

March 11, 2021

Re: South Fork Wind, LLC's Comprehensive Mitigation Proposal

Jeffrey Willis, Executive Director
Rhode Island Coastal Resources Management Council
Stedman Government Center
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Dear Mr. Willis,

The Coastal Resources Management Council (CRMC), South Fork Wind, LLC (SFW), and the Fishermen's Advisory Board (FAB) have engaged in mitigation negotiations pursuant to the enforceable policies of the Rhode Island Ocean Special Area Management Plan (Ocean SAMP) for approximately six months. As CRMC finalizes its mitigation recommendation and prepares its recommendation to the Council for public hearings in April, SFW provides this memorandum to summarize (1) the numerous modifications made to the SFW Project to avoid and/or minimize any potential adverse impacts to commercial and recreational fisheries and (2) the comprehensive mitigation package SFW has proposed to address any potential impacts. SFW has met with the FAB and CRMC for the past four years to discuss the proposed SFW Project. During that time, SFW has listened to the concerns of the fishing community and addressed them through meaningful modifications to the SFW Project. The SFW Project before CRMC represents the culmination of years of engagement with federal and state agencies, the FAB and greater fishing community, and other stakeholders and incorporates the work of countless subject matter experts relying on the best available science. For the reasons detailed below, SFW respectfully submits that it has demonstrated that the proposed SFW Project is consistent with the Ocean SAMP's enforceable policies, including on mitigation.

I. REGULATORY FRAMEWORK

The federal Coastal Zone Management Act, 16 U.S.C. § 1451 *et seq.* (the CZMA) requires that, where a state has a coastal management program approved by the U.S. Secretary of Commerce through authority delegated to the National Oceanic and Atmospheric Administration (NOAA), the state has the opportunity to review proposed projects for consistency with the enforceable policies of the state's coastal management program. Applicants proposing activities within the coastal management program's scope must certify that the proposed activity "complies with the enforceable policies of such state's approved management program and will be carried out in a manner consistent with such program." 16 U.S.C. § 1456(c)(3). The trigger for federal consistency review applicability is "reasonably foreseeable effects": federal actions that have reasonably foreseeable effects on land or waters uses within the state's coastal zone, including actions in an approved geographic location description, must be consistent with the state's enforceable policies. See 15 C.F.R. § 930.11. The state's role is limited to reviewing the applicant's consistency certification. See 15 C.F.R. § 930.78.

The CZMA regulations direct the state and applicant to "cooperate" "to develop conditions that, if agreed to" by each "would allow the State agency to concur" with the consistency certification. 15 C.F.R. § 930.4. But while the CZMA allows for and indeed encourages cooperation and collaboration between the state and applicant, the CZMA does not permit

states to demand compensation as a condition of concurrence. NOAA has stated this plainly. In its February 2020 letter to CRMC, NOAA stated the following with respect to compensation in the context of federal consistency review:

[N]ote that for purposes of determining consistency with mitigation requirements and monetary compensation in section 11.10.1(G) [of the Ocean SAMP], the CRMC cannot compel monetary compensation as a form of mitigation through the CZMA federal consistency process, but the Council and applicant can agree to compensation as one means to meet the mitigation policy of this part. . . . [T]he state must only apply its CZMA federal consistency review authority in a manner that conforms to these comments.

Letter from NOAA to CRMC 4 (Feb. 12, 2020) [hereinafter NOAA Letter].

Section 11.10 of the Ocean SAMP includes the enforceable policies for purposes of CZMA federal consistency review. See 650-RICR-20-05-11.10 [hereinafter § [xx.xx]].¹ Among other policies,² the Ocean SAMP requires that, if the Council determines that a proposed project may have potential adverse effects, it shall require an applicant to “modify the proposal to avoid and/or mitigate the impacts.” § 11.10.1(C). The Ocean SAMP calls for modification first. Then, to the extent the project cannot be modified to fully avoid potential adverse effects, the applicant must work to mitigate them. This is critical: an applicant is not required to both modify a proposal and mitigate. If modification of the project removes the potential impact, there is nothing left to mitigate. In this context, the Ocean SAMP also requires that “potential adverse impacts of offshore developments and other uses on commercial or recreational fisheries be evaluated, considered and mitigated.” § 11.10.1(G). Mitigation negotiations must occur among CRMC staff, the applicant, and the advisory FAB, with final approval by the Council. See § 11.10.1(H).

