UNITED STATES DISTRICT COURT DISTRICT OF MASSACHUSETTS

ACK RESIDENTS AGAINST TURBINES, et al.

Plaintiffs,

v.

Civil Action No. 1:21-cv-11390-IT

Hon. Indira Talwani

U.S. BUREAU OF OCEAN ENERGY MANAGEMENT, et al.

Defendants,

and

VINEYARD WIND 1 LLC,

Intervenor-Defendant.

FEDERAL DEFENDANTS' MEMORANDUM IN OPPOSITION TO PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT, AND IN SUPPORT OF CROSS-MOTION

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GLOSSARY

APA Administrative Procedure Act
Area 537 NMFS Statistical Area 537

AVERT EPA Avoided Emissions and Generation Tool

BiOp Biological Opinion

BOEM U.S. Bureau of Ocean Energy Management

CEQ Council on Environmental Quality

CAA Clean Air Act

COP Construction and Operations Plan
U.S. Army Corps of Engineers

DEIS Draft Environmental Impact Statement

ESA Endangered Species Act

FEIS Final Environmental Impact Statement

FWS U.S. Fish & Wildlife Service GHG Greenhouse Gas Emissions

IHA Incidental Harassment Authorization

ITS Incidental Take Statement
JROD Joint Record of Decision

MMPA Marine Mammal Protection Act

NAAQS
National Ambient Air Quality Standards
NEPA
National Environmental Policy Act
NMFS
National Marine Fisheries Service
NMFS/GAR
NMFS Greater Atlantic Region
NMFS/OPR
NMFS Office of Protected Resources

OCS Outer Continental Shelf

OCSLA
Outer Continental Shelf Lands Act
PAM
Passive Acoustic Monitoring
PBR
Potential Biological Removal
PSOs
Protected Species Observers

RI/MA WEA Rhode Island/Massachusetts Wind Energy Area

RPMs Reasonable and Prudent Measures

SEIS Supplemental Environmental Impact Statement

WDA Wind Development Area WTGs Wind Turbine Generators

INTRODUCTION

The Vineyard Wind Project ("the Project") is an offshore wind energy project planned for Lease Area OCS-A -5-1—also known as the wind development area ("WDA")—an area on the Outer Continental Shelf more than 14 miles from the coasts of Martha's Vineyard and Nantucket Island. The Project will have the capacity to generate approximately 800 megawatts of electricity, which could supply renewable, virtually emissions-free energy to about 400,000 homes in Massachusetts.

The Project underwent an extensive, multi-year environmental review by several federal and state agencies, which concluded in July 2021 when the Bureau of Ocean Energy Management ("BOEM") issued final approval of Vineyard Wind's Construction and Operations Plan ("COP"). BOEM's environmental review spanned three years, included fifteen public meetings, and culminated in a four-volume final environmental impact statement ("FEIS"). The environmental review also included consultation between BOEM and the National Marine Fisheries Service ("NMFS") under the Endangered Species Act ("ESA"), which resulted in NMFS's publication of a 500-page biological opinion ("BiOp") assessing potential effects of the Project on ESA-listed species, including the North Atlantic right whale. NMFS separately evaluated and authorized the incidental harassment of right whales through an incidental harassment authorization ("IHA") issued pursuant to the Marine Mammal Protection Act ("MMPA").

Plaintiffs bring suit pursuant to the Administrative Procedure Act ("APA"), contending that NMFS's BiOp violates the ESA and that BOEM's FEIS violates the National Environmental Policy Act ("NEPA") for their alleged failure to adequately analyze (i) potential impacts to right whales, and (ii) (solely with respect to the FEIS) air quality and greenhouse gas emissions. Plaintiffs lack standing, and also failed to preserve several arguments during the administrative

processes. And on the merits, Plaintiffs' scattershot arguments do not account for the deference due the agencies here. Indeed, far from bearing out Plaintiffs' arguments by showing arbitrary or capricious decision-making, the agencies' administrative records fully support the agencies' analyses and confirm that the BiOp complies with the ESA and the FEIS complies with NEPA. For instance, in its BiOp, NMFS evaluated the best available scientific information concerning potential effects of the Project on the right whale, including impacts to its habitat, and reasonably concluded that the Project is not likely to jeopardize the continued existence of the right whale. And the FEIS establishes that, in evaluating the Project pursuant to NEPA, BOEM thoroughly analyzed the effects of the Project on air quality and greenhouse gas emissions and took the requisite hard look at potential impacts, including measures to avoid or minimize environmental harm. In drafting the FEIS and deciding to approve the COP, BOEM reasonably relied on NMFS's considerable expertise, including by incorporating numerous measures to mitigate and avoid impacts to right whales. The record establishes that both agencies complied with applicable laws. For all of the reasons set out below, the Court should enter summary judgment in favor of Federal Defendants.

LEGAL BACKGROUND

A. ESA

ESA section 7(a)(2) provides that each federal agency must ensure that any action it authorizes, funds, or carries out is not likely to "jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined by the Secretary . . . to be critical" 16 U.S.C.

§ 1536(a)(2). To achieve this objective, the ESA requires the action agency to consult with NMFS or FWS whenever a federal action "may affect" an endangered or threatened species. 50 C.F.R. § 402.14(a).²

Section 7 and its implementing regulations set out detailed consultation procedures designed to provide action agencies with expert advice to determine the biological impacts of their proposed activities. 16 U.S.C. § 1536(b); 50 C.F.R. pt. 402. "Formal consultation," which is described at length at 50 C.F.R. § 402.14, culminates in the issuance of a "biological opinion" by NMFS or FWS, which advises the action agency whether jeopardy or adverse modification is likely to occur for any listed species and, if so, whether "reasonable and prudent alternatives" exist to avoid jeopardy or adverse modification. *Id.* § 402.14(h). The ESA and its implementing regulations require NMFS to utilize the "best scientific and commercial data available" in rendering its biological opinion. 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(d).

Section 9 of the ESA prohibits the "taking" of any endangered or threatened species. 16 U.S.C. § 1538(a)(1)(B). "Take" as defined by the ESA means to harass, harm, pursue, hunt,

¹

¹ "Secretary" as used in the ESA means the Secretary of the Interior or the Secretary of Commerce, who in turn have delegated their responsibilities to the U.S. Fish & Wildlife Service ("FWS") and NMFS, respectively. 16 U.S.C. § 1532(15). In general, NMFS has authority over marine species, such as the right whale at issue here. 50 C.F.R. §§ 222.101, 224.101(h) (listed as endangered), 226.203 (designated critical habitat). To "jeopardize the continued existence" means "to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species." 50 C.F.R. § 402.02. "Destruction or adverse modification" of critical habitat is also defined (50 C.F.R. § 402.02).

² With respect to this Project, NMFS acted in two roles: NMFS's Office of Protected Resources ("NMFS/OPR") acted as an action agency in issuing the Incidental Harassment Authorization ("IHA") pursuant to the Marine Mammal Protection Act ("MMPA"). NMFS's Greater Atlantic Region ("NMFS/GAR") acted as the consulting agency in issuing the biological opinion. Where, as here, more than one federal agency's action regarding a project "may affect" a listed species, each one must fulfill its obligation to consult, and a "lead action agency" is often identified. For the Vineyard Wind project, BOEM was the lead action agency, with whom NMFS/OPR and several other Federal agencies consulted with NMFS/GAR.

shoot, wound, kill, trap, capture, or collect, or to attempt to engage in such conduct. 16 U.S.C. § 1532(19). The ESA's prohibition on taking species applies to all "person[s]," including individuals, corporations, and federal or state agencies. 16 U.S.C. § 1532(13). However, take incidental to federal actions that is "reasonably certain to occur" can be exempted from liability as part of the consultation process in an incidental take statement ("ITS") in the final biological opinion. 16 U.S.C. § 1536(b)(4); 50 C.F.R. § 402.14(g)(7). An ITS identifies the impact of such taking and specifies reasonable and prudent measures ("RPMs") "necessary or appropriate to minimize such impact" and terms and conditions to implement those measures. 16 U.S.C. § 1536(b)(4)(ii); 50 C.F.R. § 402.14(i)(1)(i-v). Under Section 7(o) of the ESA, "any taking that is in compliance with the terms and conditions specified in [an ITS] shall not be considered to be a prohibited taking of the species concerned." 16 U.S.C. § 1536(o)(2), and "no other authorization or permit under the Act is required." 1d.; 50 C.F.R. § 402.14(i)(5).

B. NEPA

Congress enacted NEPA to establish a process for federal agencies to consider the environmental impacts of their actions. *Vt. Yankee Nuclear Power Corp. v. Nat. Res. Def. Council, Inc.*, 435 U.S. 519, 558 (1978). NEPA is a strictly procedural statute. It does not mandate particular results; rather, "it simply prescribes the necessary process for preventing uninformed—rather than unwise—agency action." *Allen v. Nat'l Insts. of Health*, 974 F. Supp. 2d 18, 36 (D. Mass. 2013) (quoting *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 333 (1989)). "NEPA does not prevent agencies from then deciding that the benefits of a

³ Contrary to the Plaintiffs' mistaken reading of the law that ESA section 10(a)(2)(B)(ii) requires NMFS to find that the applicant will minimize and mitigate the impacts of a taking, *see* Doc. No. 88-1 at 45, the formulation of an ITS under ESA Section 7(b), and the take exemption it provides under Section 7(o), is separate and distinct from the ESA's section 10(a) incidental take permitting provision (16 U.S.C. § 1539(a)), which applies to non-Federal actions.

proposed action outweigh the potential environmental harms: NEPA guarantees process, not specific outcomes." *Town of Winthrop v. FAA*, 535 F.3d 1, 4 (1st Cir. 2008).

NEPA's procedural requirements obligate federal agencies to "take a 'hard look' at environmental consequences." *Beyond Nuclear v. U.S. NRC*, 704 F.3d 12, 19 (1st Cir. 2013). An agency gives a sufficient "hard look" when, for example, it obtains opinions from experts inside and outside the agency, provides scientific scrutiny, and offers responses to legitimate concerns. *Massachusetts v. U.S. NRC*, 708 F.3d 63, 78 (1st Cir. 2013) (citing *Hughes River Watershed Conservancy v. Johnson*, 165 F.3d 283, 288 (4th Cir. 1999)).

Council on Environmental Quality ("CEQ") regulations guide NEPA implementation.⁴ *See* 40 C.F.R. §§ 1500-1508. NEPA, and the applicable CEQ regulations, generally require an agency to prepare an environmental impact statement before proceeding with any action that the agency concludes will "significantly affect[]" the environment. 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1508.11.

STANDARD OF REVIEW

Claims challenging federal agency action are reviewed pursuant to the Administrative Procedure Act ("APA"). *Mass. ex rel. Div. of Marine Fisheries v. Daley*, 170 F.3d 23, 28 (1st Cir. 1999); *Allen*, 974 F. Supp. 2d at 36; 5 U.S.C. §§ 702, 706. Under the APA, a court may set aside "agency action, findings, and conclusions" that it finds to be "arbitrary, capricious, an

⁴ The CEQ promulgated regulations implementing NEPA in 1978, 43 Fed. Reg. 55978 (Nov. 29, 1978), and made a minor substantive amendment to those regulations in 1986, see 51 Fed. Reg. 15618 (Apr. 25, 1986). The CEQ revised the regulations again in 2020. See 85 Fed. Reg. 43304 (July 16, 2020). More recently, the CEQ published a new rule, effective May 20, 2022, further revising the regulations. 87 Fed. Reg. 23453 (Apr. 20, 2022). The claims in this case arise under the 1978 regulations, as amended in 1986. See BOEM_0068440. All citations to the Council's regulations in this brief refer to those regulations as codified at 40 C.F.R. §§ 1500-1508 (2018). For the Court's convenience, a copy of the 1978 regulations is attached as Exhibit A.

abuse of discretion, or otherwise not in accordance with law." Airport Impact Relief, Inc. v. Wykle, 192 F.3d 197, 202 (1st Cir. 1999); 5 U.S.C. § 706(2)(A). Review under this standard is to be "searching and careful" but "narrow," and a court is not to substitute its judgment for that of the agency, Marsh v. Or. Nat. Res. Council, 490 U.S. 360, 378 (1989), but should make its determination based solely on the record on which the decision was made. Citizens to Pres. Overton Park v. Volpe, 401 U.S. 402, 419 (1971). Under the APA standard, a court must uphold an action if it finds a "rational connection between the facts found and the choice made," Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29 (1983), and that the agency considered the relevant factors did not make a clear error of judgment. Overton Park, 401 U.S. at 416. Review under this standard is highly deferential, and "is especially marked in technical or scientific matters within the agency's area of expertise." Citizens Awareness Network v. U.S. NRC, 59 F.3d 284, 290 (1st Cir. 1995). Where, as here, the agency's particular technical expertise is involved, the court guards the agency's discretion very zealously. Baltimore Gas & Elec. Co. v. NRDC, 462 U.S. 87, 103 (1983); FCC v. Nat'l Citizens Comm. for Broad., 436 U.S. 775, 813-14 (1978). "When specialists express conflicting views, an agency must have discretion to rely on the reasonable opinions of its own qualified experts even if, as an original matter, a court might find contrary views more persuasive." Marsh, 490 U.S. at 378.

