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Brian Hooker
Lead Biologist
Office of Renewable Energy Programs
Bureau of Ocean Energy Management
45600 Woodland Road, VAM-OREP
Sterling, Virginia 20166

Re: Request for Information, Guidance for Mitigating Impact to Commercial and Recreation Fisheries from Offshore Wind Energy Development

Submitted via regulations.gov

The American Clean Power Association ("ACP") welcomes the opportunity to comment in response to the Bureau of Ocean Energy Management's ("BOEM") Request for Information ("RFI"). ACP is a national renewable energy trade association that unites the power of offshore wind, onshore wind, solar, storage, and transmission companies.[1] ACP has established a national Fisheries Working Group ("FWG"), comprised of developers and leaseholders, to coordinate consensus and share best practices on the offshore wind industry's interaction with the environment, fishermen, fishing communities, and the fishing industry.

The ACP FWG continues to explore ways for the fishing and offshore wind industries to productively coexist and believe that BOEM should focus its efforts on creating guidance that is flexible and adaptable, recognizing what is currently working, and incorporating evidence-based solutions. Specific opportunities for alignment identified include:

- A federal structure for compensatory mitigation.
- Structured regional science and data approaches that can help inform and/or augment federal surveys that assess stock status.
- Better communication of surveys and other offshore wind activities occurring at sea.
- Improvements to engagement throughout the leasing process and projects development and operations.

[1] Within the offshore wind industry, ACP represents all the major developers and original equipment manufacturers (OEMs) and organizes meetings with the relevant personnel from each company weekly, monthly, and quarterly to determine industry positions on a variety of policy issues, federal regulations, and legislation impacting fisheries, transmission, and maritime issues.

Our comments address BOEM's request for specific feedback on existing Best Management Practices ("BMPs"), and those are detailed herein. As the renewable energy goals of federal and state governments rightfully accelerate to combat the harmful effects of climate change, particularly on fisheries and fishermen, there is no better time to coalesce around the idea of using a substantial portion of federal lease revenues, acquired through upcoming auctions and/or operating fees, to seed a compensation fund specifically geared towards fishermen. ACP and its members are fully prepared to support federal action on this effort as soon as possible.

I. Summary Comments

The ACP FWG offers comments regarding the four identified BMP areas on which BOEM is considering developing guidance:

1. Project Siting, Design, Navigation and Access;
2. Safety Measures;
3. Environmental Monitoring Plan; and
4. Financial Compensation for Economic Impacts.

The ACP FWG recommends that any effort undertaken by BOEM in this RFI process be forward-looking, not retroactive, and provide general principles that can be adapted at regional and/or project levels, without being prescriptive. The ACP FWG generally agrees with the scope that BOEM outlined in the RFI; however, given the wide range of topics, the ACP FWG respectfully recommends that BOEM focus the majority of its attention where standardized guidance is most lacking: financial compensation, and the use of existing authority to incentivize a permanent funding stream from fees associated with the leasing process.

Our comments therefore start with a discussion of a federal compensation fund, followed by comments on the other three topic areas. With respect to compensation, the ACP FWG's comments seek ways for the fishing and offshore wind industries to successfully coexist. We propose general principles that provide clarity, predictability, and optionality for both industries in a federal compensation fund. To support the fishing industry as it deals with the impacts of climate change and potential changes that may occur from offshore wind development, ACP FWG believes there is a regulatory solution (in lieu of our preferred legislative one) that can establish the appropriate mechanisms for a federal compensation program. The foundation of each solution allocates funds from lease revenue, credits, and/or operating fees to facilitate permanent funding, which could be used for new equipment and vessels, potential insurance rate increases, other business costs, and research. The distribution of these funds would be administered by a third-party.

We anticipate that any compensatory mitigation rubric would end up primarily compensating impacts from the temporary construction period and a short period thereafter, as adverse impacts, if any, will be less during operations than during construction. Similarly, potential adverse impacts from the export cable installation generally are expected to be of shorter duration and with less severe impact than from construction within the lease area itself, so the calculation should focus primarily on lease area impacts. NOAA has already collected data for commercial

and charter/party landings in these lease areas. Depending on the type and intensity of fishing activity within a project area, compensatory mitigation could take several different forms in addition to gear loss claims, such as navigation safety upgrades and training that facilitates further fishing effort, a claims-based direct compensation program, and broad grants for coastal communities.

The ACP FWG believes effective national guidance on a compensatory mitigation framework can play an essential role in providing clarity and reducing uncertainty for the benefit of fishermen and offshore wind developers. Guidance should be fair, transparent, evidence-based, forward-looking, adaptive, and provide robust mitigation for fishing communities—including commercial and recreational fishermen—as appropriate when subject to unmitigable negative effects attributable to offshore wind development. The mitigation framework for any direct compensation funds must also account for the fact that continued reductions to landings and landings values may occur due to reasons wholly separate from offshore wind development, particularly effects caused by climate change.

With respect to the BMP areas 1 - 3, the ACP FWG asks BOEM to consider the following principles:

1. Outcomes should incorporate best practices and evidence-based approaches from current projects, interagency consultations, and agency studies resulting in guidance to inform future projects;
2. BMPs should be flexible and adaptable to region-and project-specific needs, as well as information learned from current projects; and
3. BMPs should consider forward-looking approaches to project construction, operations, and decommissioning phases.

In each of these three areas, BOEM should ensure that the BMPs include mechanisms to receive feedback from fishermen, which is critical to developing evidence-based approaches to project siting and development, and to make certain that these mechanisms are working. BOEM should also outline the type of information that should be solicited by developers and how such information will be integrated into the Construction and Operations Plan ("COP") process, noting that developers have different, project-specific approaches for soliciting and incorporating input from fishermen. For certain topic areas (e.g., Navigation and Safety Measures), BOEM should incorporate applicable studies and consultation results from interagency efforts, in addition to information and standards generated by developers and adopted by consulting agencies, into BMP revisions.

Many navigation safety measures have already been voluntarily adopted by developers, especially in the Northeast Atlantic, that both facilitate and enhance navigation safety for mariners, including:

- Uniform layouts in lease areas and across adjoining leases, as appropriate[2].
- Enhanced aids-to-navigation systems.
- Plans to subsidize equipment upgrades and provide navigation training.