While the FAB participates in these negotiations and provides advice to CRMC staff pursuant to its advisory role, it does not have veto authority over these negotiations, nor does it serve as a signatory to any agreement reached. See *Lapp v. Fishermen’s Advisory Board*, OM 19-23, 5 (Attorney General Opinion Sept. 26, 2019) (distinguishing the FAB from the public body in *Solas v. Emergency Hiring Council*, 774 A.2d 820 (R.I. 2001) and noting that “the FAB is expressly intended to be an advisory-only body”). NOAA has described the FAB’s limited role as follows:

While the FAB may have valuable information and insights to provide as the CRMC determines the consistency of projects, the CZMA does not confer authority on entities other than the state in making CZMA federal consistency decisions. Opposition to a project by the FAB cannot be a basis for a CZMA objection; objections must be based on the CRMC’s determination of consistency with NOAA-approved enforceable policies.

¹ CRMC undertook a substantial revision of § 11.10 in October 2019, which NOAA approved in February 2020. Because SFW filed its Construction and Operations Plan in June 2018, the earlier version of § 11.10 applies to the extent consistent with the CZMA.

² SFW reserves the right to provide additional argument with respect to other enforceable policies.

NOAA Letter 3. Further, while the Ocean SAMP requires “negotiation” among CRMC staff, the applicant, and the advisory FAB, it does not require that the three reach a final agreement with respect to mitigation. See § 11.10.1(H).

The Ocean SAMP adopts a rigorous science-based approach to decision-making. It requires the Council to “work to the maximum extent practicable . . . to make sure it is using the best available science and modeling tools to inform the decision making process.” § 11.8(A)(5). In fact, the Ocean SAMP identifies as one of its core principles to “[b]ase all decisions on the best available science.” *Id.* § 11.6(C)(4).

SFW has adhered to this type of data-driven and evidence-based approach throughout these mitigation negotiations. As described below, SFW has engaged numerous subject-matter experts to evaluate potential impacts from the SFW Project, implement project modifications, and develop a robust mitigation proposal to address any remaining potential effects not completely eliminated through modification. SFW has compiled extensive written documentation summarizing the bases for its mitigation proposal and also has made its subject matter experts available for extensive questioning by and dialogue with CRMC staff. SFW believes its mitigation proposal follows the letter and spirit of the Ocean SAMP to rely on the best available science.

II. SFW PROJECT MODIFICATIONS

SFW has taken significant steps to modify the SFW Project to avoid and/or mitigate any potential impacts to fisheries. SFW prioritizes coexistence with the fishing community as an important step in developing a sustainable offshore wind industry. Consistent with the Ocean SAMP, SFW has sought to avoid potential impacts first and, if full avoidance cannot be achieved, then mitigate. Throughout the SFW Project’s development and permitting process, SFW has assessed and responded to feedback from numerous stakeholders, including the advisory FAB. This feedback has resulted in substantial project modifications, including with respect to the overall project layout.

A. WTG Layout

The Ocean SAMP recognizes the importance to commercial and recreational fishing of “access around and through offshore structures and developments and along cable routes” and notes that such access “is a critical means of mitigating the potential adverse impacts of offshore structures on commercial and recreational fisheries.” § 5.3.1(F). Accordingly, CRMC and the FAB lobbied heavily for the offshore wind industry’s adoption of 1 x 1 nautical mile (NM) grid spacing between wind turbine generators (WTGs) to permit commercial and recreational fishing to continue safely within the wind lease areas. The historical record is replete with instances of such statements. For example, in its Consistency Concurrence for the Vineyard Wind project, CRMC called for the adoption of the 1 x 1 NM grid: “CRMC staff find that offshore wind farms should be developed in a grid pattern with east-west orientation of rows and 1 nm spacing between all turbines and turbine rows . . . in order to avoid significant adverse impacts to Rhode Island commercial fishing operations and be consistent [with] the CRMC’s enforceable policies.” Vineyard Wind Consistency Concurrence, CRMC Staff Project Review & Federal Consistency Analysis, CRMC File 2018-04-055, at 57 (CRMC Feb. 28, 2019) [hereinafter Vineyard Wind Concurrence]; see also CRMC Letter to BOEM, Vineyard Wind COP Supplement to the Draft EIS; BOEM-2020-0005, at 1 (July 9, 2020) (“The RICRMC believes it is imperative that BOEM condition all COP approvals [on adoption of the 1 x 1 NM grid] so that there is regulatory certainty for the offshore wind industry and stakeholders with assurance that there will be a predictable and