ARGUMENT

I. Plaintiffs lack standing.

"A plaintiff invoking federal jurisdiction bears the burden of establishing standing." *Strahan v. Sec'y, Mass. Exec. Office of Energy & Envtl. Affairs*, No. 19-cv-10639, slip op. at 10 (Nov. 30, 2021) (D. Mass. Talwani, J.). To satisfy Article III, a plaintiff must establish an injury that is (i) "concrete, particularized, and actual or imminent"; (ii) "fairly traceable to the

challenged action"; and (iii) "redressable by a favorable ruling." *Clapper v. Amnesty Int'l USA*, 568 U.S. 398, 409 (2013). An association may have standing to sue on behalf of its members so long as "at least one of the members possesses standing to sue in his or her own right." *United States v. AVX Corp.*, 962 F.2d 108, 116 (1st Cir. 1992).

At summary judgment, where a plaintiff's or association's standing is premised on harm to an endangered species, the plaintiff must "submit affidavits or other evidence showing, through specific facts, not only that listed species were in fact being threatened [by the challenged government action], but also that one or more of [the association's] members would therefore be 'directly' affected apart from their "special interest' in th[e] subject." *Lujan v. Defs. of Wildlife*, 504 U.S. 555, 563 (1992). Here, Plaintiffs have attempted to establish standing based on declarations from two ACK RAT members, Plaintiff Vallorie Oliver and Ms. Amy Disibio. Doc. Nos. 88-2, 88-3. But neither declaration is sufficient to demonstrate standing.

Neither Ms. Oliver nor Ms. DiSibio has demonstrated that the Project will cause them to suffer any concrete or imminent harm. Both Ms. Oliver and Ms. Disibio declare an affinity for whales and other marine mammals that inhabit the waters in and around Nantucket (*see, e.g.*, Doc. No. 88-2 ¶ 3; Doc. No. 88-3 ¶4). Each also claims that she "love[s] that [she] ha[s] had, and continue[s] to have, opportunities to observe them in their natural habitat." Doc. No. 88-2 ¶ 3; Doc. No. 88-3 ¶ 4. But neither provides any specific facts to establish that she has ever seen a right whales, or that she has any concrete plans to attempt to see them in the future. *Id.* Absent such specific facts, Ms. Oliver and Ms. Disibio cannot establish the concrete and imminent

⁵ While their declarations mention whales and other marine species generally, Plaintiffs' summary judgment motion addresses only North Atlantic right whales, and makes no attempt to establish that the Project will harm any other species, much less harm that would also result in imminent injury to Plaintiffs.

injury that Article III requires. *See Lujan*, 504 U.S. at 564 ("Such 'some day' intentions—without any description of concrete plans, or indeed even any specification of when the some day will be—do not support a finding of the 'actual or imminent' injury that our cases require.").

Nor can they establish standing based on their professed desire to protect right whales. *See* Doc. No. 88-2 ¶ 3 (Ms. Oliver "will feel that [she] ha[s] failed in [her] duty to protect them."); Doc. No. 88-3 ¶ 4 (Ms. DiSibio has "kept herself informed about the right whale" and that she "feel[s] a responsibility to protect" the species). *Id.* As this Court has recognized, a "sincere and passionate interest in the well-being of whales' alone" is not sufficient to establish standing. *Strahan*, slip op. at 15; *see also Sierra Club v. Morton*, 405 U.S. 727, 739-40 (1972) Thus, Ms. Oliver and Ms. DiSibio must show that they would be "directly affected by harm to the whales, apart from [their] . . . special interest" in the species. *Strahan*, No. 19-cv-10639, slip op. at 15 (citing *Strahan v. Linnon*, 967 F. Supp. 581, 617 (D. Mass. 1997)). They have not met that burden.

In addition, because Ms. Oliver and Ms. DiSibio fail to establish any concrete injury, they also cannot establish "procedural injury" based solely on the claim that the agencies allegedly failed to comply with the ESA and NEPA. "[D]eprivation of a procedural right without some concrete interest that is affected by the deprivation—a procedural right *in vacuo*—is insufficient to create Article III standing." *Summers v. Earth Island Inst.*, 555 U.S. 488, 496 (2009)). As the First Circuit recognized in *AVX Corp.*, "[t]here is nothing talismanic about the phrase 'procedural harm.' A party claiming under that rubric is not relieved from compliance with the actual injury requirement for standing." 962 F.2d at 119.

Finally, because Plaintiffs have not carried their burden to establish that at least one of their members has standing, ACK RATs also lacks standing. *Id.* at 116.

II. Plaintiffs waived several arguments by failing to raise them during the relevant administrative process.

As another threshold matter, the Court's review of Plaintiffs' ESA citizen-suit claims against BOEM should be limited according to the substance of arguments raised in their three notices of intent to sue pursuant to the ESA citizen-suit provision, 16 U.S.C. § 1540(g)(2)(A)(i), dated May 24, 2021 (filed herewith as Exhibit B); November 26, 2021 (filed herewith as Exhibit C); and November 29, 2021 (filed herewith as Exhibit D), respectively. These notices failed to alert BOEM and NMFS of Plaintiffs' claims alleging ESA violations based on right whales fleeing to NMFS Statistical Area 537 ("Area 537") in response to "soft start" pile-driving procedures. Other arguments not raised in Plaintiffs' notice letters include: alleged failure to consider the Potential Biological Removal threshold; the override procedure during pile-driving; the sufficiency of size of clearing zone; and the passive acoustic monitoring detection limit. Therefore, Plaintiffs have failed to satisfy the mandatory pre-suit notice requirement as to numerous issues regarding right whales that Plaintiffs currently assert in their summary judgment brief. See, e.g., Sw. Ctr. for Biological Diversity v. U.S. Bureau of Reclamation, 143 F.3d 515, 520-22 (9th Cir. 1998) (notice letter must alert the recipients to the actual violation alleged in a subsequently filed complaint). The Court should grant summary judgment in favor of Federal Defendants as to these claims, even before getting to the reasons below why the claims fail on the merits.

Even if the Court determines that Plaintiffs' notice letters, taken together, suffice for purposes of commencing an ESA suit, the Court's review of the merits of Plaintiffs' ESA claims should be informed and circumscribed based on the substance of comments submitted by Plaintiffs during public comment proceedings. Federal Defendants acknowledge that Plaintiffs participated in public comment procedures leading up to BOEM's decision to approve the

COP.⁶ BOEM responded to Plaintiffs' right whale-related comments in detail.⁷ Plaintiffs also submitted comments in response to the NMFS IHA. NMFS 3428-34. NMFS responded to these comments in the Notice of Issuance of the IHA. NMFS 3521-23. Although there is no public comment procedure as part of the ESA section 7 consultation process, the 2021 BiOp analyzed NMFS's IHA, which identified mitigation measures to minimize and avoid harm to right whales and was subject to public comment. As with their ESA notices of intent to sue, none of Plaintiffs' public comment submittals raised the specific deficiencies cited above, including Plaintiffs' argument that right whales will flee to Area 537 in response to "soft start" pile-driving procedures.

Courts have long recognized that, even absent a specific statutory or regulatory requirement, "[t]he failure to raise an argument before an agency constitutes a waiver of that argument [for] judicial review." *Padgett v. Surface Transp. Bd.*, 804 F.3d 103, 109 (1st Cir. 2015) (citing cases). Thus, the Court may also deny Plaintiffs' motion for summary judgment

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⁶ See BOEM 78666-78683 (comment on DEIS dated January 22, 2019 (comment id 76)); BOEM 79220 – 79222 (second set of comments on DEIS dated February 22, 2019 (comment id 206)); BOEM 79477-BOEM 79478 (comment in Project Public Meeting Transcript February 11, 2019 Nantucket, MA (comment id 297)); BOEM 72746 (comment on supplement to DEIS dated April 7, 2021).

⁷ See BOEM 69444 & BOEM 69487-69500 (responses to comment id 76); BOEM 69446 & BOEM 69666-69668 (responses to comment id 206); BOEM 69448 & BOEM 69777-69778 (responses to comment id 297); and BOEM 76826-76826 (responses to post-FEIS comments on right whales).

⁸ This is the rule because "it accords respect to the agency decisionmaking process by providing the agency with the 'opportunity to address a party's objections, . . . apply its expertise, exercise its informed discretion, and create a more finely tuned record for judicial review." *Upper Blackstone Water Pollution Abatement Dist. v. EPA*, 690 F.3d 9, 31 (1st Cir. 2012), (*quoting Mass. Dep't of Pub. Welfare v. Sec'y of Agric.*, 984 F.2d 514, 523-24 (1st Cir. 1993)). The requirement to raise an argument before the agency is essential to the integrity of the administrative process, and therefore strictly enforced. *See, e.g., United States v. L.A. Tucker Truck Lines, Inc.*, 344 U.S. 33, 37 (1952); *Mazariegos-Paiz v. Holder*, 734 F.3d 57, 62 (1st Cir. 2013).

with respect to arguments Plaintiffs neglected to raise during available public comment proceedings based on the doctrine of issue exhaustion. *Sims v. Apfel*, 530 U.S. 103, 112 (2000) (O'Connor, J., concurring) ("In most cases, an issue not presented to an administrative decisionmaker cannot be argued for the first time in federal court. On this underlying principle of administrative law, the Court is unanimous."); *Mass., Dep't of Public Welfare*, 984 F.2d at 522-23; *Appalachian Power Co. v. EPA*, 251 F.3d 1026, 1036 (D.C. Cir. 2001). The Court should not indulge Plaintiffs in their *post-hoc* critique of the Defendant agencies' reasonable assessments concerning the sufficiency of mitigation measures to minimize and avoid harm to right whales when Plaintiffs themselves failed to raise these points of concern during the applicable comment periods. *Vt. Yankee*, 435 U.S. at 553-54 ("[A]dministrative proceedings should not be a game or a forum to engage in unjustified obstructionism by making cryptic and obscure reference to matters that 'ought to be' considered and then, after failing to do more to bring the matter to the agency's attention, seeking to have that agency determination vacated on the ground that the agency failed to consider matters 'forcefully presented."").

III. The Agencies fully complied with the ESA.

The NMFS Greater Atlantic Region Office ("NMFS/GAR") complied with the ESA in issuing the 2021 BiOp, and BOEM reasonably relied on the 2021 BiOp. Based on the best available scientific information, NMFS/GAR concluded that the Project is not likely to jeopardize right whales or any of the other threatened or endangered species in the action area. NMFS 17558. NMFS/GAR specified RPMs and terms and conditions to avoid and minimize the take of right whales in the form of harassment that it determined was reasonably certain to occur as a result of pile-driving construction. NMFS 17563-17579. The Court should uphold the 2021 BiOp based on the deferential "arbitrary and capricious" standard of review. 5 U.S.C. § 706(2)(A).

A. The BiOp utilizes the best available scientific and commercial data.

The ESA and its implementing regulations require all parties in consultation to utilize the "best scientific and commercial data available." 16 U.S.C. § 1536(a)(2); 50 C.F.R. § 402.14(d), (g)(8). Upon issuance, the 2021 BiOp replaced the previous BiOp⁹, *see* NMFS 17170, and utilized the best and latest information on right whales. NMFS 17230-42 (2021 BiOp); NMFS 16639-40 (Biological Assessment); NMFS 17683-733 (2021 BiOp's Transmittal Memorandum). In short, this newly available information reiterated that "the status of North Atlantic right whales is poor and that the population size has declined in recent years." NMFS 17686. It reaffirmed the 2020 BiOp's description of the right whale patterns of distribution, abundance, and behavior, and it supported the determination that the time of year when pile-driving is prohibited (January – April) is the time of year with the greatest density of right whales in the lease area. NMFS 17687. The 2021 BiOp used the most up-to-date density information for right whales in the area, as well as a new paper on mortality for unknown reasons, to update the vessel strike analysis. *Id*.