Finally, the ACP FWG also recognizes that the guidance will be national in scope, but may consider specific regions, given differences in the development stages of offshore wind energy development. Our comments are primarily national in scope, but do consider region-specific activities, examples, or applications, in the case of a compensatory mitigation framework, that recognize region-specific developer actions and consider whether such actions could be adapted in other regions. Our comments also consider stages of national leasing activities and project development timelines and encourage BOEM to also consider these factors as this effort progresses, specifically towards how this document will inform current and future lease sales and stipulations and how developers should implement guidance in project development and execution.

II. RFI General Approach

a. *Should BOEM development mitigation guidance for some or all of the four topics below and how should they be prioritized?*

The four topic areas that BOEM highlighted in this RFI are all critical elements of fisheries mitigation, but as BOEM correctly recognizes, guidance may be more detailed in some BMP areas and less so in others. Particular topics may only benefit from minor updates or revisions to the 2014 BOEM Report[3] based on lessons learned from the advancement of current projects in the Atlantic Region and BOEM's lease planning, whereas the topic of financial compensation requires more for robust, detailed, and standardized guidance. For project siting (specifically navigation) and safety measures, BOEM should leverage existing best practices from projects currently under review, and already approved, as frameworks to inform future projects. For environmental monitoring (or fisheries monitoring), BOEM should integrate monitoring best practices and lessons learned from recently established regional efforts such as the Responsible Offshore Science Alliance ("ROSA"), developers' efforts, and fishing industry organizations that can inform revisions to the 2014 BOEM report.

b. *Are there specific strategies, process steps, and engagement components for minimizing impacts and obtaining information requested in the topic areas?*

BOEM's guidance should inform how developers approach the four topic areas when developing projects. The guidance should recognize that there are unique site-specific considerations that

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[2] ACP and its members are not advocating that all projects in federal waters should have the same spacing requirements. Wind turbine spacing should be informed by many factors, analyses, and stakeholder and regulatory feedback. In certain cases, as with federal leases in Massachusetts and Rhode Island, minimum standard spacing across multiple leases may be justified by data and best available information. However, this may not be applicable for other adjoining lease areas on the U.S. Outer Continental Shelf.

[3] *Development of Mitigation Measures to Address Potential Use Conflicts between Commercial Wind Energy Lessees/Grantees and Commercial Fishermen on the Atlantic Outer Continental Shelf*, OCS Study BOEM 2014-654 (July 2014) *available at* https://www.boem.gov/sites/default/files/renewable-energy-program/Fishing-BMP-Final-Report-July-2014.pdf.

differ from project to project. The guidance therefore should be flexible and adaptive to incorporate those differences, but it should also be standardized to the extent that the framework can be used across projects and geographic areas. Essentially, it should provide a common formula into which details representing the unique, site-specific considerations are input. The guidance should be evidence-based, integrating best available science and utilize information that includes peer-reviewed science, fisheries management, and developers' fisheries monitoring data. Any necessary mitigation measures are best applied at the time of project approval. Additionally, BOEM can and should collaborate with regional entities to support evidence-based data and information aggregation. As such, we recommend that BOEM consider including regional entities, including those that are already established and those that may be established in the future, in the drafting and implementation of the revised guidance.[4]

c. *Should topics be addressed from a national or a regional perspective and why?*

Individual issues should be addressed from both a national and regional perspective, depending on the specifics of those issues. As an analogy, the recent BOEM leasing roadmap is best viewed conceptually through a national perspective but the unique, site-specific considerations that inform the roadmap are best viewed through a regional perspective. Similarly, BOEM should consider which elements of the existing BMP framework and feedback solicited in this RFI process apply nationally versus regionally, understanding that any recommendation should allow for flexibility and adaptation for region-specific activities, information, and project phases.

III. Financial Compensation

a. *Summary Comments*

To date, compensatory mitigation has been implemented in the U.S. either through state Coastal Zone Management Act review processes or ad hoc agreements with developers. The guidance stemming from this RFI presents the opportunity for a federal, standardized approach.

The ACP FWG and its members believe there is a legislative and/or regulatory solution that can establish the appropriate mechanisms for a federal compensation program that addresses concerns of the offshore wind and fishing industries, facilitates continued fishing activities, and promotes the successful and sustainable coexistence of both industries.

This is a key topic that BOEM can help advance that addresses concerns and provides clarity and predictability across the two industries. A thoughtful approach and potential mechanisms to address known and unknown potential effects to fisheries and fishing activity resulting from offshore wind development can help to improve relationships between the two industries and BOEM moving forward.

The ACP FWG agrees that compensatory mitigation is the final step in the effort to avoid, minimize, and mitigate adverse effects from offshore wind development. Any BOEM guidance

[4] Such entities include U.S. Fishery Management Councils, Marine Fisheries Commissions, academic fisheries scientists, the Responsible Offshore Science Alliance (ROSA), NOAA regional entities (i.e., Integrated Ocean Observing System Regional Associations), regional councils and/or ocean partnerships, and other relevant entities that can help advance regional and national research and data synthesis and integration key to understanding the effects of offshore wind and fisheries.

should acknowledge and account for ongoing BOEM or developer efforts, which include wind energy area identification that avoids prime fishing grounds, adoption of layouts that facilitate fishing operations, fisheries monitoring surveys, and navigation safety programs. The ACP FWG and its members recommend that any effort undertaken by BOEM in this RFI process be forward-looking, not retroactive, and provide general principles of what a potential mechanism could be, without being prescriptive. Any mechanism should provide optionality for both developers and the fishing industry. It should be national, evidence-based, and led by a collective federal government approach, specifically between BOEM and NMFS, that does not rely on multiple independent state approaches. Instead of answering each of BOEM's RFI questions in this section, we have set forth a potential framework for a federal fisheries compensation program.

b. *Introduction*

The ACP FWG proposes a compensatory mitigation framework containing the following elements:

i. The guidance should be truly federal and cover all offshore wind activities. Developers should not be subjected to duplicative or conflicting requirements from individual states.