uniform wind farm pattern that accommodates and facilitates safe navigation, commercial and recreational fishing activities, and USCG search and rescue operations.”). Indeed, in that same concurrence, CRMC commended SFW’s predecessor entity for listening to the concerns of Rhode Island-based fishermen by committing to the 1 x 1 NM grid:

[E]xtensive discussions regarding WTG layout have continued between the CRMC, Rhode Island-based commercial fishermen and Vineyard Wind since the April 11, 2018 FAB meeting. During this period two other wind developers that have secured BOEM leases, Deepwater Wind (OCS-A 0486 and 0487) and Bay State Wind (OCS-A 0500), have been listening to the Rhode Island-based fishermen concerns and have responded by committing to an east-west orientation for their proposed wind farm project layouts. This commitment serves to address the concerns of the Rhode Island commercial fishing industry by accommodating existing, well established commercial fishing practices and by supporting safe navigation throughout the entire southern New England wind energy area.

Vineyard Wind Concurrence 45 (emphasis added).

The FAB stated repeatedly that its constituents required the 1 x 1 NM grid to continue operating within the wind lease areas. For example, at a 2019 Fisheries Advisory Meeting, one fishermen indicated that, “Fishermen have been saying for years . . . one nautical mile east-west and north-south squared. . . . [A]s a fisherman, it’s just for safety to get home.” Fisheries Advisory Meeting, Tr. at 90:16-19 (Sept. 9, 2019). Another echoed this position: “[E]very single meeting we attended, we all said we need one nautical mile east-west and north-south We need the one nautical mile, . . . the checkerboard square[.]” *Id.* at 97:18-24; see also *id.* at 91:22-24 (“[W]e said one nautical mile, east-west, north-south. . . . Nothing has changed.”).

In its original Construction and Operations Plan (COP), SFW incorporated 0.8 statute mile spacing between WTGs arranged in a grid-like pattern. SFW adopted this layout to balance stakeholder input with a goal of maximizing the amount of clean, renewable energy SFW could bring to the area based on the number of WTGs that could fit within the finite wind lease area. Based on feedback from the FAB and the greater fishing community, along with repeated statements from CRMC, SFW invested significantly to modify the SFW Project layout in response to feedback. In late 2019, SFW, in concert with the larger offshore wind industry in New England, committed to designing its layout in a 1 x 1 NM grid that aligns across wind farms. In other words, the grid points in the SFW Project will align with adjacent WTG points so that all of the Orsted/Eversource Joint Venture (Orsted/Eversource JV) offshore wind installations in the Massachusetts/Rhode Island Wind Energy Area (MA/RI WEA) will create a continuous east-west/north-south grid layout with 1 x 1 NM spacing. SFW incorporated this modified layout into its February 2020 revised COP.

The adoption of the 1 x 1 NM grid represented a substantial concession by the offshore wind industry. The final designation of the MA/RI WEA, and subsequent bidding process to acquire leases within it, was the result of a robust public involvement process that accounted for the concerns of many stakeholders, including fishermen. Ultimately, BOEM reduced the size of the MA/RI WEA from the original proposal to address many of these concerns. Lessees, including SFW, who bid on and procured leases had the expectation that they would have the opportunity to use the area granted in the lease. Adopting the 1 x1 NM grid, reduces the total number of WTG locations available.