Notwithstanding the fact that Federal Defendants have concluded two rounds of ESA consultation culminating in the 2021 BiOp, and took into consideration these Plaintiffs' and other ESA 60-day notices of intent to sue (*see* NMFS 17696-33), Plaintiffs still assert that NMFS failed to utilize the best scientific and commercial data available to inform the 2021 BiOp. Doc. No. 88-1 at 24. Plaintiffs misapprehend the ESA Section 7 consultation process and its

⁹ In the 2020 BiOp, NMFS/GAR used the best available scientific information concerning the status of right whales at the time, NMFS 16076-83, including the most recent five-year review. When consultation was reinitiated, NMFS added an analysis of the fisheries resource surveys BOEM proposed to require and updated the entire document with the best scientific information that had become available since completion of the 2020 BiOp.

culminating biological opinion; present a conclusory critique that is not supported by the record; and fail to focus on whether the agencies considered all relevant available information and provided rational explanations to support technical and scientific determinations regarding the impacts of the proposed project on the endangered North Atlantic right whale, specifically. Plaintiffs' arguments lacked merit previously (as presented in their original complaint), and they continue to lack merit now.

1. The 2021 BiOp is based on the best available information concerning the current status of right whales in the action area.

Contrary to Plaintiffs' assertions, Doc. No. 88-1 at 24-28, the record before the Court demonstrates that NMFS accounted for the current status of right whales in an "Action Area" that included the WDA and surrounding areas including vessel routes that may be affected by the Project. NMFS 17220. The BiOp includes a robust account of the status of the North Atlantic right whale in the North Atlantic Ocean, the presence, including densities and distribution, of right whales in the Action Area, and the effects of the Project on the right whale. NMFS 17230-42. The fact that right whales may utilize the Action Area as a feeding and/or stopover site is

¹⁰ The BiOp evaluates impacts on many different species, but only the right whale will be referenced in this brief. Plaintiffs apparently concluded the analysis was sufficient for all other endangered and threatened species referenced in their amended complaint, as Plaintiffs' summary judgment brief addresses only right whales. *See* Doc. No. 59 ¶¶ 1, 3, 5, 75. Plaintiffs' claims concerning other threatened and endangered species should be deemed waived.

¹¹ Plaintiffs' memorandum quotes extensively from the Quintana-Rizzo (2021) study, NMFS 53318-35, to support their argument that NMFS/GAR failed to "analytically engage with the 'best scientific data' on the current status of the right whale" in an area described in the study as the Rhode Island/Massachusetts Wind Energy Area ("WEA"). *See* Doc. No. 88-1 at 24-28. Plaintiffs incorrectly assert that NMFS "barely mentions" the Quintana-Rizzo (2021) study in its own BiOp, and incorrectly state that NMFS must "engage with its findings." Doc. No. 88-1 at 25, 28. NMFS cited the study and discussed its results numerous times in the 2021 BiOp, NMFS 17295, 17297, 17362, 17363, 17468, and Transmittal Memorandum. *See, e.g.,* NMFS 17687, 17703 ¶16, 17706 ¶26. Plaintiffs' citations to the Quintana-Rizzo (2021) study do not contradict or undermine any of the 2021 BiOp's conclusions with respect to potential effects of the Project

not in dispute. NMFS 17297 (feeding "during the months of March and April"), 17295, 17703 ¶16 (mean residence time of individual right whales at 13 days).

The 2021 BiOp analyzes a suite of measures including "soft start" procedures¹² imposed as conditions of Project approval to avoid and minimize exposure of ESA-listed whales to pile-driving noise during construction. In total, the IHA authorizing incidental harassment of right whales during project construction for purposes of complying with the MMPA includes "nine overarching mitigation measures related to pile driving." NMFS 3550.¹³ Taken together, this suite of avoidance measures makes it unlikely that right whales will be in proximity to pile-driving operations when soft start procedures commence. NMFS 17358. NMFS reasonably concluded that it is "extremely unlikely" that a right whale will be exposed to noise that could result in Level A harassment. *Id*.

Whether individual right whales leave the WDA in response to the ramp-up protocols or are incidentally exposed to sound during the pile-driving operations, NMFS explained that "[e]ffects to distribution will be limited to avoiding the area with disturbing levels of noise

on right whales or the sufficiency of the mitigation measures emanating from the COP, BOEM's conditions of COP approval, and the IHA, or the "reasonable and prudent measures" specified in the ITS to minimize the impacts of any exempted incidental take of right whales.

¹² "Soft start" procedures consist of three single hammer strikes at 40 percent energy, followed by at least a one-minute delay before full energy hammer strikes begin. NMFS 17210. Given pile-driving has to start at some energy level, it is better for listed species to have the initial hammer strikes be at reduced capacity. These procedures are not purposeful harassment or hazing but part of the installation process for the piles. NMFS 17699-17700.

¹³ As analyzed by NMFS, the Project includes: a seasonal restriction on pile-driving to avoid the time of year with the highest densities of right whales in the WDA, NMFS 17352; the use of protected species observers ("PSOs") to establish clearance zones around the pile-driving equipment to ensure these zones are clear of marine mammals prior to the start of pile-driving, NMFS 17353; and the use of Moored Passive Acoustic Monitoring ("PAM") systems or autonomous PAM platforms to record ambient noise and marine mammal vocalizations in the lease area to supplement visual observations by PSOs by detecting vocalizing whales, NMFS 17198.

during pile driving. There will be no change to the overall distribution of right whales in the action area or throughout their range." NMFS 17531. Therefore, NMFS/GAR reasonably concluded that, for each of the 20 right whales to be affected, "the short-term (no more than three hours) exposure to pile driving noise experienced by a single individual is not anticipated to have any lingering effects and is not expected to have any effect on future reproductive output." *Id*.

Plaintiffs incorrectly suggest that NMFS failed to consider the effects on right whales from the pile-driving, including potential entanglement threats with fixed fishing gear located in Area 537. Doc. No. 88-1 at 28-29 (citing BOEM 194534). The 2021 BiOp includes measures to address any risks from the trap/pot sampling that will occur in Area 537 between May and October for six years as a condition of BOEM's COP approval for purposes of monitoring Project effects on fishery resources. NMFS 17480. Nevertheless, Plaintiffs suggest that the 2021 BiOp should have specifically analyzed the potential for right whale interaction with fixed fishing gear if they leave the WDA as a result of the "soft start" procedures to minimize the species' exposure to pile-driving noise during construction. Doc. No. 88-1 at 36.

The "soft start" procedures do not push whales into Area 537 as Plaintiffs allege. Doc. No. 88-1 at 29 (citing BOEM 77411, 194539). Area 537 is a vast zone south of Nantucket and Martha's Vineyard that includes the WDA. ¹⁴ Plaintiffs present no reason to conclude there would be any appreciable difference in exposure to entanglement risk because of the pile-driving, given how the whales are already in this fished area. ¹⁵

¹⁴ Area 537 is depicted at https://www.northeastoceandata.org/AzfKsltQ September 7, 2022). It includes the Vineyard Wind project lease, other offshore wind leases, and a large expanse of ocean.

¹⁵ Although Plaintiffs suggest that NMFS should have considered the risk that an individual whale may transit through Area 537 and become entangled in fishing gear in response to the soft start protocols, it would be infeasible to predict the behavioral response of whales with this type

Considering the proposed actions' suite of mitigation measures designed to avoid and minimize the potential interactions with right whales, NMFS/GAR reasonably concluded that pile-driving construction noise, including any noise resulting from "soft start" procedures, is not anticipated to result in injury or death to any right whales. *See* NMFS 17531. BOEM's and the NMFS Office of Protected Resources' ("NMFS/OPR") selection of appropriate mitigation measures among various options, and NMFS/GAR's analysis of them, are exactly the type of administrative actions in which it is appropriate for agencies to bring to bear their extensive expertise. *Balt. Gas & Elec. Co.*, 462 U.S. at 103; *Nat'l Citizens Comm.*, 436 U.S. at 813-14. The Court should defer to NMFS/GAR's determination about the effects of the selected mitigation measures including the ramp-up protocol, which is amply supported by the record. *Selkirk Conservation All. v. Forsgren*, 336 F.3d 944, 955-56 (9th Cir. 2003) (FWS properly relied upon mitigation in conservation agreement in arriving at a "no jeopardy" conclusion).

2. The 2021 BiOp considers the "2020 Annual Report Card" and the 2020 Marine Mammal Stock Assessment.

NMFS is intimately familiar with the current status of right whales and has conducted rulemaking on multiple fronts to address the threats posed to the species. *See, e.g., Dist. 4 Lodge of the Int'l Ass'n of Machinists and Aerospace Workers Local Lodge 2017 v. Raimondo*, 40 F.4th 36, 41 (1st Cir. 2022). Plaintiffs incorrectly imply that the 2021 BiOp failed to consider the "2020 Annual Report Card" prepared by the North Atlantic Right Whale Consortium, which

of precision. The 2021 BiOp describes potential right whale responses to acoustic stress in terms of swimming away from a sound source in a direct path, i.e., away from the pile-driving location through area with a radius that extends around the pile-driving location at the center. NMFS 17363. Defendants are unaware of any research or model that would enable NMFS to predict what direction an individual right whale may swim, and Plaintiffs do not cite any particular study that NMFS allegedly overlooked.

indicated the right whale calving interval had increased to 7.6 years. Doc. No. 88-1 at 29. To the contrary, this document was among the new information cited by BOEM in its supplemental biological assessment. NMFS 16639.¹⁶

Plaintiffs also lament the 2021 BiOp's alleged failure to analyze the 2020 Marine Mammal Stock Assessment's data and utilize its estimate of the Potential Biological Removal (PBR) threshold for the right whale. Doc. No. 88-1 at 29-30. *See also* NMFS 33684. Because NMFS/OPR was an action agency in the consultations culminating in the 2020 and 2021 BiOps, NMFS/GAR considered the current PBR level of 0.8 as a "gross indicator of the status of the species and other threats" in the Notice of Issuance of the IHA. NMFS 3529. Plaintiffs fail to provide any basis for concluding that specifically referencing PBR or including it in the BiOp's analysis is necessary to satisfy the ESA's "best available scientific information" standard, or even what analytical benefit would accrue from using it. 18

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¹⁶ In addition, the 2021 BiOp specifically stated that "Annual average calving interval was 7 in 2019 and 7.6 in 2020 (Pettis et al. 2020, 2021)." NMFS 17232. Pettis *et al* 2021 is the North Atlantic Right Whale Consortium's 2020 Annual Report Card. NMFS 17598, 70578-70602. While the 2021 BiOp might not have included the ratio of mortalities to births in 2020 reported by the Consortium, it provided more comprehensive and, therefore, more useful information on mortalities, births, and population trends over time. *See, e.g.*, NMFS 17236-17237. Plaintiffs have not indicated whether or why one specific year's ratio is better scientific information than the decades of data and analysis actually used in the 2021 BiOp.

¹⁷ Potential Biological Removal is an MMPA term of art. *See* 16 U.S.C. § 1362(20). Stock Assessments are required by the MMPA, 16 U.S.C. § 1386, and must calculate PBR. *Id.*. § 1386(a)(6) ("Each draft stock assessment, based on the best scientific information available, shall...(6) estimate the potential biological removal level for the stock, describing the information used to calculate it, including the recovery factor."). PBR is also an MMPA standard reference point for commercial fishery take reduction plans. *See, e.g.,* 16 U.S.C. § 1387(f)(2) (describing the immediate goal of a take reduction plan is to reduce incidental mortality or serious injury of marine mammals "to levels less than the potential biological removal level established for that stock under section 1386").