ii. BOEM's guidance should clarify that any compensatory mitigation regime does not imply the creation of permanent property rights in federally managed ecosystems.

iii. The proposed compensatory mitigation framework considers different types of funds – direct compensation and other mitigation mechanisms – to mitigate potential unmitigable impacts resulting from offshore wind development across all fisheries sectors (*see Section III.c.iii* and *Table 1*).

iv. We anticipate that any compensatory mitigation rubric would end up primarily compensating impacts from the temporary construction period and a short period thereafter, as adverse impacts, if any, will be less during operations[5] than during construction. Similarly, potential adverse impacts from export cable installation generally are expected to be of shorter duration with less impact than from construction within the lease area itself, and so the calculation should focus primarily on lease area impacts.

v. Any directed compensation should be limited to commercial fishing for construction, operations, and decommissioning, and to party/charter vessels for construction and decommissioning. Direct compensation programs may be most effectively and appropriately applied to mitigate impacts to commercial and for-hire recreational fisheries, while a range of

[5] If direct compensation was determined to be warranted by the federal government during the operations phase, we anticipate compensation, as a result of unmitigable measures, may not be equal for the commercial and recreational fishing industries. Adaptability in a compensation mechanism is necessary to adjust for such valuation differences between and within the industries, e.g., commercial versus recreational and for-hire charter.

other mitigation programs may be effective for others affected in the recreational and coastal fishing communities.

vi. The mitigation framework must account for the fact that continued reductions to landings and landings values may occur due to reasons wholly separate from offshore wind development, namely ocean effects caused by climate change. The framework should address those impacts to fisheries and fishing communities that are otherwise unmitigable and attributable to offshore wind development. Development projects should not be required to mitigate extant, underlying changes in fisheries distributions and performances that are resulting from climate change, even as the offshore wind industry works to directly mitigate climate change for the benefit of all.

vii. BOEM should utilize its existing authority, which grants wide latitude in shaping bidding credits and operating fees, to facilitate a permanent funding stream for regional or national mitigation frameworks that would be administered by a third-party.

c. *BOEM Should Adopt a Data-Driven, Standardized Approach to Compensatory Mitigation*

As described in the comments above, the ACP FWG's member companies are developing project layouts, implementing communication and outreach plans, and utilizing mitigating technologies to avoid and minimize impacts to the fishing industry. This is all part of the effort—consistent with BOEM's prior BMPs and developers' goals—to ensure productive co-existence with the fishing industry.

Where impacts cannot be avoided or minimized, a predictable and standardized federal compensation methodology and decision-making process would prove beneficial. The ACP FWG's members believe that the underlying goals of compensatory mitigation, where and when it is warranted, are: (1) to make fishermen whole from demonstrated and unmitigable adverse effects of offshore wind development on their catch and fishing operations; and (2) to promote adaptation and economic resilience in the regional fisheries where offshore wind resources are developed to support successful and sustainable outcomes for both industries.[6] As discussed further below, the mitigation framework would be optimized by legislation or regulatory action that directs portions of bonus bids or lease fees to this purpose.

i. *Framework Should Be Comprehensive*

A federal framework for compensatory mitigation is the only sustainable long-term option, for several reasons. First, the potential effects on federal fisheries will occur largely in federal waters, which the federal government manages for the collective good. Second, impacted

[6] See BOEM, *Development of Mitigation Measures to Address Potential Use Conflicts between Commercial Wind Energy Lessees/Grantees and Commercial Fishermen on the Atlantic Outer Continental Shelf*, OCS Study BOEM 2014-654 (July 2014) at vi, *available at* https://www.boem.gov/sites/default/files/renewable-energy-program/Fishing-BMP-Final-Report-July-2014.pdf.

fishermen fishing in federal waters should expect a consistent process regardless of the state in which their home port lies. Finally, NOAA collects relevant data on landings values and has experience administering similar compensatory mitigation programs as the agency tasked with management of the Nation's public fisheries resource.

While the ACP FWG prefers national guidance, regional guidance (focused first on the Northeast and Mid-Atlantic regions) would present a good first step. To be truly national (or regional), it is essential that developers are not subject to overlapping or potentially conflicting scopes between this BOEM-led process and other frameworks that states with extensive coastal zone management reviews may have implemented or are implementing.

As BOEM manages the shared energy resource in federal waters, federal leadership is critical. Under Section 8(p)(4) of OCSLA, it is incumbent on BOEM to use its discretion to balance other uses of the ocean against factors that may weigh in favor of renewable electricity generation.[7] Moreover, Section 8(p)(9) makes clear that BOEM's offshore wind authority does not modify other federal jurisdiction, so BOEM should also make clear that any compensatory mitigation regime does not imply the creation of permanent private property rights in federally managed ecosystems through the use of terms such as "impact fee" or "user fee." Offshore wind developers already pay an annual rental fee to the federal government pursuant to their leases, which is in addition to the bonus bid paid to secure the lease. Operational fees will apply once projects are constructed and begin operations. Any monetary payments to fishermen are properly described as "compensatory mitigation." Moreover, as discussed below, BOEM should think creatively about how to harness these existing revenue streams to provide dedicated funding for the compensation framework.

ii. *Compensatory Mitigation Should Be a Last Resort and Recognize Prior Mitigating Federal and Developer Actions*

The ACP FWG agrees that compensatory mitigation is the final step in the effort to avoid, minimize, and mitigate adverse effects from offshore wind development. Any BOEM guidance should acknowledge and account for ongoing BOEM or developer efforts, which include wind energy area identification that avoids prime fishing grounds, adoption of layouts that facilitate fishing operations, fisheries monitoring surveys, and navigation safety programs. For example, BOEM's presentation as part of the Revolution Wind scoping meetings (*see Figure 1*) shows how the Massachusetts and Rhode Island area of mutual interest lease area was defined during a public process.[8]

[7] M-Opinion 37067, Secretary's Duties under Subsection 8(p)(4) of the Outer Continental Shelf Lands Act When Authorizing Activities on the Outer Continental Shelf (April 9, 2021).
[8] BOEM, Leasing History (April 2021), *available at* https://www.boem.gov/sites/default/files/documents/renewable-energy/state-activities/RWF-Scoping-Poster-Leasing-History.pdf.