CRMC, the FAB, the greater fishing community, and the U.S. Coast Guard³ all concluded that adopting the 1 x 1 NM grid would permit the continuation of commercial and recreational fishing within the wind lease areas. By doing so, SFW substantially modified the SFW Project to avoid or minimize any potential adverse impacts to commercial and recreational fisheries. This modification reduces significantly any remaining potential adverse impacts that SFW must mitigate.

B. Gear Loss Claim Process

SFW also has implemented a first-in-the-industry gear loss claim process to compensate fishermen fairly in the event of lost or damaged gear. SFW uses fishing gear avoidance tactics such as onboard gear observers, avoidance training, and/or the use of a scout vessel. Accordingly, SFW expects limited gear interactions, if any, in connection with the installation and operation of the SFW Project. Nevertheless, SFW's gear loss claim process addresses those few instances in which accidental gear loss occurs.

SFW recently amended its gear loss claim process to include a business interruption component.⁴ SFW modeled it after the NOAA Fishermen's Contingency Fund Program, established to compensate fishermen for losses in connection with oil and gas structures on the Outer Continental Shelf. The NOAA program provides compensation for economic loss based on 50 percent of gross income lost, rather than lost profits.

The gear loss claim process allows affected fishers to claim both gear loss and business interruption, and it provides for evaluation of claims by a three-member panel. Claimants who dispute the panel's decision may appeal to an independent third-party reviewer and simultaneously receive payment for any undisputed portion of the claim. By implementing this robust and industry-leading process, SFW has mitigated potential adverse impacts resulting from gear loss caused by the SFW Project.

C. Additional Modifications

Adoption of the 1 x 1 NM grid and implementation of the gear loss claim process represent only two of the modifications SFW has made. SFW also developed a comprehensive fisheries communication plan that incorporates input from CRMC and the fishing community. The communication plan gives fishers advance notice of where and when survey and construction activities will occur so as to minimize adverse interactions. SFW also employs fisheries liaisons to assist with these communication efforts.

³ See U.S. Coast Guard, Final Report, The Areas Offshore of Massachusetts and Rhode Island Port Access Route Study, No. USCG-2019-0131 (May 14, 2020); see also U.S. Coast Guard Letter to Responsible Offshore Development Alliance re Request for Correction Pursuant to Information Quality Act Guidelines (Oct. 27, 2020), which is attached hereto.

⁴ As CRMC is aware, SFW spent considerable time in 2020 waiting for a proposal from the FAB on gear claim and then attempting to reach agreement with the FAB on a business interruption component. SFW invested significant time and money trying to work with the FAB's consultant on an agreed-upon, standardized framework. Even though SFW agreed to adopt the FAB's proposal in nearly every respect, the FAB refused to reach agreement.

SFW developed a robust Fisheries Monitoring Plan that incorporated months of feedback from CRMC, other federal and state agencies, the FAB, and other fishers and users of the SFW Project area. SFW also incorporated input from mobile gear fishermen to adjust the export cable route to avoid areas of concern. In response to concerns about navigation, SFW will incorporate automatic identification system (AIS), enhanced cellular, and very-high frequency coverage into the WTGs. Finally, SFW will target sufficient burial cable depth and microsite the WTGs to minimize impacts to sensitive benthic habitats.

These project modifications are substantial. They demonstrate SFW's responsiveness to the commercial and recreational fishing communities and ensure the continued long-term use of the project area by fishers. By working with CRMC, SFW has eliminated or minimized significantly any potential adverse impacts of the project to commercial and recreational fisheries.