¹⁸ Furthermore, the 2021 BiOp also explains that, at the time of its completion, Hayes et al 2021–i.e., the 2020 Marine Mammal Stock Assessment–was the most recent MMPA stock assessment available, but it was based on information through January 2018. NMFS 17234. Instead of using

The 2021 BiOp need not have incorporated PBR, given no right whales were anticipated to be removed from the population. NMFS 17530 ("[W]e expect there to be harassment of 20 different whales. We do not anticipate harassment to result from exposure to any other noise source. No harm, injury, or mortality is expected."); NMFS 17531 ("We do not expect any serious injury or mortality of any right whale to result from the proposed action. We also do not anticipate fitness consequences to any individual North Atlantic right whales. Because we do not anticipate any reduction in fitness, we do not anticipate any future effects on reproductive success."). Nevertheless, the 2021 BiOp states, "[t]he species faces a high risk of extinction and the population size is small enough for the death of any individuals to have measurable effects in the projections on its population status, trend, and dynamics." NMFS 17528. In effect, this sentence states, using a layperson's language, something similar to the 2020 Stock Assessment's estimate that PBR is 0.8—that any removal would have serious population impacts. In sum, the 2020 BiOp considered the scientific references cited by Plaintiffs.

3. The 2021 BiOp analyzes the appropriate "Environmental Baseline".

Plaintiffs also suggest that the 2021 BiOp should have assessed how right whales' increased use of waters south of Martha's Vineyard and Nantucket will be affected by the construction and operation of multiple offshore wind energy projects in the area.¹⁹ Doc. No. 88-1

only information reviewed through the Stock Assessment process, the 2021 BiOp used even more recent scientific studies, such as Pace 2021, consistent with the requirement to use the best available scientific information. NMFS 17234 n.10.

¹⁹ Plaintiffs incorrectly suggest that the waters south of Martha's Vineyard and Nantucket Islands are vulnerable because they "do not currently enjoy the protections of a critical habitat designation...." Doc. No. 88-1 at 30. While it is true the area south of the Islands is not designated as "critical habitat"--a term of art under the ESA, *see* 16 U.S.C. § 1532(5)--that does not mean that the 2021 BiOp ignored right whale habitat impacts. To the contrary, the 2021 BiOp analyzes effects on right whale habitat, including on prey, oceanographic conditions, noise, clarity/turbidity, temperature, electromagnetic fields, and more. NMFS 17323-17504. "Harm" is

at 30. As explained in the "Integration and Synthesis of Effects" section of the 2021 BiOp (i.e., the jeopardy analysis), "[i]n this section, we add the Effects of the Action (Section 7) to the Environmental Baseline (Section 6) and the Cumulative Effects (Section 8), while also considering effects in the context of climate change, to formulate the agency's biological opinion as to whether the proposed action is likely to reduce appreciably the likelihood of both the survival and recovery of a ESA-listed species in the wild by reducing its numbers, reproduction, or distribution." NMFS 17505. The ESA regulations²⁰ provided, in part, that the "Effects of the Action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur." 50 C.F.R. § 402.02. The 2021 BiOp explained that "the Vineyard Wind project is not the 'but for' cause of any other projects....In addition, the potential projects in other lease areas are not, at this time, reasonably certain to occur..." NMFS 17322.

"The environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section

type of take that is defined in the NMFS ESA regulations as an act that "may include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including, breeding, spawning, rearing, migrating, feeding or sheltering." 50 C.F.R. § 222.102; NMFS 17559. The 2021 BiOp concluded that "harm" will not occur. NMFS 17530.

²⁰ The 2021 BiOp was prepared under ESA Section 7 regulations as revised by a 2019 final rule, 84 Fed. Reg. 44,976 (Aug. 27, 2019). Definitions provided here refer to those regulations. The 2019 rule has since been vacated. *Ctr. for Biological Diversity v. Haaland,* No. 19-cv-05206, 2022 WL 244455, --F.Supp.3d-- (N.D. Cal. July 5, 2022) (appeal docketed). However, in issuing the 2021 BiOp, NMFS/GAR expressly confirmed that the 2021 BiOp's analysis and conclusions would not change under the 50 C.F.R. § 402 regulations as they existed prior to the 2019 final rule. NMFS 17688.

7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process," whereas "Cumulative effects are those effects of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to consultation." 50 C.F.R. § 402.02. As a Section 7 consultation is completed on a windfarm, "the effects of the action associated with that project would be considered in the Environmental Baseline for the next one in line for consultation." NMFS 17292. See also NMFS 17688-17689. Thus, the 2021 BiOp need not have analyzed future wind energy projects as effects of the action, part of the environmental baseline, or cumulative effects under consultation. The effects of future Federal actions that will undergo ESA Section 7 consultation later, if and when they occur—such as other wind energy projects in the RI/MA WEA—are not properly included in the jeopardy analysis for the Vineyard Wind project. See 51 Fed. Reg. 19,926, 19,933 (June 3, 1986), cited in Miccosukee Tribe of Indians v. United States, 566 F.3d 1257, 1269 (11th Cir. 2009).

The 2021 BiOp was also informed by information concerning recent changes in seasonal density of right whales in proximity to the WDA. NMFS 16639.²¹ BOEM's own biological assessment similarly concluded that impacts to right whales do not increase in number or magnitude as a result of this new density information. NMFS 16639. NMFS/GAR then

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²¹ Recognizing that this data represented new information that was deemed the best available information on right whale density in the WDA, NMFS/OPR, for the IHA, "requested that Vineyard Wind re-run the exposure modeling for NARWs using this new density data, for all possible construction scenarios, to confirm whether the incorporation of the new density data would result in a change to modeled exposure numbers." NMFS 17350. Although the resulting modeled number of harassment takes of right whales was lower under all four potential construction scenarios than previously estimated, NMFS/OPR authorized through the IHA the same number of harassment takes (20), as previously analyzed in the 2020 BiOp, to be conservative in assessing potential impacts of pile-driving considering the potential (albeit still very low in the summer months, as indicated in the density estimates) year-round presence of right whales. *Id*.

considered the IHA and new density estimates in the 2021 BiOp. NMFS 17575.

4. The 2021 BiOp considers the best available information about the effects of wind turbine operational noise on baleen whales, including right whales.

The 2021 BiOp considers the best available information on the potential effects of operational noise, including information based on monitoring of existing wind farms in Europe, which indicates that noise levels resulting from older generation wind turbine generators ("WTGs") usually remain indistinguishable from background noise within a short distance from the source. NMFS 17732. NMFS also considered available modeling information to predict underwater operational noise levels associated with the newer 10 megawatt ("MW") turbines planned for the Vineyard Wind Project. NMFS 17733. Taken together, this information supports NMFS's conclusion that "[o]perational noise is not expected to impact the distribution of right whales and neither is the existence of the turbine foundations." NMFS 17531. *See also* NMFS 17709-10 ¶¶ 37, 38.

Plaintiffs suggest that the available information based on previous wind farms with smaller turbines does not adequately support NMFS's conclusions about the development of "industrial-scale wind farms" with larger turbines. Doc. No. 88-1 at 31-32. Contrary to Plaintiffs' suggestion that development of wind farms must await further studies involving operational

While acknowledging the limitations of available modeling information, NMFS cited two studies, Tougaard et al. (2020) and Stober and Thomsen (2021), for the proposition that operational noise is less than shipping noise. NMFS 17333. "[T]his suggests that in areas with consistent vessel traffic, such as the Vineyard Wind lease area, operational noise may not be detectable above ambient noise." *Id.* NMFS also cited findings from hydroacoustic monitoring of operational noise from the Block Island Wind Farm ("BIWF"), which utilizes direct-drive technology similar to the WTGs planned for Vineyard Wind. *Id.* "Operational noise from the direct-drive WTGs at the BIWF were generally lower than those observed for older generation WTGs, particularly when weighted by the hearing sensitivity of different marine mammal species." *Id.*

noise generated by the latest turbine designs, the ESA's requirement to utilize the "best scientific and commercial data available," 16 U.S.C. § 1536(a)(2), does not require NMFS to conduct independent studies or await new data.²³

Here, Plaintiffs have identified no other "better" information that NMFS failed to consider. Indeed, the record before the Court confirms that BOEM and NMFS considered the specific studies cited by Plaintiffs, *see* Doc. No. 88-1 at 30-32, concerning potential effects of wind turbine operation noise on whales. NMFS 57139 (Stone and Leiter et al. 2017), NMFS 53319 (Quitana-Rizzo 2021), NMFS 57132-36 (Stober et al. 2021). NMFS utilized the best available scientific information concerning potential effects on right whales resulting from operational noise.

B. The 2021 BiOp includes an appropriate description of baseline conditions with respect to the potential occurrence of right whales in the WDA.

The 2021 BiOp's description of the environmental baseline was appropriate and lawful. As defined in NMFS's regulations, "[t]he environmental baseline includes the past and present impacts of all Federal, State, or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone formal or early section 7 consultation, and the impact of State or private actions which are contemporaneous with the consultation in process." 50 C.F.R. § 402.02. With respect

²³ E.g., Heartwood, Inc. v. U.S. Forest Serv., 380 F.3d 428, 436 (8th Cir. 2004) ("The requirement that agencies use the 'best scientific and commercial data available,' . . . does not require an agency to conduct new studies when evidence is available upon which a determination can be made. . . . All that is required of the agencies is to seek out and consider all existing scientific evidence relevant to the decision at hand.") (citations omitted). Rather, the requirement "merely prohibits the Secretary from disregarding available scientific evidence that is in some way better than the evidence [s]he relies on. Even if the available scientific and commercial data were quite inconclusive, [s]he may--indeed must--still rely on it at that stage." City of Las Vegas v. Lujan, 891 F.2d 927, 933 (D.C. Cir. 1989).

to right whales, the 2021 BiOp summarizes information on ESA-listed large whales in the action area, including the most recent information about the seasonal distribution of right whales. NMFS 17293-302. Contrary to Plaintiffs' assertion that the 2021 BiOp does not adequately describe the importance of the WDA to the right whale, see Doc. No. 88-1 at 33, NMFS described the best available information concerning the potential occurrence of right whales in the WDA, including the following: a) NMFS acknowledged that the Vineyard Wind lease area "could be a feeding location for whales that stay in the mid-Atlantic and north during the winter-spring months and a stopover site for whales migrating to and from the calving grounds." NMFS 17295; b) the 2021 BiOp also discusses recent studies that have identified a recent increase in the frequency of observations of right whales in the summer and fall. NMFS 172296-97; c) it also discusses the distribution of right whale zooplankton prey in New England waters. NMFS 17294; d) it also includes an analysis of existing vessel traffic in the action area, NMFS 17405-07, and a description of the expected increase above baseline vessel traffic in the area, NMFS 17407-16; e) the 2021 BiOp also includes a summary of information on the presence of large whales, including right whales, in the action area. NMFS 17293-17297; and f) it also includes a description of other federal, state, and private activities in the action area that may affect right whales and other species of concern. NMFS 17312-21.

With respect to each of these topics, Plaintiffs quibble with the finer points of technical conclusions rendered by NMFS experts in the 2021 BiOp, *see* Doc. No. 88-1 at 33-34, but Plaintiffs cannot credibly assert that NMFS *failed* to consider any of these factors in assessing the baseline condition of the right whale or the effects of the proposed action, and they point to no superior evidence that NMFS failed to consider. *See Bays' Legal Fund v. Browner*, 828 F. Supp. 102, 106 n.7 (D. Mass. 1993) ("plaintiffs never produce any evidence that the data on

which [the agency] relied to prepare its biological studies was inferior in any way."). The court may reverse an agency's decision under the "arbitrary and capricious" standard only "if the agency has relied on factors which Congress has not intended it to consider, [has] entirely failed to consider an important aspect of the problem, [or has] offered an explanation for [that] decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise." *State Farm*, 463 U.S. at 4. Plaintiffs have offered no basis for overturning NMFS's BiOp.²⁴

The facts here are distinguishable from *National Wildlife Federation v. NMFS*, 524 F.3d 917, 936 (9th Cir. 2008) (cited by Plaintiffs at Doc. No. 88-1 at 34), in which a biological opinion concluded that proposed Federal Columbia River Power System dam operations would not jeopardize threatened and endangered salmon populations or adversely modify their critical habitat. In that case, although NMFS determined that proposed operational changes would improve environmental conditions in relation to the existing operational regime, the court concluded that NMFS failed to consider whether the proposed action, which involved continued salmon mortality, would "tip the species into jeopardy." *Id.* at 929. Here, by contrast, no right whale mortality is anticipated to occur at all, and NMFS has fully explained the basis of its "no jeopardy" determination.