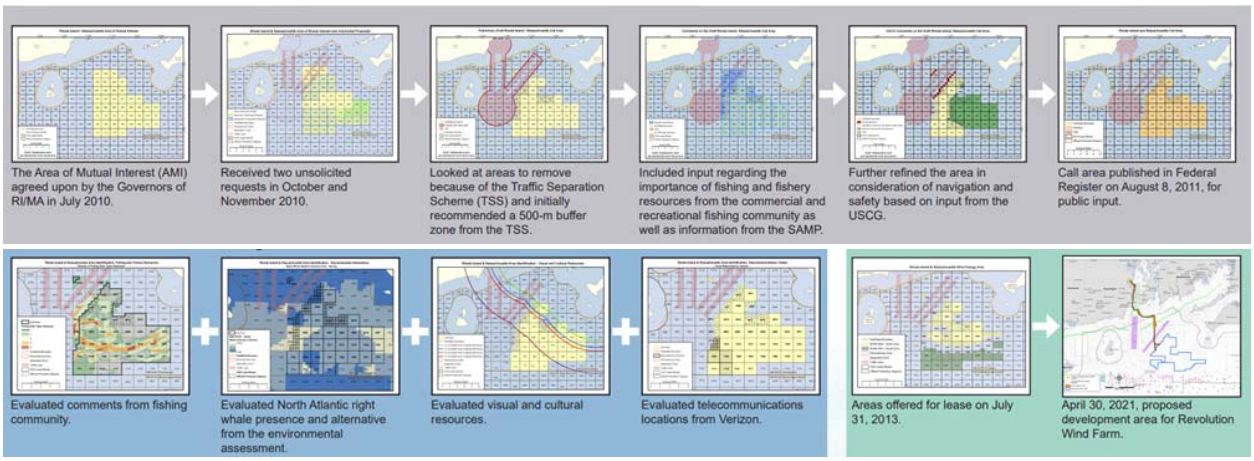


Figure 1 - BOEM Leasing History for Massachusetts/Rhode Island Lease Area

Still, even with avoidance and mitigating actions like these, there are several categories of potential effects that the compensatory mitigation could address:

- Transient effects due to constrained access to certain areas during construction;
- Transient effects on fish stocks due to construction activities;
- Limitations on fishing within wind farms during operations; and
- Transient effects due to constrained access to certain areas during decommissioning.

BOEM, with NOAA's input, is well-suited to develop and implement a compensatory mitigation framework because it is already familiar with actions taken to avoid or minimize adverse effects on the fishing industry before any turbines are put in the water. Federal agencies also have access to critical fisheries data that support this process.

The ACP FWG urges BOEM to tailor its direct compensatory mitigation framework to the fishermen that will be adversely affected when there are demonstrated and otherwise unmitigable effects. Specifically, compensation should be available to the commercial fishing industry for the construction, operations, and decommissioning phases, and to charter and party vessels during the construction and decommissioning phases.

Based on regional factors and preferences, compensatory mitigation for commercial fishing could address the following:

- Costs from adapting to fishing within offshore wind farms, including navigation system upgrades, new vessels, fishing equipment, gear modification or gear upgrades, insurance premiums, or training; and

- Loss of fishing revenue to the extent there is documented loss of use of the area (offset by self-mitigation from fishing other areas).

Recreational (private and for-hire) vessels[9] could be impacted differently than commercial fishing.[10] The U.S. Department of the Interior has long recognized the beneficial artificial reef effect created by oil and gas platforms in the Gulf of Mexico and Pacific Regions for recreational fishermen. Recent data also shows an artificial reef effect to occur around U.S. offshore wind turbines, which recreational fishermen are similarly benefitting from.[11] While we strongly believe that the artificial reef effect should result in significant opportunities for recreational fishermen, to the extent the recreational fishing industry is negatively impacted by offshore wind construction or decommissioning activities, that sector should also be eligible for compensatory funding through a federal mitigation program. For all subsectors of the recreational industry, compensatory mitigation measures for recreational fisheries should be focused on unmitigable impacts associated with project construction and decommissioning, as appropriate.

Mitigation measures should be responsive to impacts attributable to development and appropriately tailored across diverse commercial and recreational fisheries. While we do not make prescriptive recommendations in this area, we believe such a program should be flexible, innovative, and sufficient in scope to provide benefits for adversely affected recreational fishermen who fish in or transit through the projects. For instance, community investment funds could also provide support for commercial fisheries' gear innovation to promote fisheries adaptation and resilience. The proposed community investment fund could include mechanisms to provide benefits for other sectors where landings data may not be available and/or limited (e.g., seafood processors). Examples of other mitigation measures could include Community Grant and/or Navigation and Safety Training Funds (*see Section III.c.iii* and *Table 1*).

iii. *Data and Methodology for Compensation Programs*

This section discusses data and methodology for compensation in more detail. Four distinct types of funds or programs could address the impacts mentioned above, based on the type or intensity of fishing within a project area:

[9] Others affected in the recreational fishery could include private recreational vessels that fish in the project area or transit the project to participate in fisheries seaward of the project area.

[10] The ACP FWG recognizes the variability and differences in fishing vessels, practices, and activities (e.g., tournaments, for-hire, party and charter, commercial recreational sector (Gulf of Mexico)), within the recreational fishing industry and have proposed compensation optionality for this sector based on the range of activities. As such, the ACP FWG did not propose specific compensation measures for each subsector of the industry, but instead indicate possibilities that could exist. By incorporating flexibility and adaptability as described in the proposed financial model, the ACP FWG believes that the recreational fishing industry can fairly benefit from the compensatory mitigation measures proposed if there are unmitigable negative impacts associated with project phases. Note that this warrants further consideration as BOEM progresses this effort.