III. SFW'S MITIGATION PROPOSAL

SFW nevertheless has recognized throughout that aspects of the project, particularly construction and decommissioning, may present some potential impacts that require mitigation. Accordingly, and in keeping with the Ocean SAMP's emphasis on using the best available science and modeling tools, SFW engaged Woods Hole, one of the world's leading organizations dedicated to ocean research, to examine impacts to fisheries from the SFW Project and provide an economic assessment of such impacts. SFW has incorporated this assessment into its compensatory mitigation proposal described below. In response to questions from the FAB, SFW also has reiterated its commitment to certain impact mitigation strategies, such as noise attenuation. Finally, SFW proposed another industry-leading program, the Rhode Island Navigational Enhancement and Training Program, which proposes an approximately \$1 million investment to enable Rhode Island commercial fishers and for-hire (charter) vessels to obtain pulse compression radar systems and AIS transceivers. With this comprehensive mitigation proposal, along with the project modifications, SFW respectfully submits that it has met the Ocean SAMP's requirement to "modify the proposal to avoid and/or mitigate" any "potential adverse impacts." See §§ 11.10.1(C), 11.10.1(G).

A. Rhode Island Navigational Enhancement and Training Program

SFW created the Rhode Island Navigational Enhancement and Training Program to provide training and experiential learning opportunities to those navigating within the Orsted/Eversource JV wind lease areas in the MA/RI WEA. The program furthers positive co-existence between offshore wind and the fishing community and advances CRMC's commitment to mariner education regarding safe navigation. See § 5.3.1(E) ("The Council will promote and support the education of all mariners regarding safe navigation around offshore structures and developments and along cable routes.").

Pursuant to the program, fishers eligible for SFW's Commercial Fisheries Compensation Fund, described below, will be eligible through a voucher program to receive pulse compression radar systems and AIS transceivers, if they do not already possess them. The Orsted/Eversource JV will pre-approve at least two Rhode Island marine electronics retailers to sell and install the electronic equipment. Thus, both Rhode Island fishers and Rhode Island marine retailers will benefit from this program.

In addition to the radar equipment, the program will include professional training and experiential learning components. Fishers eligible for the Commercial Fisheries Compensation Fund may attend a professional training program of their choice, including but not limited to a captain's course, license upgrade, radar course, or rules of the road refresher. Private anglers, charter captains, and commercial fishing industry members with a valid saltwater fishing license, in addition to fishers eligible for the Fund, will have the opportunity to participate in a simulator session. During the session, they will have the opportunity to navigate a vessel through a windfarm during different scenarios, including night conditions, adverse weather, and vessel crossings.

SFW developed this program in direct response to advice from the FAB. FAB members expressed concerns about navigating through the wind farm at night or during inclement weather. They expressed concerns about having enough crew members sufficiently licensed to operate in the wind farms. And they expressed concerns about radar interference from the WTGs. *But see* § 8.4.11 (H) ("The installation of offshore renewable energy facilities may cause either minimal impacts or possible enhancements to navigation and communication tools and systems, including global positioning systems, magnetic compasses, cellular phone communications, very-high frequency (VHF) communications, ultra-high frequency (UHF) and other microwave systems, and automatic identification systems (AIS). [BOEM's Programmatic Environmental Impact Statement for Alternative Energy Development and Production] indicates that any impacts are likely to be negligible to minor, and cites a number of studies in which no negative impacts were found." (internal citations omitted)). The Rhode Island Navigational Enhancement and Training Program provides direct, tangible solutions to those concerns in a manner that will benefit the entire Rhode Island fishing community.

B. Mitigation Strategies

The FAB also requested certain specific mitigation actions in its November 19, 2020 presentation to CRMC and SFW. SFW addressed these requested mitigation actions in a memorandum to CRMC dated December 15, 2020. In brief, SFW agreed to the following additional mitigation measures.

First, SFW reaffirmed its commitments with respect to pile-driving noise attenuation and sound verification. SFW has committed to monitoring and exclusion zones based on modeled 10dB broadband underwater noise reduction levels during foundation pile driving. SFW also has committed to taking sound source verification measurements during foundation pile driving to verify in situ underwater noise levels.

Second, SFW committed to avoiding temporal and most spatial overlap between the low frequency high-resolution geophysical (HRG) surveys and the SFW fisheries monitoring surveys prior to construction. HRG surveys are required by BOEM for offshore wind development activities. They inform engineering and design, archaeological assessments, and benthic habitat mapping. HRG surveys for offshore wind development do not use seismic air guns, which studies have shown can influence the distribution and catch rates of commercially important marine fish. SFW has not used seismic air guns and does not intend to use seismic air guns in the future. While BOEM has concluded that non-airgun HRG equipment will have little to no measureable impacts on fisheries resources, essential fish habitat, commercial and recreational fisheries, and benthic communities, SFW has nevertheless made this additional commitment to minimize

overlap between HRG surveys and SFW fisheries monitoring surveys prior to construction to address the FAB's stated concerns.