²⁴ As noted above, Plaintiffs also criticize NMFS for failing to discuss the right whale's current "potential biological removal" limit as described in the recent report card. Doc. No. 88-1 at 34 (citing NMFS 33684 (Hayes et al. 2021) and NMFS 63325 (Davies and Brilliant 2019)). Discussion of the PBR is unnecessary here because no lethal take of right whales is anticipated or authorized. Moreover, both of the documents cited by Plaintiffs are part of the agency record

and Hayes et al. was actually authored by NMFS staff. Again, Plaintiffs cannot credibly assert that NMFS entirely failed to consider an important aspect of the problem.

C. The 2021 BiOp reasonably concluded that the project is not likely to jeopardize the continued existence of the right whale.

Contrary to Plaintiffs' suggestion, the fact that an agency action may have adverse effects on a species is not tantamount to saying the action is likely to jeopardize the existence of the species. "Jeopardize the continued existence" means "engag[ing] in an action that reasonably would be expected, directly or indirectly, to reduce *appreciably the likelihood of both the survival and recovery* of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species." 50 C.F.R. § 402.02 (emphasis added). ESA Section 7(a)(2) does not require agencies to avoid any adverse effects to listed species, but rather only to ensure that their actions are not likely to jeopardize the existence of a listed species or to destroy or modify its designated critical habitat. 16 U.S.C. § 1536(a)(2).

Plaintiffs incorrectly suggest that NMFS's "no jeopardy" determination concerning the Project somehow conflated the requisite findings of survival and recovery, respectively. Again, NMFS determined that Project construction is likely to result in the incidental harassment of individual right whales and recommended numerous measures to minimize and avoid such harassment. NMFS does not anticipate any lethal take of right whales during the life of the Project. To the contrary, NMFS does not anticipate instances of behavioral harassment to result in fitness consequences to individual North Atlantic right whales. NMFS 17530. Survival of the species is not implicated, as there will not be reductions in right whale reproduction, numbers, or distribution. NMFS 17531.

The 2021 BiOp also includes NMFS's express finding that "[t]he proposed action is not likely to affect the recovery potential of North Atlantic right whales." *Id.* Building on its findings that reduction in reproduction, numbers, or distribution are unlikely, NMFS further reasoned that "[t]he proposed action will not result in any condition that impacts the time it will take to reach

these [recovery] goals or the likelihood that these goals will be met." *Id.* In sum, NMFS's determination that the proposed action is not likely to jeopardize the continued existence of right whales is supported by the requisite analysis of effects on both survival and recovery.²⁵ Plaintiffs' arguments concerning specific alleged deficiencies in the 2021 BiOp's jeopardy analysis fare no better:

1. The 2021 BiOp considers potential effects of pile-driving noise on right whales.

As explained above, the 2021 BiOp imposes numerous terms and conditions to minimize and avoid exposure of right whales to harmful noise during Project construction. Although the 2021 BiOp concludes that harassment of right whales is reasonably certain to occur, permanent injury to right whales in the form of permanent threshold shift is not anticipated or exempted. NMFS 17528-32. Plaintiffs criticize the inclusion of a "soft start" procedure as part of the planned pile-driving operations. Doc. No. 88-1. Plaintiffs' assertion that the inclusion of a "soft start" procedure as part of the planned pile-driving operations will itself result in an unauthorized "taking" of right whales ignores the fact that the required mitigation measures make it unlikely for right whales to be present in the areas where pile-driving activities will take place (see Section III(A)(2)), and is entirely unsupported by the record or applicable case law.

As noted above, the ESA defines "take" as to "harass, harm, pursue, shoot, wound, kill, trap, capture, or collect" 16 U.S.C. § 1532(19). "Harass" is defined pursuant to a NMFS

²⁵ To the extent Plaintiffs suggest that NMFS's analysis concerning survival and recovery was inadequate based on the reasoning in *National Wildlife Federation v. NMFS*, 524 F.3d at 930, the facts here are distinguishable. Again, no right whale mortality is anticipated or exempted here, and the BiOp contains an analysis of both survival and recovery unlike in *NWF*. NMFS has sufficiently explained the basis of its determination that any temporary behavioral disruptions resulting from the Project are not reasonably expected to reduce appreciably the likelihood of both the survival and recovery of right whales by reducing the reproduction, numbers, or distribution of that species.

policy directive (available at https://media.fisheries.noaa.gov/dam-migration/02-110-19.pdf (last visited Sept. 7, 2022)) as to "create the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering." *Id.* at 2. "Harm" is defined in the NMFS ESA regulations as an act that "may include significant habitat modification or degradation which actually kills or injures fish or wildlife by significantly impairing essential behavioral patterns, including, [sic] breeding, spawning, rearing, migrating, feeding or sheltering." 50 C.F.R. § 222.102. Based on these definitions of "harass" and "harm," it does not follow that any activities designed to avoid the harassment or harm is itself a prohibited taking simply because it may elicit a behavioral response from a right whale. To the extent that an individual right whale may be exposed to pile-driving noise and harassed as a consequence of BOEM-authorized pile-driving activities (including the soft start procedures), such incidental harassment is accounted for as part of the authorized harassment of 20 right whales pursuant to the IHA, NMFS 17350, and the BiOp's ITS. NMFS 17561.

Plaintiffs' arguments concerning the use of Protected Species Observers and Passive Acoustic Monitoring, Doc. No. 88-1 at 37-42, also lack merit. In fact, NMFS refuted many of Plaintiffs' specific arguments in its response to Plaintiffs' comments submitted on NMFS's incidental harassment authorization pursuant to the MMPA. NMFS 3521-23. The Federal Register notice includes a detailed explanation of the required training and experience required of PSOs. NMFS 3547-48. Among numerous other requirements, "[a]ll observers will be trained in marine mammal identification and behaviors and are required to have no other construction-related tasks while conducting monitoring." NMFS 3547. In response to Plaintiffs' comment submitted on the IHA, NMFS responded that "[t]he commenters do not provide any

recommendations regarding additional or different mitigation measures, or specifically explain why they believe the measures are unenforceable." NMFS 3523. NMFS adequately accounted for the limitations of individual mitigation measures, and Plaintiffs have provided no evidence that such acknowledged limitations undermine NMFS's "no jeopardy" conclusion. Plaintiffs fail to demonstrate that it was arbitrary and capricious for the 2021 BiOp to rely on the use of PSOs among a suite of other mitigation measures to minimize and avoid potential exposure of right whales to pile-driving noise. *State Farm*, 463 U.S. at 43.

Plaintiffs also criticize the BiOp for including exceptions to the requirement to "stop all pile driving when right whales are detected" if necessary to safeguard human safety or the integrity of the pile-driving operation. Doc. No. 88-1 at 38. Contrary to Plaintiffs' insinuation that the determination to stop all pile-driving is subject to the whim of Vineyard Wind, the Federal Register notice approving the IHA explains in detail the applicable procedure for determining when shutdown is not practicable due to human safety or operational concerns. NMFS 3545. In turn, the 2021 BiOp describes detailed conditions on pile-driving activity that BOEM prescribed as conditions of COP approval in accordance with the NMFS-approved IHA.

²⁶ As to Plaintiffs' arguments that an observer cannot accurately detect and identify a right whale beyond 1,500 meters or in poor visibility conditions, Doc. No. 88-1 at 37-38, the BiOp includes RPMs 1 and 4 and associated terms and conditions, NMFS 17565-79, to implement the measures prescribed in the final IHA. Term and condition 4 includes specific requirements to account for the possibility of poor visibility conditions in a manner to maximize detection of a whale in the exclusion or monitoring zone. NMFS 17566. RPM 1 and term and condition 3 together require that any large whale that cannot be identified to species be treated as a right whale for purpose of maintenance of the exclusion zone. NMFS 17574.

²⁷ The BiOp describes the specific requirements for evaluating when shutdown is technically feasible, i.e., the BOEM-prescribed conditions for COP approval in accordance with the NMFS-approved IHA. NMFS 17355. Plaintiffs also fail to note that if shutdown is not feasible, the IHA requires that they reduce hammer energy so pile-driving isn't so noisy. *See id.* There is also a

As to Plaintiffs' criticism of the provision to continue pile-driving operations beyond sunset, Doc. No. 88-1 at 38, this contingency is addressed in RPM 1, term and condition 4, which limits such operations to circumstances where pile-driving must proceed for human safety or installation feasibility reasons. NMFS 17576. The Court should uphold the BiOp's consideration of the shutdown procedures required as part of the action because the agency has made a rational connection between facts and conclusions while exercising its scientific expertise to determine that the measures that are part of the proposed action will avoid Level A harassment of right whales and minimize Level B harassment of right whales, and that the action is not likely to jeopardize right whales. Plaintiffs again fail to demonstrate that it was arbitrary and capricious for the agencies to consider these provisions as part of the suite of other mitigation measures to avoid and minimize potential exposure of right whales to pile-driving noise. *State Farm*, 463 U.S. at 43.

Plaintiffs also miss the mark with their criticisms of passive acoustic monitoring. Doc. No. 88-1 at 38-40. NMFS/OPR reasonably required PAM coverage up to five kilometers from the pile-driving source during the period of June 1 to October 31 because, as discussed above, this time of year corresponds to the period when right whiles are less likely to be in the WDA. NMFS/OPR's decision in the IHA to establish a five-kilometer clearance zone was an increase to the one-kilometer clearance zone that the agency initially proposed as sufficient during this time of year. NMFS 3543. As to Plaintiffs' criticism that PAM may not detect all right whales that swim into the pile-driving area, Plaintiffs overlook the fact that PAM is just one component of the suite of mitigation measures that also includes time of year restrictions and the use of

procedure that must be followed before the restart of pile-driving after marine mammal detections. NMFS 17214.

protected species observers. Plaintiffs' objections to the shutdown protocols to be utilized in the event right whales are detected during pile-driving operations are addressed above. ²⁸

NMFS/OPR also addressed comments concerning the sufficiency of PAM procedures in its response to comments submitted on the IHA proposed pursuant to the MMPA. NMFS 3522-23. NMFS/OPR determined that "the mitigation measures in the IHA provide the means of effecting the least practicable adverse impact on marine mammal species or stocks and their habitat. . . ." NMFS 3523. Plaintiffs again fail to demonstrate that it was arbitrary and capricious for NMFS/GAR to consider the use of PAM as part of the suite of other mitigation measures established as conditions of COP approval to minimize and avoid potential exposure of right whales to pile-driving noise. *State Farm*, 463 U.S. at 43.

Plaintiffs criticize NMFS for considering studies that involved species other than right whales. Doc. No. 88-1 at 41-42. However, the parameters used for forecasting behaviors are determined and interpreted from marine species studies where available, or reasonably extrapolated from related species. NMFS 17344. "Because analysis of the relevant documents 'requires a high level of technical expertise,' we must defer to 'the informed discretion of the responsible federal agencies." *Marsh*, 490 U.S. at 377 (quoting *Kleppe v. Sierra Club*, 427 U.S. 390, 412 (1976)). Here, NMFS's determinations as to which studies are the "best available" for purposes of forecasting right whale behavior is itself a scientific determination deserving deference. *Ctr. for Biological Diversity v. NMFS*, 977 F.Supp.2d 55, 74-75 (D.P.R. 2013).

²⁸ Engaging in further conjecture, Plaintiffs also question NMFS/GAR's findings about potential behavior disruption of right whales that may temporarily leave the WDA during pile-driving operations. Doc. No. 88-1 at 40-42. As discussed in detail above, the record before the Court supports the agency's conclusion, based on the best available scientific information, that "[e]ffects to distribution will be limited to avoiding the area with disturbing levels of noise during pile-driving. There will be no change to the overall distribution of right whales in the action area or throughout their range." NMFS 17531.

2. The 2021 BiOp considers the effects of project-related vessel strikes.

The 2021 BiOp and the IHA together include a detailed accounting of vessel trips that will be required for Project construction, operation and maintenance, and decommissioning.