[11] https://coastalvawind.com/partnerships/supporting-fisheries.aspx#fishery-video & https://www.13newsnow.com/article/tech/science/environment/marine-life-wind-turbines-virginia-coast/291-da2984ee-212f-445a-811b-70fc9657fcdc

Table 1 - Proposed Compensatory Mitigation Fund Types

MITIGATION FUND TYPES	ELIGIBLE RECIPIENTS	PURPOSE	CLAIMS-BASED	TIED TO LANDINGS DATA
GEAR LOSS PROGRAM	Commercial fishermen	Replace mobile and fixed gear loss due to interactions from offshore wind activities; program administration may vary in different project phases; subject to claims process	Yes	No
NAVIGATION SAFETY AND TRAINING FUND	Charter/party Commercial fishermen	Addresses navigational safety by providing eligible vessels operating in the wind farms with reimbursement for new radar equipment, training courses, and/or gear upgrades; not claims-based	No	No
CONTINGENCY FUND/DIRECT COMPENSATION	Charter/party Commercial fishermen	Offsets lost income to fishing vessels due to construction exclusion, demonstrated loss of use, or potential stock effects; subject to self-mitigation and consideration of non-offshore wind impacts; would include waiver of relevant individual tort claims against developers; subject to claims process	Yes	Yes
COASTAL COMMUNITY FUND	Charter/party Commercial fishermen Private recreational anglers[12] Processors/dockside	Grants for initiatives supporting the general betterment of coastal communities for those not eligible for direct compensation	No	No

Some developers already administer a gear loss program, but ACP members implementing these programs see value in having the gear loss programs administered by a third-party, even if developers remain liable for paying valid claims. The three remaining funds in the above table

[12] The Coastal Community Fund is the broadest of the proposed funds. Given the diverse range of the recreational fishing industry, this fund could provide opportunities for private anglers.

would gain efficiencies and greater predictability if operated on a regional or national level and funded through the mechanisms described in Subsection f.

d. *Valuation Framework Should be Transparent and Data-Driven*

To the extent BOEM is contemplating direct compensation to commercial fishermen during construction, operations, and decommissioning, as well as charter/party vessels during construction and decommissioning, the compensatory mitigation framework should rely on definitive baseline data. Fortunately, NOAA already collects and reports detailed landings data[13] for each offshore wind lease area. The reports for commercial fisheries highlight annualized landings and revenue by state, species, gear type, and fishery management plan within each lease area, as well as vessel dependence upon operations in each lease area. The party/charter reports feature annualized kept catch by species and management category, annualized revenue, and vessel/angler dependence upon operations in each area. The landed value (gross revenue) within an offshore wind project area is larger than net income or profit from fishing. Data for the small number of fisheries where data is less available could be supplemented by monitoring data that developers collect in advance of construction or by additional NOAA studies.

A review of the data shows considerable year-to-year fluctuation in the historical baseline commercial landings from all wind development areas; moreover, future fishery landings from these areas are likely to diverge from historical baselines as a result of climate change. Still, the available NOAA data (data for 2008-2019 is currently available) is the best baseline data available. Available data should be averaged to produce a baseline for each lease area. Ideally, the most recent 3-5 years of landings data would be weighed more heavily to reflect most accurately the latest trends.

Using the NOAA data, the value of commercial fishing within an offshore wind project would represent the theoretical maximum case: the full loss of fishing access to the lease area. Of course, the actual economic loss will be less, and potentially much less (even assuming some Vessel Trip Report ("VTR") data gaps from some species, notably for lobster, Jonah crab, whelk, and other landings by vessels without federal fisheries permits) because exposure value does not equal impact value.

Apart from small, rolling (in time), and temporary safety zones during construction, wind farms will be open to commercial fishing during operations. The offshore wind industry has neither the authority nor the desire to restrict such access. Moreover, distribution of fisheries is not uniform within the lease areas, and pursuant to the siting BMPs, developers are siting projects to minimize impacts to ocean resources and ocean users. Developers are also taking specific measures in the design and layout of arrays to accommodate historical fishing practices associated with gear-specific modalities, including trawl-tow directionality, in order to facilitate fishing within the project. While some individual fishermen may choose not to fish within a wind farm, fishing can and will continue, as demonstrated by active commercial fisheries in long-

[13] https://www.fisheries.noaa.gov/resource/data/socioeconomic-impacts-atlantic-offshore-wind-development

established European wind farms and recreational fisheries in more recent wind project areas in the U.S.

In calculating economic losses due to offshore wind, it is also important to recognize that there are larger forces at work impacting the value of the federally managed fisheries. BOEM's NEPA documents prepared for recent projects recognize that climate change is a major impact factor to the fishing industry. Considering that the landings and/or landings revenue trendline is flat or downward for most leases, a formula that averages landings over the past decade rather than anticipating and accounting for continued downward trends would be conservative. For many lease areas, the multi-year average would overestimate current landings values (most recent 2-3 years). The framework should fairly consider recent conditions, variability, and underlying trends in the fisheries resources within the project area when characterizing fisheries baselines. While the ACP FWG does not want to be too prescriptive in how funds should be administered after the baseline is set, in the interest of accuracy and fairness, the compensation fund administrator should employ traditional tort principles of causation such that individual claims for compensation are weighed or compared against regional variations in fishing stocks driven by macro factors such as climate change.[14]

The ACP FWG looks forward to seeing and commenting upon the calculation that BOEM may develop as part of this guidance. A transparent and publicly available formula or rubric would help more accurately estimate potential mitigation costs earlier in the leasing and development project. The ACP FWG also urges BOEM to revisit and review the guidance five years after it is finalized so that it may, if appropriate, adapt its approach based on studies showing the actual impacts and fishing activity at the first offshore wind projects that will be operational by that time.