Third, SFW has committed to conducting a post-construction researched radar analysis for submission to the U.S. Coast Guard. The analysis will aim to determine the extent, if any, to which SFW WTGs and offshore substation may produce radar reflections, blind spots, shadow areas, or other radar effects that may have adverse impacts on navigation safety. This analysis will consider specifically the types of vessels that regularly navigate the wind lease area, taking into account the navigation, communications, and collision avoidance equipment typically used on those vessels. In concert with the Rhode Island Navigational Enhancement and Training Program, this analysis will further the state of navigational technology and understanding within the Orsted/Eversource JV wind lease areas and provide a significant benefit to Rhode Island commercial and recreational fisheries.

C. Woods Hole Report

Recognizing the need to evaluate fairly and quantitatively the scope of financial mitigation, SFW engaged Woods Hole to assess the economic value of reasonably foreseeable impacts to commercial fisheries during the project's life. Woods Hole brought decades of experience and a rigorous, data-driven focus to the question of impacts and economic value.

Woods Hole examined the level of existing fishing operations that intersect with the SFW lease area and two alternative export cable route areas to determine the landings and landed value attributable to those areas. Woods Hole obtained and used NOAA data spanning from 2008 to 2018. This NOAA data is considered the best fisheries data in the world and has been used nationally for decades for research and fisheries management. It indisputably represents the best available science and incorporates the most advanced modeling for the spatial distribution of landings. The data uses modeled representations of federal Vessel Trip Report (VTR) and clam logbook fishing trip data matched with NOAA fishery observer data, including geocoordinates of detailed fishing locations, to improve the spatial resolution of VTR within the wind lease and cable route areas. Further, because not everyone in the federally permitted lobster or Jonah crab fisheries provides VTR data, Woods Hole applied an upward adjustment on the reported VTR data for these fisheries to account for the additional landings.

Woods Hole used IMPLAN model software and data to estimate the average total economic impact to Rhode Island from commercial fishing activity in the project area. IMPLAN is a widely accepted, peer-reviewed model that incorporates data from over 500 industry sectors, including seafood processors and other sectors subject to the downstream impacts of the commercial fishing industry. Using this model, Woods Hole arrived at an output multiplier that reflects the linkages between economic activity in different sectors of the economy. Incorporating this multiplier captured indirect economic impacts attributable to commercial fishing activity.

Using these baseline values, Woods Hole analyzed five categories of possible impacts to commercial fishing: (1) transient impacts due to constrained access to certain areas during construction; (2) transient impacts on fish stocks due to construction activities and noise; (3) impacts to fishing in the wind lease area during operations; (4) transient impacts due to constrained access to certain areas during decommissioning; and (5) transient impacts on fish stocks due to decommissioning activities.

The Woods Hole report incorporates numerous conservative elements. For example, Woods Hole used the average of eleven years of data and assumed that average would continue for the next thirty years, even though landings vary from year to year and have trended downward most recently. Woods Hole also made no adjustment for the effects of climate change. Nor did Woods Hole quantify the potential positive impacts accruing from the well-documented reef effect (see below). Woods Hole also assumed that any affected landings are foregone, rather than incorporating the realistic assumption that some fishing simply will shift to other nearby locations. Likewise, Woods Hole based its estimate on gross values—not net profits—making no reduction for costs regularly incurred in connection with commercial fishing.