NMFS 17409-16. For example, during Project construction, the 2021 BiOp estimates that a maximum of 46 vessels could be on-site at any given time, although an average of 25 vessels will be involved in construction activities on any given day, with seven vessels transiting to and from ports each day. NMFS 17414. The 2021 BiOp also identifies the distance between likely ports and the WDA, although some points of origin, including ports in Europe that will be used to ship project components, are currently unknown. NMFS 17411-16.²⁹

The IHA explains the basis of NMFS's decision to exempt crew transport vessels³⁰ from the 10-knot speed restriction when certain conditions are met. Given the 50–60-mile distance from port to the WDA, traveling at 10 knots or less would take approximately 4.5 to 5 hours each way (9–10 hours total). NMFS 3546. It would be unfeasible for workers to spend 10 hours of a

²⁹ Although Plaintiffs suggest that the number of vessel miles is the better metric (rather than the number of trips) for measuring right whale exposure to vessel strike risk, they provide no scientific or technical basis to support that view, let alone to demonstrate that NMFS's approach is arbitrary or capricious. *See* Doc. No. 88-1 at 42. Again, Plaintiffs have the burden to cite some evidence that Defendants allegedly ignored. *Bays' Legal Fund*, 828 F. Supp. at 106. Plaintiffs fail to meet this burden. Moreover, the ESA does not require NMFS to impose conditions (e.g., imposing limitations on vessel miles) that Plaintiffs deem to be the most beneficial to the species. The Act requires only that the action that is taken avoid jeopardy. *Sw. Ctr. for Biological Diversity*, 143 F.3d at 523 (ESA does not require agency to select what the Plaintiffs may deem to be the "best" alternative or the one that would most effectively protect the species from jeopardy).

³⁰ Plaintiffs incorrectly suggest that the number of trips made by crew transfer vessels is "not reveal[ed]." Doc. No. 88-1 at 42. During the period of project construction subject to the IHA, there will be two crew transfer vessels making one round trip per day. NMFS 3526. The 2021 BiOp also describes the number of trips to be made by crew transfer vessels during operations and maintenance. NMFS 17415. The number of trips during decommissioning is estimated to be about 90 percent of those occurring during construction. NMFS 17416.

12-hour workday in transit. *Id.* Moreover, the speed restriction is not the sole mitigation measure to avoid vessel strikes. All Project vessels, including crew transport vessels, are subject to other requirements including training for all vessel observers and captains, monitoring for right whales with PSOs and PAM, maintaining a minimum separation distance, and taking action as necessary to avoid violating the relevant separation distances. NMFS 3546-47. Moreover, as described above, pile-driving construction is limited to the time of year when right whales are less likely to be in the WDA.³¹

In sum, Plaintiffs highlight the limitations of the speed restriction, PSOs, and PAM as if each of these mitigation measures were the only measure adopted to avoid vessel strikes. *See* Doc. No. 88-1 at 42-45. Contrary to Plaintiffs' characterizations, each of these measures should be viewed as part of a suite of conditions that have been established to avoid vessel strikes. The 2021 BiOp further analyzed the potential for vessel strikes over the lifetime of the project and reasonably concluded that it is "extremely unlikely that a project vessel will collide with a whale." NMFS 17428.

Based on the facts here, Plaintiffs' citation to National Wildlife Federation v. NMFS, 184

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³¹ Plaintiffs incorrectly suggest that NMFS/GAR should have accounted for vessel strike of right whales that may occur during Project construction notwithstanding implementation of mitigation measures including "soft start" pile-driving. As NMFS/OPR explained in its response to Plaintiffs' comment on the proposed IHA, "NMFS analyzed the potential for vessel strikes to occur during construction and determined that vessel strike is unlikely to occur (not that there is no collision threat at all, as suggested by [Plaintiffs], based on a combination of the low probability of a ship strike generally, and the extensive mitigation and monitoring included." NMFS 3522. Therefore, because NMFS/GAR determined that the suite of mitigation measures is adequately protective to avoid vessel strike during construction activities, NMFS/GAR reasonably decided not to exempt take from vessel strike during that part of the proposed action. It would be unnecessary and inappropriate for NMFS/GAR to authorize incidental take of right whales in a situation, as here, where it has determined that such take is unlikely to occur. *Ariz. Cattle Growers Ass'n v. FWS*, 273 F.3d 1229, 1242 (9th Cir. 2001) ("[I]t is arbitrary and capricious to issue an Incidental Take Statement when the [FWS] has no rational basis to conclude that a take will occur incident to the otherwise lawful activity.").

F. Supp. 3d 861 (D. Or. 2016), is inapposite. In that case, NMFS had previously concluded that the continued existence of a listed species was in jeopardy as a consequence of an agency action under consultation. *Id.* at 870. Under those circumstances, the court reasoned that mitigation measures included in a "reasonable and prudent alternative" to avoid jeopardy had to be sufficiently "specific and binding." *Id.* at 901-02 (citing *Ctr. for Biological Diversity v. Rumsfeld*, 198 F. Supp. 2d 1139, 1152 (D. Ariz. 2002)). Here, by contrast, the proposed vessel operations are subject to binding mitigation measures that have been incorporated into the COP and are unlikely to result in the taking of individual right whales, much less jeopardize the continued existence of the species.

3. The 2021 BiOp considers the effects of operational noise on right whales.

Plaintiffs incorrectly assert that the 2021 BiOp fails to adequately assess the potential to jeopardize right whales as a result of operational noise. Doc. No. 88-1 at 45-46. Here, Plaintiffs largely re-hash their arguments concerning the applicability of available research concerning existing wind projects utilizing smaller WTGs than proposed for the Project. As explained above, the 2021 BiOp's "no jeopardy" determination is informed by the best available scientific information, which indicates that operational noise may not be detectable above ambient noise in the WDA. NMFS 17333. NMFS/GAR reasonably concluded that "[o]perational noise is not expected to impact the distribution of right whales. . . ." NMFS 17531. And, in any event, there can be no dispute that the measures proposed by NMFS are both specific and binding on the applicant because they have been incorporated as conditions of COP approval. BOEM 77152.

4. The 2021 BiOp considers the potential for increased stress on right whales due to lost foraging opportunities.

Plaintiffs incorrectly suggest that the 2021 BiOp did not analyze potential effects on prey abundance within the WDA. The BiOp acknowledges that right whales feed almost exclusively

on copepods, a type of zooplankton, NMFS 17452, and that New England waters are important feeding habitats for right whales. NMFS 17294. The 2021 BiOp assessed potential effects on copepods occurring in right whale critical habitat and concluded that the proposed action will not result in effects to the generation of copepods and will not affect any of the physical or oceanographic conditions that serve to aggregate copepods in critical habitat. NMFS 17229. The BiOp assesses the potential effects of cable installation and operation of the transmission line on the copepods. NMFS 17454, 17460. NMFS also considered how the physical presence of the WTG foundations may affect the distribution, abundance, or availability of copepods. NMFS 17475. NMFS also assessed potential effects of proposed trap/pot and bottom trawl survey activity on copepods. NMFS 17483. Plaintiffs cannot show that NMFS failed to consider potential project effects on copepods. *State Farm*, 463 U.S. at 43.

NMFS adequately explained the basis of its determination that mitigation measures to avoid and minimize potential exposures of right whales to harmful sound will not reduce the right whale's foraging opportunities. As discussed above, "[t]here will be no change to the overall distribution of right whales in the action area or throughout their range." NMFS 17531. NMFS cited a "population consequences of disturbance" model in support of its determination that behavioral responses from exposures to noise above the Level B harassment threshold "are not expected to impact individual animals' health or have effects on individual animals' survival or reproduction." NMFS 17362. It follows logically that behavioral responses resulting from exposures to lower sound levels (for example, during "soft start" procedures) will likewise not impact individual animals' health either. Plaintiffs cannot show that NMFS failed to consider potential project effects on right whale foraging behavior.

5. The 2021 BiOp considers the potential for entanglement of right whales in fishing gear

The 2021 BiOp also considered the potential for entanglement of right whales in fixed fishing gear as part of its comprehensive assessment of potential effects of the Vineyard Wind project. The Vineyard Wind COP includes requirements for Vineyard Wind to conduct research to monitor Project impacts on the American lobster, Jonah crab, and black sea bass fisheries by placing groups of six lobster and crab trap/pots at each of 30 sampling stations in the WDA. NMFS 16644; NMFS 17198. Indeed, BOEM reinitiated ESA consultation with NMFS, in part, to assess the effects of these fishery monitoring surveys that were not considered in the 2020 BiOp. NMFS 16641. To assess potential effects on right whales, NMFS considered the time of year when surveys will take place, the relatively small number of traps, the risk reduction measures including the high frequency of which gear will be tended, and gear modifications to reduce risk to right whales. NMFS 17481-82. Based on these considerations, NMFS reasonably concluded that "any effect of this increase to the risk of entanglement considered in the Environmental Baseline will be so small that it cannot be meaningfully measured, evaluated, or detected." NMFS 17482. Accordingly, no incidental take of right whales is anticipated or exempted in relation to the planned fishery monitoring. See id.

As discussed above, the COP establishes a suite of management measures to avoid and minimize potential interactions with right whales during all project phases, including project construction. NMFS reasonably concluded that pile-driving construction noise is not anticipated to result in injury or death to any right whales, including any right whales that leave the WDA in response to "soft start" procedures. *See* NMFS 17531. Plaintiffs have not demonstrated that NMFS failed to adequately account for potential entanglement in fishing gear as part of its determination that the Project is not likely to jeopardize right whales.

6. The 2021 BiOp includes an integration and synthesis of potential effects on right whales.

Finally, Plaintiffs fail to show that the 2021 BiOp fails to account for what they characterize as the Project's "synergistic impacts" on right whales. Doc. No. 88-1 at 48-50. In the section titled "Integration and Synthesis of Effects," the 2021 BiOp considers the effects of the action together with the environmental baseline and cumulative effects to formulate the agency's biological opinion as to whether the proposed action is likely to reduce appreciably the likelihood of both the survival and recovery of the right whale and other listed species in the wild by reducing its numbers, reproduction, or distribution (i.e., whether the proposed action will jeopardize the right whale). NMFS 17505. NMFS concluded that "the effects of the proposed action are not expected to cause an appreciable reduction in the likelihood of survival and recovery of North Atlantic right whales in the wild." NMFS 17532.³² In support of its determination that the Vineyard Wind Project is not likely to jeopardize right whales NMFS considered both the impacts resulting from the Project and the measures necessary to avoid and minimize impacts to right whales. See NMFS 17528. NMFS's "no jeopardy" determination is owed particular deference because NMFS is the agency charged by Congress with the authority to administer the ESA. See Nat'l Wildlife Fed. v. Coleman, 529 F.2d 359, 375 (5th Cir. 1976).

D. BOEM Reasonably Relied on the 2021 BiOp.

In addition to challenging the merits of NMFS's decision to issue the 2021 BiOp, *see* Doc. No. 59 (First Amended Complaint), Second and Third Claims for Relief, ¶¶ 71-76, Plaintiffs also challenge BOEM's decision to rely on the 2021 BiOp to satisfy the ESA's

³² Plaintiffs' citation to *National Wildlife Federation v. NMFS*, 184 F.Supp.3d 861, with respect to an alleged obligation for NMFS to analyze the effects of the action in relation to recovery abundance levels, *see* Doc. No. 88-1 at 49, is again misplaced given the facts are distinguishable. *See supra* at p. 32.

substantive requirement to avoid jeopardizing right whales in connection with its decision to approve the Vineyard Wind COP. *Id.* ¶¶ 75-76. BOEM's July 15, 2021 decision to approve the Vineyard Wind COP is expressly conditioned on the applicant's approval with all terms and conditions of the 2021 BiOp. BOEM 0077152 ("Activities authorized herein will be subject to any terms and conditions and reasonable and prudent measures resulting from a BOEM-reinitiated consultation for the Project's BiOp."). BOEM affirmed that the COP approval letter incorporates the terms and conditions of the 2021 BiOp pursuant to the ESA consultation regulations, 50 C.F.R. § 402.15(a): "Because the activities authorized under BOEM's COP approval—including the monitoring surveys—are subject to the terms and conditions and reasonable and prudent measures found in the 2021 BiOp, no further action is required in order for Vineyard Wind to proceed with construction and operation of the Project." BOEM 0077788.