The ACP FWG also appreciates statements by BOEM that the guidance would apply prospectively to projects that have not yet received approvals, and the guidance would not be applied retroactively to previously approved projects, even if their compensatory mitigation differed from the guidance. The ACP FWG's position is that its members should honor their existing compensatory mitigation commitments, but expects that any federal compensation system will ensure that claimants are not able to "double count" losses that have already been compensated under existing agreements.

e. *Guidance Should Recommend Third-Party Administration of Funds, Claims-Based Payments, and Simple Verification Processes*

The calculation process will prove complicated enough; the administration of funds should not be. Currently, developers may contribute to project-specific funds held in escrow at banks and other entities based on negotiations with state coastal zone regulators. Going forward, regional or national funds established for this purpose may prove more efficient and effective. BOEM has said in its RFI that it believes it cannot administer any cross-project mitigation funds under its current statutory authority. If that is indeed the case, third party entities could manage the funds. In fact, the federal government and congressionally chartered organizations have years of

[14] In other words, even if a particular fisherman experiences some reduction in landings over time but regional stocks of a particular fishery decline by an equal or greater amount overall, the "loss" should not be attributed to offshore wind.

experience establishing and implementing funding mechanisms to support the fishing industry. Examples that could be modified for the offshore wind context include:

- The Fishermen's Contingency Fund ("FCF") Program (43 U.S.C. 1842), which compensates fishermen's economic and property losses caused by specific incidents resulting from oil and gas obstructions.

- The former Fishing Vessel and Gear Damage Compensation Fund (22 U.S.C. § 1980), which was focused on mitigating vessel and gear (primarily static gear) losses caused by foreign vessels operating within federally managed fisheries.

- The Saltonstall-Kennedy Program administers a yearly grant competition that funds approximately 40 projects for $10 million. The program is aimed at helping promote, develop, and market U.S. fisheries.

- In addition, the National Fish and Wildlife Foundation's Fisheries Innovation Fund provides business and technical assistance to fishermen and coastal communities to build capacity.

- The Joint/Oil Fisheries Committee of South/Central California administers grants and programs to support research, technology adaptations, and gear modifications to minimize at-sea interactions between offshore oil and gas industry and fishing fleets. Some of these programs have used Outer Continental Shelf Lands Act federal-state revenue monies to mitigate perceived cumulative impacts to fishing fleets.[15]

While certain grants for navigation safety and training need not be claims-based, any direct compensation for commercial fishing should be paid out over time by the third-party administrator as claims are filed. The fishing industry can advise on the types of information that is already collected and can be used for validation. A claims-based process for direct compensation would facilitate continued fishing and help ensure the contents of the fund could be accessed by more than one generation of fishermen.

Administrative costs can be minimized with the use of existing NOAA data and a transparent formula that can be utilized for multiple offshore wind projects. The ACP FWG encourages the development of an easy-to-navigate, web-based claims tracking system.

f. *BOEM Should Establish a Guaranteed Funding Mechanism through Bidding and Leasing Fee Credits*

The compensatory mitigation program described above should be funded permanently through redirected BOEM revenue. The development of offshore wind energy is a federally driven enterprise, and it would be logical to repurpose user fees to mitigate potential impacts from those uses. Moreover, saddling project proponents with the costs of fisheries compensation would

[15] The Joint Oil/Fisheries Committee of South/Central California, est. 1983. https://sites.google.com/site/jointoilfisheriesliaisonoffice/

almost certainly have an adverse impact on ratepayers and/or project finance. Finally, funding through redirected BOEM revenue would also make it easier to beneficially repurpose unused funds, thereby avoiding the administrative and legal challenges involved in refunding developers.

The ACP FWG strongly favors legislation that would require a certain percentage of BOEM offshore wind revenue to be deposited in a federal fisheries compensation fund managed by the federal government or a designated third-party. This option would be the most durable way to ensure a permanent funding stream for fisheries compensation. We naturally understand the challenges inherent in enacting legislation, however, and believe the same objectives can be accomplished by funding federal fisheries compensation through (a) bidding credits in future lease sales, and (b) credits against operating fees once offshore wind projects have commenced commercial operation. The former funding stream could be similar to the domestic supply chain investment and job training bidding credit proposed by BOEM in the Carolina Long Bay lease (although in this case, we recommend that money be payable immediately into the mitigation fund so it is available to claimants as soon as possible).

For the latter funding stream, BOEM could condition a reduction in the 2% operating fee rate on making an equivalent payment into that same third-party fund. BOEM's regulations at 30 CFR § 585 grant BOEM discretion to set an operating fee rate lower than 2% if:

- It decides to "specify otherwise"[16];
- The fee is to apply to a new project (i.e., new generation based on a new technology), considering factors such as "program objectives"[17]; or
- It decides a reduction in the operating fee is "necessary to encourage continued or additional activities."[18]

We also recommend that both funding mechanisms be codified in BOEM regulations in order to ensure that the stream of funding for fisheries compensation is predictable, durable, and not subject to the whims of future administrations.

The ACP FWG recognizes that the amount of compensatory mitigation for a particular project must be informed by the NEPA process and cannot be determined prior to COP approval, let alone COP submittal. The amount identified at lease sale for the mitigation fund (and thus for the credit) would not substitute for the level of mitigation BOEM deems necessary in the environmental review process. After the EIS effects analysis was completed, the identified level of mitigation would be earmarked from the fund to offset impacts from that particular project. ACP anticipates that the bidding credit, rental fee credits, and anticipated operating fee credits would cumulatively exceed the levels of compensation estimated through the NEPA process.

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[16] 30 CFR § 585.506(c)(1) states, "Unless BOEM specifies otherwise, in the operating fee rate, 'r"' is 0.02 for each year the operating fee applies when you begin commercial generation of electricity. We may apply a different fee rate for new projects (i.e., a new generation based on new technology) after considering factors such as program objectives, state of the industry, project type, and project potential. Also, we may agree to reduce or waive the fee rate under § 585.510."

[17] Id.

[18] 30 CFR § 585.510(a) states: "BOEM Director may reduce or waive the rent or operating fee or components of the operating fee, such as the fee rate or capacity factor, when the Director determines that it is necessary to encourage continued or additional activities."

The buffer created by the "up front" leasing credits would also address concerns about the inherent uncertainty of funding levels over the long term and would prove much less disruptive and punitive than a surety bond or other financial instrument raised by other commenters during this process.