Woods Hole presented its report to CRMC and the FAB and answered extensive questions from the FAB's consultant. Based on specific feedback from the FAB, Woods Hole then made additional upward adjustments to its initial calculation. Woods Hole incorporated the FAB's proposed 15 percent premium for dockside sales of lobster and Jonah crab. Woods Hole also increased the IMPLAN multiplier at the FAB's suggestion to account more fully for both upstream and downstream effects to seafood processors. Woods Hole modified its assumptions for the stock effects resulting from construction pile-driving, incorporating the conservative criterion that all mobile species will leave the wind lease area and a 5 km zone around the wind lease area for four months in connection with pile-driving. Finally, Woods Hole added an impacts assessment for the for-hire (charter) fishing boat industry based on the research study suggested by the FAB's expert.⁵

Between the original report and update, the Woods Hole analysis identifies and assesses the reasonably foreseeable potential adverse impacts from the project.

D. SFW's Comprehensive Compensatory Mitigation Proposal

Using Woods Hole's conservative assessment, SFW developed a fisheries mitigation framework to compensate fishermen and support coastal communities. SFW sought to achieve a fair and transparent process. SFW's proposed framework is divided into two components: a Commercial Fisheries Compensation Fund to provide direct financial mitigation to Rhode Island fishers operating in the SFW lease area and export cable areas; and a Coastal Community Fund to benefit the fishing industry and its communities through grants.

Over the past six months, SFW has increased its initial compensatory offer substantially based on feedback received from CRMC and the FAB:

- Because SFW tied its proposal to the Woods Hole analysis, the compensation proposed necessarily increased when Woods Hole incorporated the upward adjustments described above.

⁵ Note that the Draft Environmental Impact Statement for the SFW Project states that “the number of charter fishing trips is fairly low in the RI-MA WEAs.” BOEM 2020-057, South Fork Wind Farm and South Fork Export Cable Project, Draft Environmental Impact Statement, 3-88 (Jan. 2021) [hereinafter DEIS]. The DEIS also notes that the 70 square miles of Cox Ledge excluded from the lease area and therefore the SFW Project are “important to for-hire recreational fishing.” *Id.* But even in this “important” area, NOAA data indicates only six average annual permit holders from 2012 to 2014, each generating less than \$10,000 per year. *Id.*

- SFW added a component to account for rerouting costs during construction and decommissioning.
- Based on the FAB's and CRMC's repeated statements that a purely quantitative approach fails to capture adequately the FAB's experiential concerns and worries about the future, SFW added a contingency percentage on top of the conservatively calculated value of reasonably foreseeable potential impacts.
- SFW developed the Rhode Island Navigational Enhancement and Training Program, to which it expects the Orsted/Eversource JV to contribute approximately \$1 million for its three lease areas within the MA/RI WEA.
- Finally, as a showing of good faith and recognizing that the SFW Project is the first of the Orsted/Eversource JV projects to move forward, SFW topped off its proposal with a non-scalable lump sum payable over the SFW Project's life.

Consequently, during these negotiations, SFW has increased its compensatory offer more than six-fold, not including the Rhode Island Navigational Enhancement and Training Program. SFW respectfully suggests that this substantial compensatory offer sufficiently offsets any reasonably foreseeable potential impacts that the SFW Project could not otherwise eliminate or mitigate through the extensive measures described above.

E. Speculative Concerns Raised by the FAB

During mitigation negotiations, the FAB has raised a litany of speculative concerns about the SFW Project, too numerous to recount here. When the FAB has raised specific supported concerns about the SFW Project based on their experiences, SFW has carefully considered these and adjusted its mitigation proposal to account for the members' experiences. Many of the concerns raised, however, lack support in science or evidence. CRMC has rejected many of them previously. While SFW cannot recount its responses to all such comments here, the following examples bear repeating.

First, the FAB has suggested that the introduction of WTG foundations will permanently alter large swaths of underwater habitat. No evidence supports this. To the contrary, the Ocean SAMP states that, "The direct effects of these hard structures to the seabed are likely to be limited to within one or two hundred meters of the turbines." § 8.5.3(C)(4) (citations omitted). The Ocean SAMP further notes that, "The total area of seabed disturbed by wind turbine foundations is relatively small compared to the total facility footprint." *Id.* This is true for the SFW project. The total area of temporary and permanent seabed disturbance within the wind lease area within Cox's Ledge is just 8.80 percent. See SFW Seabed Disturbance Estimates (Dec. 17, 2020). During operations, 99.76 percent of the wind lease area will remain undisturbed.