In light of the 2021 BiOp's determination that the Vineyard Wind Project, including the mitigation measures in the COP, those proposed by BOEM, and those considered in the IHA, is not likely to jeopardize right whales, Plaintiffs must demonstrate that: 1) NMFS's "no jeopardy" determination is arbitrary and capricious; and 2) BOEM unreasonably relied on this finding in approving the COP. *See Pyramid Lake Paiute Tribe of Indians v. U.S. Dep't of the Navy*, 898 F.2d 1410, 1415 (9th Cir. 1990) (action agency's reliance on biological opinion will satisfy obligation under ESA if the challenging party cannot point to "new information" that the consulting agency did not take into account). For the reasons set forth above, the 2021 BiOp is fully supported by the record, and BOEM reasonably relied on this biological opinion.

IV. The FEIS fully complied with NEPA.

BOEM complied with NEPA in evaluating the potential environmental impacts of the Vineyard Wind Project. The requirements of NEPA are procedural in nature, and the Court's role in reviewing a NEPA analysis is "narrow in scope." *Geer v. Fed. Highway Admin.*, 975 F. Supp.

47, 58-59 (D. Mass. 1997). The Court should "assure itself that the agency has given good faith consideration to the environmental consequences of its actions and should not pass judgment on the balance struck by the agency among competing concerns." *Id.* (quoting *Grazing Fields v. Goldschmidt*, 626 F.2d 1068, 1072 (1st Cir. 1980)). The FEIS meets this standard.

A. The EIS appropriately analyzes impacts to air quality and greenhouse gas emissions.

The EIS contains a thorough analysis of the potential impacts of the Vineyard Wind Project on air quality and greenhouse gas ("GHG") emissions. That analysis is contained in Appendix A of the FEIS, BOEM_0068843-61, and draft analyses were circulated for review in the Draft EIS ("DEIS"), BOEM_0034765-74, and the Supplemental DEIS ("SDEIS"), BOEM_57151-61. Emissions associated with project activities, particularly during the construction phase, will impact air quality, but those impacts are expected to be minor. BOEM_0068848-53. Once the project is operational, it will benefit air quality by reducing emissions from power plants using fossil fuels. BOEM_0068852-53. Similarly, the project will have a beneficial impact on GHG emissions. *Id.* Plaintiffs' critiques of the analysis in the EIS are without merit.

1. The EIS does not improperly relegate information to non-NEPA documents.

Plaintiffs first assert that the EIS relegated key information to non-NEPA documents that were not available during the public comment period. They are mistaken. As to the non-NEPA document point, the FEIS contains specific figures regarding the emission of Clean Air Act ("CAA") criteria pollutants, such as carbon monoxide, sulfur dioxide, particulate matter smaller than 10 microns, particulate matter smaller than 2.5 microns, nitrogen oxide, ozone, and lead. BOEM_0068850-52. The FEIS also puts these figures in context, explaining that the emissions will be highest during the construction and decommissioning phases and be caused mainly by

onshore and offshore vehicle traffic and emissions from construction equipment.

BOEM 0068850. The assertion that BOEM left this analysis out of the FEIS is incorrect.

Plaintiffs also are incorrect that data on criteria pollutants was unavailable to the public during the public comment period. The specific data regarding criteria pollutants were not set forth in the DEIS itself, but instead were contained in the draft COP, which is directly referenced in the DEIS. BOEM 0034767. The Federal Register notice announcing the availability of the DEIS for public review expressly referred to the availability of the draft COP on BOEM's website. BOEM 0034694. The public comment period on the DEIS took place from December 7, 2018, to February 22, 2019. BOEM 0069180. During that timeframe, the March 2018 version of the COP was available on BOEM's website, and it includes a report (the "Epsilon report") containing emissions data regarding criteria pollutants. BOEM 0009792, -9903-85.³³ Vineyard Wind submitted a subsequent version of the COP to BOEM in October 2018, BOEM 0033662, and that was also available on BOEM's website during this time-period and contained the same report. BOEM 0015335-402. Therefore, the public had the opportunity to review and provide comments regarding BOEM's analysis of emissions data in the DEIS. Moreover, emissions data were included in the SDEIS, BOEM 0057153-55, thus providing the public with an additional opportunity to review and comment on the emissions data during the public comment period on the SDEIS, which commenced on June 12, 2020. BOEM 0069181.

To the extent Plaintiffs, nevertheless, would argue that BOEM violated NEPA by not putting all of the information in the Epsilon report in the text of the EIS, Plaintiffs are mistaken. For purposes of NEPA, it was sufficient to analyze the information contained in the Epsilon

³³ In their brief, Plaintiffs cite a December 2017 version of the COP, BOEM_0001361-2346, which was not posted to BOEM's website.

report and refer the reader to the report itself, as long as the report was made publicly available, which it was. *See Trout Unlimited v. Morton*, 509 F.2d 1276, 1284 (1974); *see also* 40 C.F.R. § 1502.21 (2019) (agencies may "incorporate material into an [EIS] by reference," as long as such material is "reasonably available for inspection by potentially interested persons"); *Jones v. Nat'l Marine Fisheries Serv.*, 741 F.3d 989, 998 (9th Cir. 2013) (upholding an environmental assessment which cited publicly available data); *Town of Norfolk v. U.S. EPA*, 761 F. Supp. 867, 877-79 (D. Mass. 1991) (upholding an EIS that incorporated by reference environmental reports).

Plaintiffs' reliance on *Kern v. U.S. Bureau of Land Management*, 284 F.3d 1062 (9th Cir. 2002), is misplaced. The issue in *Kern* was whether it was appropriate for the agency to tier to a prior guidance document that had not gone through the NEPA process. *Id.* at 1073; *see also* 40 C.F.R. § 1502.20 (in certain circumstances, an agency may tier to a prior NEPA analysis without the necessity of repeating that prior analysis). The problem in *Kern* was that the agency attempted to tier, not to a NEPA document, but a guidance document that had never gone through a NEPA process. *See* 284 F.3d at 1073. This holding is irrelevant here because the EIS does not tier to a prior non-NEPA document. Instead, the EIS contains an extensive analysis of air quality and refers to a report that was available for public review and comment during the NEPA process.³⁴

2. The FEIS properly analyzes impacts to air quality and GHG emissions.

The FEIS appropriately analyzes the direct and indirect effects of the project on air quality and GHG emissions. As discussed directly above, Plaintiffs are simply incorrect that the

³⁴ Highway J Citizens Group v. U.S. Department of Transportation, 656 F. Supp. 2d 868 (E.D. Wis. 2009), likewise provides no support to Plaintiffs' arguments. The court held that an agency must set forth its analysis in an EIS for public review. *Id.* at 887. BOEM did so here.

FEIS did not disclose data regarding the emission of criteria pollutants, such as carbon monoxide, sulfur dioxide, and particulate matter. The FEIS does so. BOEM_0068850-52. The FEIS also states that emissions from the project are not expected to cause pollution levels to exceed the EPA's National Ambient Air Quality Standards ("NAAQS"). BOEM_0068850; see also BOEM_0068843-44 (explaining the NAAQS). Plaintiffs also claim that the FEIS did not analyze the indirect effects on emissions, such as "vehicle emissions from employees associated with the Project." Doc. No. 89 at 45. But the FEIS does account for such emissions. It states, for example, that "[p]rimary emission sources would be increased commercial traffic, air traffic, public vehicular traffic, combustion emissions from construction equipment, and some fugitive emissions." BOEM_0068850; see also BOEM_68858-59. Plaintiffs have not identified emissions from any project-related activity that were not considered in the FEIS. Moreover, given that any impacts from emissions are expected to be minor, BOEM_0068849-50, BOEM's analysis and discussion of emissions was reasonable. See 40 C.F.R. § 1502.2(b) ("Impacts shall be discussed in proportion to their significance.").

Plaintiffs also overlook the FEIS's discussion of the Project's potential beneficial impacts on air quality. The FEIS explains that constructing an 800-MW wind energy facility is expected to improve air quality due to reduction in emissions from energy generation. BOEM_0068850. BOEM evaluated these potential benefits using the EPA's Avoided Emissions and Generation Tool ("AVERT"), and calculated the annual avoided emissions to be equivalent to "the emissions generated by 213,348 passenger vehicles in a year." *Id.* This would have health benefits as well, potentially resulting in savings of up to \$27,185,112 in health care costs. BOEM_0068851. Thus, the FEIS does analyze the indirect effects on emissions, and contrary to Plaintiffs' narrative, these effects are expected to be beneficial.

Plaintiffs' argument with respect to GHG emissions is likewise off base. The FEIS explains that GHG emissions associated with the project are expected to be minimal and therefore have a negligible impact on climate change. BOEM_0068852. Further, during the operational phase of the project, any emissions would be more than offset by the substantial savings in GHG emissions gained from using wind energy instead of fossil fuel-based energy sources. BOEM_0068852-53. Plaintiffs are incorrect that this analysis does not consider the emissions from existing energy sources in making these calculations. To the contrary, the AVERT model used "information about the historical patterns of power generation throughout the year to evaluate the potential for emissions avoided on an hourly basis throughout the year in a specific region." BOEM_0068850. Based on this model, the EIS calculates that once the project is operational, it would avoid emissions of 1,608,740 tons of carbon dioxide annually. BOEM_0068851. This would result in a minor benefit in terms of reducing GHG emissions. BOEM_0068853. Accordingly, the EIS's analysis of GHG emissions complies with NEPA.

B. The FEIS demonstrates that BOEM took a "hard look" at potential impacts to North Atlantic right whales.

In contending that BOEM failed to adequately analyze impacts to right whales, Plaintiffs reprise the same flawed complaints they raised with respect to the BiOp. Like their challenges to the BiOp, Plaintiffs' criticisms of the FEIS are belied by the FEIS's extensive analysis of effects on marine mammals, including right whales. Indeed, the FEIS dedicates more than 30 pages to potential impacts to marine mammals. The scope and substance of that analysis reflects the immense time and effort that BOEM and NMFS invested in their consultation concerning right whales, and confirms that BOEM took a hard look at the Project's potential impacts.

1. Baseline conditions

Plaintiffs first attempt to import an ESA concept, contending that the FEIS does not

adequately describe baseline conditions of right whales and their habitat. Doc. No. 88-1 at 46. Even assuming Plaintiffs had demonstrated that NEPA requires such analysis (they have not),³⁵ the FEIS does describe baseline conditions of marine mammals that are known to inhabit or migrate through the relevant region, including right whales.

That analysis is set forth in section 3.4.1 of the FEIS, which addresses the impact on marine mammals of the "No Action Alternative"—i.e., the current and reasonably projected conditions of marine mammals in the absence of any effects from the Vineyard Wind project.

See BOEM_0068571-88. Additional baseline conditions are further discussed in Table 3.4-1.

BOEM_0069020-31. Those analyses address the very baseline conditions Plaintiffs claim were omitted.

For instance, the FEIS observes that right whales have suffered elevated rates of mortality since 2017. BOEM_0068573. And, citing several studies, it describes factors that currently "threaten[] the very survival of th[e] species," including fishery-related entanglements and vessel strikes. BOEM_0068573. Contrary to Plaintiffs' assertion that BOEM failed to address right whale prey abundance, the FEIS also discusses primary prey sources and abundance for baleen whales generally, and for right whales specifically. BOEM_0068573. Likewise, notwithstanding Plaintiffs' claim to the contrary, the FEIS discusses the impact of commercial fishing activities on right whales, observing that entanglement is a "leading cause[] of mortality" for right whales, that frequency varies by marine mammal density and fishing intensity, and that "the distribution of fishing effort may change" in response to the presence of offshore wind facilities in the Outer

³⁵ As Plaintiffs' own cited case explains, in the NEPA context "[a] baseline is not an independent legal requirement, but rather, a practical requirement in environmental analysis often employed to identify the environmental consequences of a proposed agency action." *Am. Rivers v. FERC*, 201 F.3d 1186, 1195 (9th Cir. 1999).

Continental Shelf. BOEM_0068575-6; see also BOEM_0068586 (further discussing potential effects of wind structures on recreational and commercial fishing). Plaintiffs also accuse the FEIS of silence regarding ambient underwater noise. But the FEIS's "No Action Alternative" analysis dedicates nearly six pages to marine mammal hearing and the effects of noise, including ambient noise from operational wind turbine generators. BOEM_0068577-83; BOEM_0068581 (discussing operational ambient noise).