Therefore, BOEM could determine that it is a program objective to facilitate compensation for commercial fishermen for displacement during construction. BOEM could then reduce the operating fee rate and require that each lessee pay an identical amount of money into a third-party managed federal fisheries compensation fund. BOEM could offer voluntary lease amendments to existing lessees who do not yet have approved COPs. Although BOEM would still need to determine that the reduced operating fee constituted a "fair return" under OCSLA, the concept of a fair return is a broad concept that includes fairness to ocean users potentially affected by offshore wind development.

Even with the bidding credit or reduced operations fee, developers would still be paying the same in total, because of the additional payment to the mitigation fund. But this mechanism would address BOEM's concern about not being able to require or administer payment of mitigation funds directly.

IV. Project Siting, Design, Navigation, and Access

a. *Project Siting*

There is no one-size-fits-all siting approach for all developers in all leases. Siting is primarily project-specific and depends on many factors (e.g. location, subsea conditions, proximity to other projects and ocean uses). Spacing between wind turbines is influenced by, among other things, metocean conditions, seabed topography and other environmental conditions, other ocean uses and users in a project site, and (as it pertains to this RFI) the different fishing gear types and patterns used in the area. We recommend that BOEM consider what is an appropriate level of guidance for siting and provide examples for best practices in each category, based on project efforts to-date, that can inform future leaseholders.

Micro-siting and the systematic integration of fisheries considerations in the project design process can play an important role in the avoidance, minimization, and mitigation of impacts to fisheries. BOEM's BMPs in this area should highlight current project practices that have effectively incorporated local fisheries knowledge and other fisheries data into the design of projects to improve their compatibility with historical fishing modalities, fisheries transits, and other fisheries considerations, including navigational safety. Some projects are aligned with predominant trawl tow directionalities and fisheries transits, to make the project layout compatible with local commercial and recreational fisheries. For example, when Atlantic Shores was exploring different options for the layout of the wind turbine rows in their lease area, they utilized data prepared by the surf clam industry in creating potential layouts. They held a meeting with surf clam industry representatives to look at various layout scenarios and selected the layout that aligned with AIS tracks and VMS data. These efforts resulted in Atlantic Shores adjusting the orientation and directionality of their project layout to accommodate the fishing activity, along with general maritime activity in the southern portion of Atlantic Shores' lease. Additional

input was sought from the recreational fishing community as well to understand any potential effects on transit for this industry.

In the context of the agency's approach to the development of fisheries mitigation guidelines, BOEM's overall approach should incentivize developers to proactively integrate fisheries considerations into their overall design process to avoid, minimize, and otherwise attenuate fisheries impacts. A project developer's efforts to incorporate fisheries considerations in their project design should be fully reflected in the agency's BMPs, mitigation guidelines, and regulatory review of projects. As BOEM considers BMPs related to project micro-siting and design, it should avoid prescriptive orientation and spacing requirements that would limit the ability of developers to integrate site-specific fisheries information in the design process in order to avoid and minimize fisheries impacts at the local project level.

BOEM's guidance should focus on best practices that developers should consider. Considerations should be fact-based and defensible through site-specific studies, analyses, and data collected prior to COP submission. BOEM should also consider how to disseminate best practices and best available science, such as case studies and/or reports, that can help to share knowledge nationally and regionally.

BOEM's guidance should also be flexible and adaptive to changes in fishing activity and how fishermen will choose to adapt to navigating within the wind farms, incorporating the results of studies on actual fishing behaviors in and around the first round of projects and other factors, beyond offshore wind development, that may influence fishing activities (*see Sections II.b.i.6* and *Section III.d)*. If demonstrated impacts are greater or less than what is predicted, the guidance should adapt to reflect that reality.[19]

b. Safety Measures

Safety for all ocean users within offshore wind projects is the top priority for the offshore wind industry. Safely and responsibly designing, constructing, and operating projects in a way that protects the safety of all ocean users is paramount to meeting the Administration's goals and mitigating the effects of climate change. ACP and its members recommend that BOEM differentiate navigation from project siting recommendations in the BMP and navigation considerations in the topic above be combined with safety.

For this topic, we recommend that BOEM think forward to different project phases, particularly construction and decommissioning, and what information needs to be developed to inform these phases. This can also include acknowledgement of stakeholder input translated into recommendations for safety equipment upgrades on fishing vessels and/or within wind farms (e.g., radar units, AIS, etc.) that could help improve safety operating and/or transiting through wind farms. In our comments on compensatory mitigation (*see Section III.c.ii – iii* and *Table 1*), we provide an option for how such upgrades could be compensated for the fishing industry.

We also recommend that BOEM's revisions should recognize how information and standards developed to-date, such as New England lighting and marking standards, can be incorporated.

[19] The ACP FWG recommends that BOEM's guidance avoid making recommendations for its own pre-lease planning, as each planning process has unique geographic, economic, and state policy-related considerations.

BOEM should coordinate and collaborate closely with the U.S. Coast Guard ("USCG") on policies and recommendations that are applicable to the questions posed by the BOEM in this RFI. Examples include operational safety (Search-and-Rescue), navigation and spacing, etc. The USCG recently studied the need for routing measures, fairways, or transit lanes within wind farms in its various port access route studies that supplement the Atlantic Coast Port Access Route Study. We ask that BOEM review these studies and consult with the USCG regarding safe navigation parameters for commercial fishing vessels that operate in the vicinity of existing leases or project areas. Further, we recommend that BOEM consult with the USCG to provide clarifying guidance to developers, commercial and recreational fishing, and other waterway users regarding their authority and intent to establish safety zones to protect life, property and the environment during offshore wind construction and maintenance activities.

Safety measures also incorporate best practices for communicating offshore activities between offshore wind developers and the mariner community, which includes the fishing industry. Specific to fishing, effective communication will between the offshore wind and fishing industries will help to avoid gear conflict issues in both the lease area and along project cable corridors. The ACP FWG recommends that BOEM not overhaul the existing BMPs specific to communication between industries, but rather consider and adopt in revisions best practices currently implemented by projects that can help to inform future project development and construction phases.

