final-Coral-9-DEIS-20181005_508C.pdf