The remaining supposed deficiencies that Plaintiffs identify fare no better. Plaintiffs offer no support for the argument that BOEM was required to specifically state that right whales have a "potential biological removal" ("PBR") limit of 0.8, nor explain why it was inadequate for BOEM to instead describe the species' current conditions by stating that its "very survival" is "threaten[ed]." BOEM 0068573. And Plaintiffs similarly fail to support their argument that NEPA requires BOEM to discuss what Plaintiffs deem "the importance" of one specific area of the Outer Continental Shelf—NMFS Statistical Area 537. Finally, Plaintiffs acknowledge that the FEIS addresses vessel traffic and related risks, but complain that it should also have addressed the density of traffic in the specific transit routes that vessels will use for the Project. None of these alleged deficiencies raise a serious question about whether BOEM took the requisite hard look at impacts to right whales, and Plaintiffs do not even attempt to meet their burden to show otherwise. NEPA does not require an agency to "engage in the most exhaustive environmental analysis theoretically possible[.]" Nw. Envtl. Advocates v. Nat'l Marine Fisheries Serv., 460 F.3d 1125, 1139 (9th Cir. 2006). And courts should not seize on alleged deficiencies, such as those here, "that are mere 'flyspecks." New Mexico ex rel. Richardson v. Bureau of Land Mgmt., 565 F.3d 683, 704 (10th Cir. 2009).

2. Vessel strikes

Plaintiffs similarly attempt to fly speck the FEIS's consideration of vessel strikes. They

admit that the FEIS analyzed the risk of vessel strikes, including "the number, type, size, speed trip frequency of vessels needed for the Project," but contend that the FEIS is inadequate because "it does not calculate the number of vessel *miles* required for the construction, operation, and decommissioning of Project." Doc. No. 88-1 at 47 (emphasis added). Plaintiffs claim that this is a problem because the number of vessel miles is a "key metric," but they do not cite a single study or expert opinion relying on vessel miles or identifying it as an important metric. *Id.* The same is true of their claim that the FEIS should have quantified the number of vessel trips that might cross what Plaintiffs identify as "right whale 'hotspots'"—a proposition for which they again offer no record or other support. *Id.* Similarly, Plaintiffs offer no record support for the premise that the soft start procedures—which are intended to mitigate potential harm from piledriving activities—will result in harassment (or in Plaintiffs' words, "hazing") of right whales, much less for the proposition that the FEIS should have addressed the risk of vessel strikes in Plaintiffs' theoretical scenario. *Id.*

Contrary to Plaintiffs' assertions, the record confirms that BOEM took a hard look at the risk of vessel strikes. In fact, the FEIS analyzed those risks at length: it identifies vessel strikes as a significant source of right whale mortality, addresses the current risks of vessel strikes, and analyzes the risks of increased vessel traffic under the various alternatives.³⁶

3. Fishing gear entanglement

Plaintiffs next argue that the FEIS fails to adequately analyze the risks of fishing gear entanglement associated with the Project's ventless trap surveys, which will be used to monitor

³⁶ See BOEM_0068573 (identifying vessel strikes as factor threatening survival of species); BOEM_0068587-88 (discussing increased vessel traffic under the "No Action Alternative"); BOEM_0068597-98 (discussing risk of increased vessel traffic under Alternative A); BOEM_0068603 (discussing vessel-related risks under the Preferred Alternative).

and assess lobster and crab resources. Doc. No. 88-1 at 47. Plaintiffs are incorrect. The FEIS addresses those concerns and requires that the ventless trap surveys employ mitigation measures "to alleviate concerns relative to North Atlantic right whales (NARWs)." BOEM_0069201. Specifically, the traps must "use weak-link technology to minimize whale entanglement and no sampling will occur between November and early May, when NARWs may be in the area." *Id.*

Plaintiffs also contend that the FEIS should have addressed the possibility that the project's soft start protocols, could push whales into heavily-fished waters. But Plaintiffs' speculation ignores that the entire lease area is within Area 537, and that the numerous mitigation measures make it unlikely that whales would be present in the WDA during pile-driving. Plaintiffs have not provided any ground on which the court could conclude that the FEIS's discussion of fishing entanglement risks (*see* BOEM_0068575-6; BOEM_0068586) is arbitrary or capricious.

4. Pile-driving noise

Plaintiffs also assert that the FEIS failed to adequately analyze the potential impacts of pile-driving noise on right whales. Doc. No. 88-1 at 47. But Plaintiffs ignore numerous mitigation measures designed to minimize noise impacts to right whales and other marine mammals, including the requirement that no pile-driving activities occur between January 1 and April 30—the season when right whales are most abundant in New England waters.

BOEM_0068592. The FEIS also identifies and analyzes numerous other mitigation measures including, noise attenuation and verification requirements, as well as enhanced time-of-year pile-driving shutdown and restart procedures that apply from May 1 to May 14 and November 1 to December 31. Those time-of-year procedures generally require pile-driving activities to stop upon detection of a right whale and to remain shut down until specific conditions are met.

BOEM 0069202-06 (describing 12 different mitigation measures related to pile-driving).

Plaintiffs do not meaningfully engage with this suite of avoidance measures, which together are designed to mitigate or avoid harm to right whales from pile-driving.

Further, there is no record support for Plaintiffs' contention that two other mitigation measures—protected species observers and passive acoustic monitoring—will be ineffective. Plaintiffs are free to disagree with the conclusions that BOEM and NMFS reached about the effectiveness of PSOs and PAMs, but that disagreement does not render the agencies' analysis arbitrary or capricious. *Lovgren v. Locke*, 701 F.3d 5, 38 (1st Cir. 2012) (plaintiffs' disagreement with agency conclusion "is not a basis for deeming it invalid"); *Town of Norfolk*, 761 F. Supp. at 891.

5. Foraging habitat

Plaintiffs claim incorrectly that the FEIS did not assess right whale foraging habitat in the WDA. Doc. No. 88-1 at 48. In fact, as described above, the FEIS discusses prey sources and abundance for right whales, and describes seasonal and other factors that affect right whale prey abundance in the shelf waters of New England, including the WDA. BOEM_0068573. It also assessed how the presence of turbine foundations might affect marine mammal prey. BOEM_0068586, BOEM_0068602.

Plaintiffs further assume, without support, that right whales will lose access to important foraging habitat in the WDA for the entirety of the Project's two-year construction, and then criticize the FEIS for not analyzing the impact of that assumed loss of foraging opportunity. As explained above, that assumption is contradicted by NMFS's analysis in the BiOp, which concluded that "[t]here will be no change to the overall distribution of right whales in the action area or throughout their range." NMFS 17531. The same is true of Plaintiffs' unsupported theory that right whales will forage in other areas where they could be exposed to heightened risks of entanglement or vessel strikes. Because the record contradicts Plaintiffs' theories, they have not

established that the analysis in the FEIS was arbitrary or capricious.

6. Operational noise

Plaintiffs are also wrong that the FEIS failed to analyze operational noise impacts. The FEIS assessed the degree to which underwater noise from operational WTGs will be audible to marine mammals. And it concluded that marine mammals will be able to hear continuous noise, but that the sound will be "at or below ambient levels at relatively short distances (164 feet [50 meters]) from the foundations." BOEM_0068592. The FEIS therefore determined that WTG operational noise would have non-measurable negligible impacts. *Id.* The FEIS includes a similar analysis of other foreseeable future wind projects. BOEM_0068581. It also assessed cumulative effects of operational noise from ongoing and planned actions, including the Project, and concluded that, while the cumulative impacts would span "a greater spatial scale," the effects, if any, "are expected to be negligible overall" because operational turbine noise is expected to be "similar to ambient levels within a short distance . . . of the WTG bases." BOEM_0069023. That analysis confirms that BOEM considered and disclosed the possible effects of operational noise.

7. Mitigation measures

Plaintiffs next take issue with some of the FEIS's mitigation measures, contending that the vessel speed limits, protected species observers and passive acoustic monitoring will be ineffective. Doc. No. 88-1 at 48-49. But NEPA does not require effective mitigation measures; it requires agencies to consider and disclose environmental consequences of a proposed action. *Food & Water Watch Inc. v. U.S. Army Corps of Eng'rs*, 570 F. Supp. 2d 177, 184 (D. Mass. 2008). Regardless, the record supports the FEIS's discussion of the mitigation measures Plaintiffs highlight (as well as the others discussed in the FEIS). In particular, BOEM considered NMFS/GAR's BiOp, which concluded based on NMFS's expertise that the design and implementation of the Project, including these mitigation measures, were sufficient to protect

right whales from unacceptable impacts. *See supra* Section III. D. It was not arbitrary or capricious for the FEIS to credit that expertise, and Plaintiffs offer no basis for concluding otherwise.

8. Cumulative impacts

Finally, Plaintiffs claim that the FEIS failed to address the cumulative impacts of other planned offshore wind projects on right whales. Doc. No. 88-1 at 49. That is incorrect. The FEIS's Appendix A details BOEM's cumulative impacts methodology. BOEM 0068796. As it explains, the FEIS's main body addresses cumulative impacts for each resources for which BOEM determined the Project might impose greater than minor impacts, while Appendix A addresses the resources for which the Project's potential impacts are expected to be minor. Id. Accordingly, the cumulative impacts for marine mammals, including right whales, are discussed in the FEIS at Volume I, chapter 3. In particular, in the No Action Alternative, the FEIS analyzes at length the potential effects of future offshore wind activities on marine mammals, including right whales. BOEM 0068576-88. The FEIS then discusses the additional cumulative impacts of each alternative. See BOEM 0068589 (explaining that the impacts analysis in the No Action Alternative, which included future wind activities, applies to the impacts analysis); see also BOEM 0068602 (comparing effects of the various alternatives considered in the FEIS "when combined with other planned actions"). The cumulative analysis is further described in Table 3.4-1, which summarizes the various relevant activities and their associated impacts on marine mammals in three scenarios: current ongoing activities, future offshore wind-related activities, and Vineyard Wind project-related activities. BOEM 0069020-31. That table also includes a "conclusion" column that synthesizes the cumulative impact analysis for each relevant activity. Id. The FEIS therefore confirms that BOEM took a hard look at the cumulative impacts of the Project on right whales.

CONCLUSION

BOEM's and NMFS/GAR's determinations and analyses concerning the Vineyard Wind Project were rational and are fully supported by the respective administrative records. Plaintiffs fail to carry their burden to show that the agencies' actions were arbitrary, capricious, or contrary to law. Therefore, Federal Defendants respectfully request that this Court grant their crossmotion for summary judgment as to all claims asserted in Plaintiffs' Amended Complaint, Doc. No. 59.³⁷ In the alternative, if the Court finds any legal deficiency, the Court should exercise its discretion to remand the agency decisions without vacatur given that any errors would be minor and could be easily mended without altering the ultimate decision, and that the equities and public interest would favor allowing this Project to proceed. *Cent. Maine Power Co. v.*FERC, 252 F.3d 34, 48 (1st Cir. 2001) (citing *Allied–Signal, Inc. v. U.S. Nuclear Regulatory Comm'n*, 988 F.2d 146, 150–51 (D.C. Cir. 1993)). To the extent there is any doubt on this score, Federal Defendants request that the Court provide an opportunity for arguments as to any appropriate remedy.³⁸

³⁷ Plaintiffs' summary judgment brief does not to address several claims asserted in their First Amended Complaint, i.e., Doc. No. 59 ¶¶ 68-69, 72-73, and 75-76. Those claims should be deemed waived. *Grenier v. Cyanamid Plastics, Inc.*, 70 F.3d 667, 678 (1st Cir. 1995).

³⁸ A court's decision to remand without vacatur "depends *inter alia* on the severity of the errors, the likelihood that they can be mended without altering the order, and on the balance of equities and public interest considerations." *Central Maine Power Co.*, 252 F.3d at 48 *(citing Int'l Union, United Mine Workers of Am. v. Fed. Mine Safety & Health Admin.*, 920 F.2d 960, 966–67 (D.C.Cir.1990)).

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CERTIFICATE OF SERVICE

Pursuant to Local Rule 5.2, I hereby certify that a true copy of the foregoing FEDERAL DEFENDANTS' MEMORANDUM IN OPPOSITION TO PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT, AND IN SUPPORT OF CROSS-MOTION was served upon the attorney of record for each other party by the CM/ECF electronic filing system on September 8, 2022.

/s/ Mark Arthur Brown
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