Specific to offshore geophysical and geotechnical survey activities, the ACP FWG recommend BOEM adopt the following examples of best practices executed by our leaseholder members conducting offshore surveys into its revisions. These should not be prescribed requirements, but rather informative examples that can be considered and adapted based on project-specific site characteristics, fisheries, and activity levels. Examples of various strategies include:

1) Hire fishermen as Onboard Fisheries Liaisons to work on geophysical and geotechnical survey vessels to help:
    a. communicate with other fishing vessels transiting through or fishing in the survey area;
    b. help spot fixed gear and keep an eye on it during operations, and
    c. communicate regularly with the scout vessel and shoreside fisheries liaison
2) Hire fishing vessels as Scout Vessels, preferably local fishermen from the fishery that is affected by the survey activity to:
    a. help set up communication network with fishermen who regularly fish in the area before survey activity starts;
    b. work ahead of the survey vessel to spot fixed gear and pass on fixed gear locations to the survey vessel;
    c. communicate with fishermen working in the survey area, and

d. communicate with fisherman on survey vessel and shoreside fisheries liaison.

3) Shoreside fishery liaison receives real-time information from fishermen on the survey vessel and the scout vessel so up to date information on survey vessel progress can be communicated with the fishermen working in the area through text/email/phone calls.

In addition to on-water best practices, BOEM should also recognize other tools and technologies that exist or are in development that can be referenced in BMP revisions. These include:

1) Websites that consolidate project-specific information and points-of-contacts for project Fisheries Liaison Officers ("FLOs");
2) Tools in development, such as free, downloadable app that fishermen can access to see which survey vessels are operating in the areas that they fish and/or transit through; and
3) Use of a full-mission simulator providing a life-like experience so that mariners can gain experience of navigation within a wind farm.

V. Environmental Monitoring Plans

a. *General Comments*

Many of the elements referenced by earlier comments apply in this RFI Area. The offshore wind industry, fishing industry, states, and federal government will benefit from monitoring plans that are transparent, adaptive, and evidence-based. BOEM should leverage and share best practices for monitoring approaches from current projects that can aid developers in advancing projects in new lease areas. The elements of environmental monitoring plans being discussed in this RFI have to consider site-specific fishing activities but also fisheries, the potential effects and impacts of specific project design on those site-specific resources and activities, and the dynamic interplay of all of these factors. Developers recognize and accept the critical importance for regional integration and interoperability of monitoring, data sharing, and standardization of methods for monitoring. We encourage BOEM to consider how the BMPs can serve as a guide to inform the creation and execution of developers' plans rather than being too prescriptive or setting standards for monitoring.

To reduce potential impact on fisheries from research surveys themselves, developers, regulators, and regional science organizations, in consultation with fishermen, should look for ways to minimize survey work while still acquiring the relevant and required information. All available data, whether collected by nearby or regional projects/developers, government agencies, academic researchers or other sources could be accepted by regulators to help either meet project requirements or reduce needs for individual projects to conduct offshore surveys. Standardization of data collection methods will further this goal.

b. ***What data should be collected to understand fishery performance (e.g., changes in catch, transit, and/or fishing itself) in and around offshore wind facilities? What methods should be used to analyze such data?***

We recommend that BOEM not focus on prescriptive data requirements and methodologies in this guidance update. Rather, we recommend that BOEM consider opportunities where general non-prescriptive guidance can create alignment and collaboration between developers and drive consistency, to the extent practicable, across techniques and project-specific approaches. For instance, BOEM should consider recommendations for monitoring based on what is reasonable given on the existing knowledge and information within a particular lease(s). Level, duration, and types of monitoring should have separate considerations for an area that is species-rich or species-limited or if the levels of fishing activity are known or less known. For areas with less data and information, BOEM BMPs should recommend guiding principles for how to collect information—through the use of Fisheries Representatives ("FRs"), FLOs, federal and state resources, etc.—to develop site-specific monitoring plans versus prescribing a set standard method or duration

The ACP FWG would encourage BOEM to outline which monitoring plan components are standard requirements of a COP and the completed or on-going efforts, such as the ROSA Monitoring Guidance, that can be referenced as a guide for developers as they advance monitoring efforts. Again, our intent here is to highlight that monitoring plans are commonly site-specific to a project area based on the fisheries and fishing activity in the lease area and that BOEM cannot, per this RFI, require regional mitigations or monitoring. Instead, BOEM should consider how this section, as guidance going forward, looks to build collaborative processes between the industries and third parties, such as ROSA, and academic institutions, so that project-specific monitoring and lessons learned can be shared.

As previously stated, updates to this topic area should incorporate best practices from current projects. For instance, many leaseholders, each of whom are executing monitoring and/or research activities in their respective leases, have received positive feedback from fishing industry on the following approaches to project-specific plans:

1. Work with fishermen to develop pre- and post-construction monitoring plans;
2. Use fishing vessels as research platforms for fisheries surveys and environmental monitoring;
3. Develop species-specific research and monitoring studies to inform project development and execution;
4. Partner with research and academic institutions, that have good working relationships with the fishing industry;
5. Promote coordination among leaseholders align and create efficiencies and promote data sharing and integration in monitoring programs and methodologies;
6. Utilize collaborative techniques that integrate existing data with monitoring data collected by offshore wind leaseholders; and

7. Include fishermen in monitoring plan review groups.

VI. Conclusion

We thank BOEM for their effort on this important topic, especially fisheries compensation. As the ACP FWG continues to advance efforts that support the coexistence of offshore wind with fisheries, it is helpful to capture best practices already underway and create a common compensatory mitigation platform that is usable and helpful to both the fishing and offshore wind industries. The ACP FWG looks forward to continued engagement with BOEM on this critical effort.

Sincerely,

Josh Kaplowitz
Vice President, Offshore Wind
American Clean Power Association
jkaplowitz@cleanpower.org

Claire Richer
Director, Federal Affairs
American Clean Power Association
cricher@cleanpower.org

Ruth Perry, Shell Renewables & Energy Solutions
Chair, ACP Fisheries Working Group
Ruth.perry@shell.com

Cc: Amanda Lefton, Director, BOEM
Walter Cruickshank, Deputy Director, BOEM
James Bennett, Chief, Office of Renewable Energy Programs
Michelle Morin, Chief, Environmental Branch for Renewable Energy