Second, the FAB has dismissed the reef effect and argued further that any such effect would have negative impacts to the Atlantic cod population. But the Ocean SAMP presents a different outlook.⁶ The Ocean SAMP cites several studies suggesting that WTG foundations may attract cod. See § 8.4.7(I)(4) (discussing United Kingdom study finding that "many of the juvenile fish found around the turbines are small Gadoid species such as cod."); § 8.4.7(I)(5) ("A study of decommissioned oil rigs in the North Sea off Norway found aggregations of cod, mackerel, and

⁶ As does the DEIS, which states that "foundation piles and associated scour protection would create an artificial reef effect, which could result in minor beneficial effects to species distribution, community composition, and predator-prey interactions in the vicinity." DEIS 2-17.

other species around the structures." (citation omitted)); § 8.4.7(l)(6) ("Another study found an increased number of cod in the area surrounding wind turbines at the Vindeby Offshore Wind Farm in Denmark." (citation omitted)). The Ocean SAMP also states that, "In addition to fish, these structures may also provide important habitat for lobsters and crabs. Young, newly-settled individuals of these species typically seek out refuge to avoid predation, including hiding among stones and cobbles, or burying in sediments. Wind turbines and scour protection may provide suitable hiding places for these individuals, and may enhance the lobster fishery in cases where habitat is a limiting factor." § 8.4.7(l)(4) (citation omitted).

Further, based on the 2019 stock assessment of cod by the NOAA Northeast Fisheries Science Center, the stock is overfished, its condition "remains poor," and the stock shows a truncated age structure. See Black Sea Bass & Cod Presentation (Dec. 17, 2020). Further, cod have a high exposure to climate change, which is anticipated to have a negative impact on cod. The distribution of cod is expected to continue shifting northward from Cox's Ledge as a result of warming temperatures, and climate change is anticipated to result in a loss of thermal habitat for cod on Georges Bank and in southern New England. *Id.* In other words, the Atlantic cod populations are depleted, and climate change is expected to have further negative impacts on cod recruitment. The impacts of climate change on cod populations far outweigh any speculative impacts from the SFW Project.

Finally, the FAB has stated repeatedly that the introduction of WTGs will result in loss of insurance, creating de facto "exclusion zones." This concern is not new, and CRMC previously has considered and rejected it:

Some fishermen have expressed the concern that marine insurance companies might increase their insurance premiums or prohibit insured fishing vessels from operating within the vicinity of offshore wind farms (e.g. Ichthys Marine 2009). However, it should be noted that at the time of this writing, Sunderland Marine does not currently impose restrictions or higher premiums on their members, nor have they heard of other insurance companies issuing such demands (McBurnie, pers. comm.). Sunderland Marine is the world's largest insurer of fishing vessels, and insures The Point Club, a fishing vessel insurance and safety club that insures many of the fishing vessels operating out of Point Judith and Newport (Nixon, pers. comm.).

§ 8.4.8(D)(8). SFW's own recent investigation of this concern has led to the same conclusion.

* * *

SFW has followed the evidence-based decision-making approach of the Ocean SAMP using best available science and modeling tools. CRMC must reach its consistency concurrence, including any proposed conditions for mitigation, pursuant to the Ocean SAMP by employing an evidence-based approach that relies on the best available science and modeling tools. CRMC cannot just provide a compensation "number" to SFW without linking it to specific potential impacts backed by science and evidence. SFW has submitted extensive documentation, much of it attached here, demonstrating its data-driven, evidence-based commitment to project design, modification, and mitigation that should be followed for mitigation. This evidence supports clearly that SFW has modified and/or mitigated any potential adverse effects to the Rhode Island commercial and recreational fisheries from the SFW Project. SFW has shown that its Project is consistent with CRMC's applicable enforceable policies.

Thank you,

/s/ Olivia Larson Tesse

Olivia Larson Tesse

Lead Commercial Manager

/s/ Melanie Gearon

Melanie Gearon

Permitting Manager

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